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Children left behind: An examination of the effects of a school counselor coordinated career development program and student and contextual factors on the post-secondary educational plans of students with learning disabilities

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CHILDREN LEFT BEHIND: AN EXAMINATION OF THE EFFECTS OF A SCHOOL COUNSELOR COORDINATED CAREER DEVELOPMENT PROGRAM AND STUDENT AND CONTEXTUAL FACTORS ON THE POST-SECONDARY EDUCATIONAL PLANS OF STUDENTS WITH LEARNING DISABILITIES

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Doctor of Education

by
Cindy Robins Lamm
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CHILDREN LEFT BEHIND: AN EXAMINATION OF THE EFFECTS OF A SCHOOL COUNSELOR COORDINATED CAREER DEVELOPMENT PROGRAM AND STUDENT AND CONTEXTUAL FACTORS ON THE POST-SECONDARY EDUCATIONAL PLANS OF STUDENTS WITH LEARNING DISABILITIES

by

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This work is dedicated to

children with learning disabilities

and those who seek to improve their quality of life.
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To my husband, Tony, my sons, Michael and Peter, and my mother, thank you for your love, support, and encouragement.

I have carried my mother’s words written on blue stationery in a pocket of my briefcase since May 31, 1991.

“Education is an asset that cannot be taken away from you, nor compromised by unsavory influences. Education is open to all, it requires sacrifice to acquire it. (It is) pursuing understanding of the world and its people, and most of all, understanding one’s self.”
The purpose of this descriptive study was to investigate the relationship between diploma status, disability status, family configuration, socio-economic status, IQ function, race, participation in a career development program coordinated by the school counselor, and post-secondary educational plans among students with learning disabilities. A further purpose of this study was to assess the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes. To explore these questions, this study used a constructionist theoretical framework as implemented in Social Cognitive Career Theory. The participants for this study included high school graduates from the years 2001 through 2007 from a rural high school in the southeastern United States. The majority of participants included students who were economically disadvantaged, African-Americans, and first-generation college students. Results indicated that a career development program coordinated by the school counselor made a significant difference in post-secondary educational plans of students with learning disabilities included in the study. Qualitative results based on student interviews revealed perceived barriers, strategies for coping with a stigmatized identity, preferred teacher attributes, and the importance of a supportive and positive educational infrastructure for building self-efficacy and increasing the likelihood of post-secondary educational planning of students with learning disabilities.
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CHAPTER 1: THE PROBLEM

The numbers of students with learning disabilities who choose post-secondary education has increased dramatically. However, rates of entry to post-secondary education for students with disabilities are “dramatically lower” than rates for students without disabilities (United States General Accounting Office, 2003; National Council on Disability, 2004). National Longitudinal Transition Study (NLTS) data indicated that 14% of high school graduates with learning disabilities participated in post-secondary education compared to 53% of their peers without disabilities (Levine & Nourse, 1998). The post-secondary enrollment rate for students with disabilities continues to lag behind at half the rate of the general population (National Council on Disability, 2004). To address this discrepancy, the Individuals with Disabilities Education Act (IDEA, 2004) emphasizes a focus on results-oriented transition activities for students with disabilities which include post-secondary educational planning. This change in emphasis reflects an effort to align IDEA (2004) with No Child Left Behind (Lordi, 2005).

Post-secondary education is of critical importance in competing in the global marketplace because income is increased when you have a marketable skill (NACAC, 2005). Children with post-secondary education have more marketable skills and the opportunity to secure a higher income. The income of students with post-secondary education is higher than those without post-secondary education. In 2004, the average earnings for individuals 18 years of age or older without a high school diploma were
$19,169. A high school diploma increased individual earnings to an average of $28,645 and a four-year degree increased earnings to an average of $51,554 (U.S. Census Bureau, 2007).

It is problematic that high school students with learning disabilities are graduating without post-secondary educational plans and they are not transitioning well to the world of work (Sabel, 2000). Many students with learning disabilities are not going to college and do not have a level of self-efficacy necessary to ensure their success should they choose post-secondary education (Janiga & Costenbader, 2002). Yet, there appears to be a lack of research on effective means of promoting post-secondary educational planning (National Council on Disability, 2004). The National Council on Disability (2004) found that transition services are inadequate for students with learning disabilities. This creates a need for further study addressing factors that both promote and impede post-secondary educational planning in order to increase the college access of students with disabilities on par with their peers in general education.

In this chapter, relevant literature and empirical research were reviewed in order to understand the problem of significantly lower post-secondary educational outcomes for students with learning disabilities when compared with their peers without disabilities. The review is organized into the following sections: (1) Statement of the Problem, (2) Purpose of the Study, (3) Research Questions, (4) Significance of the Study, (5) Chapter Summary, and (6) Operational Definitions.

Statement of the Problem

Large numbers of high school students with learning disabilities are graduating without post-secondary educational plans and are not transitioning well into the world of
work (Sabel, 2000; Janiga & Costenbader, 2002). While the number of students with learning disabilities choosing post-secondary education has dramatically increased, the rates remain lower than their peers without disabilities (United States General Accounting Office, 2003). In a study conducted during the 2003-04 academic year which examined the educational experiences and the post-secondary plans of high school students with learning disabilities, Lamm (2004) found evidence of discrepancies in post-secondary educational transition outcomes between students with and without learning disabilities. Out of 149 graduates of a rural high school in the southeastern United States who were not in special education, 98 or 66% of the students were admitted to and attended a 2-year or a 4-year college. Out of 18 graduates of the same high school who had learning disabilities, none were admitted to a 2-year or a 4-year college (Lamm, 2004).

The post-secondary education enrollment rate for students with disabilities is 50% lower than the general population (National Council on Disability, 2004). The consequences of not enrolling in post-secondary education are great for all students especially for those with disabilities (Scarborough & Gilbride, 2006). There is a need for research that explains why a disparity exists in the rates of students with learning disabilities who choose to continue their education following high school graduation and the rates of students without learning disabilities who choose to continue their education following high school graduation.

Post-secondary educational and career outcomes for young adults with learning disabilities are significantly lower than their peers without disabilities (Rojewski, 1999; United States General Accounting Office, 2003). Students with learning disabilities have
higher school drop-out rates, lower rates of college attendance, lower earnings, and lower prestige occupations compared to their peers without learning disabilities (Scarborough & Gilbride, 2006). Young adults with learning disabilities are less likely to have attained a high school diploma or its equivalent than their peers without disabilities, more likely to aspire to low-prestige occupations, and less likely to be enrolled in post-secondary education (Rojewski, 1999). At the time of the National Longitudinal Transition Study-2 (NLTS2), approximately three out of ten students with disabilities had been enrolled in post-secondary education, which is less than half (41%) that of peers in the general population (Wagner, Newman, Cameto, Levine, & Garza, 2006). The results of Rojewski’s study (1999) indicate that the career development of students with learning disabilities differs from their peers without learning disabilities. The different learning experiences of students with learning disabilities influence self-efficacy which impacts post-secondary educational planning. This difference must be acknowledged in developing and implementing strategies impacting post-secondary educational planning for students with learning disabilities.

Rojewski’s study indicated that post-secondary educational and career outcomes for young adults with learning disabilities are significantly lower than their peers without disabilities. In a correlational study of 11,178 young adults, Rojewski (1999) investigated the occupational and educational status of young adults with and without learning disabilities following completion of high school. Using information from an existing database, the National Education Longitudinal Study, standardized achievement tests, and a questionnaire, the researcher assessed predictors of post-secondary occupational and educational outcomes for young adults with learning disabilities compared to young
adults without learning disabilities. Data was analyzed using asymmetrical hierarchical log linear analysis which allowed the focus of the study to be on the relationship of the independent variables to the dependent variables (post secondary educational and career status), not on the interrelationships of independent variables. The most significant predictors of post-secondary education for young adults with and without learning disabilities were educational aspirations at grade 12 and successful attainment of a high school diploma or equivalent. The study results underscore the importance of determining what factors impact post-secondary educational plans as aspirations are shown to be clearly significant in improving post-secondary outcomes of students with learning disabilities.

Successful attainment of a high school diploma or equivalent was one of the most significant predictors of post-secondary education for young adults with and without learning disabilities (Rajewski, 1999). The type of diploma awarded to high school graduates reflects high school curriculum choices and credits earned by students in high school and impacts post-secondary educational options (U.S. Department of Education Office for Civil Rights, 2007). Youth with disabilities who graduate with a modified or special diploma may access post-secondary education; however, they may be limited in their selection of post-secondary degree options to 2-year degrees, or they may be required to complete remedial programs at community colleges before transferring to a 4-year degree program (United States General Accounting Office, 2003). Requirements for attaining a high school diploma have changed. According to the Virginia Department of Education Annual Performance Report, 43% of students with disabilities in Virginia earned a Standard Diploma. The percentage of students with disabilities earning a
Modified Diploma was not provided (Virginia Department of Education, 2007). The Modified Standard Diploma was first granted to students with learning disabilities who graduated in the class of 2004 and beyond in the State of Virginia. Course requirements for the Modified Standard Diploma (20 credits) are slightly less stringent than those required for the Standard Diploma (22 credits). The Modified Standard Diploma was intended for students with an identified disability who do not meet the credit requirements for a Standard Diploma. The Special Diploma has no credit requirement and was intended for students with an identified disability who do not meet the credit requirements for a Modified Diploma.

Nevertheless, an increasingly complex society has led to more rigorous requirements for high school graduates. To meet the job requirements of future employers and successfully compete for positions, post-secondary education is critically important. In addition, success and social mobility are contingent upon educational attainment (Satcher, 1993; Wahl & Blackhurst, 2000). As a result, the modifications in high school diploma requirements may be an impediment for children with disabilities, especially minorities. Of all youth served under IDEA who left high school during the 2000-2001 school year, 57% received a standard diploma and an additional 11% received an alternative credential. (National Council on Disability, 2004).

According to a United States General Accounting Office Report on Special Education (2003), students with disabilities, their parents, and school personnel indicated that a variety of impediments exist to students’ transitioning from high school to post-secondary education. The report cites students’ lack of self-advocacy training, lack of knowledge about their rights, and insufficient information about the transition process as
major impediments to post-secondary educational access. For example, survey research by the National Youth Leadership Network (2002) found that students with disabilities indicated that they had problems asking for accommodations.

To address these barriers for children with disabilities, it is imperative that school counselors align their school counseling program with the ASCA National Model. Such an alignment requires school counselors to identify discrepancies between achieved results and desired results and construct and implement interventions to close identified discrepancies or gaps. The ASCA National Standards provide a vision of what an effective school counseling program should incorporate. The ASCA National Model serves as a guide for school counselors to implement the national school counseling standards. A comprehensive school counseling program aligned with the ASCA National Model requires that the program prepare for the post-secondary transition of all students and promote equity and access to post-secondary education for every student. Meeting the standards of an effective school counseling program requires that "a school counseling program provide intentional guidance to specifically address the needs of every student, particularly students of culturally diverse, low social-economic status and other underserved or underperforming populations" (ASCA, 2005, p. 77).

According to the May 2005 IDEA Compliance Insider, IDEA 2004 mandates that transition planning must be based on results to reflect No Child Left Behind, results which include post-secondary education. The increased services to students with disabilities, mandated as a result of the passage of IDEA, directly impact the requirements of counselors to meet their needs (Romano & Hermann, 2007). School counselors play a pivotal role in promoting smooth post-secondary transition and college access for
children with learning disabilities because school counselors are specialists in child and adolescent development and they are knowledgeable of college admission criteria (ASCA, 2005; Hartley & Milsom, 2005). In addition, school counselors ranked providing students with assistance in post-secondary planning and preparation a top priority among counseling activities (NACAC, 2005).

Disproportionality: Differential Placement among Students with Disabilities

Today, special education programs serve a large number of students with disabilities. According to the National Council on Disability (2004), "...since the 1997 reauthorization of IDEA, the number of students served through IDEA has increased from 3.7 million to over 6.5 million" (p. 8). This growth can be attributed primarily to an increase in the number of students with specific learning disabilities (Borowsky & Resnick, 1998; United States General Accounting Office, 2003). However, disparities exist in the representation of students placed in special education. For example, there is a disproportionate representation of minority students in special education (Ferri & Connor, 2005; Salend & Duhaney, 2005) which is indicative of institutional racism (Skiba, 2000). In a policy report from the Goldwater Institute, Ladner (2003) found that, after controlling for school spending, student poverty, and community poverty, minority students were identified as having a learning disability at significantly higher rates than Caucasian students in predominantly majority White public school districts.

Gender disparities also exist in special education placement (Skiba, 2000). Noticeably, boys are more frequently identified as having learning disabilities than girls (Rodis et al, 2001). In addition, Black and Hispanic boys are more likely to be referred than White boys. However, according to the National Longitudinal Survey of Youth
significant differences were not noted between male and female students with disabilities in terms of postsecondary participation (Levine & Nourse, 1998). In a study of ethnicity, gender, and socioeconomic status and discrepancies in school discipline practices, gender was not found to be a significant factor (Skiba, 2000). However, studies have found gender to be significant in terms of sex typed career and educational aspirations (Akos, Lambie, Milsom & Gilbert, 2007).

Both racial and ethnic minority group status and socioeconomic status impact perceived educational possibilities and access to post-secondary education for students with disabilities (NACAC, 2005). A higher proportion of minority students live in poverty compared to their white counterparts (Skiba, 2000; NACAC, 2005). Membership in these two categories appears to increase the chances that school personnel will identify these students as needing services in special education (Skiba, 2000; Salend & Duhaney, 2005). In particular, African-American youth with disabilities have faced a number of barriers due to racial bias. The consequences of biases include inhibiting the formation of family partnerships. Biases affect the interaction of school personnel with families, blocking collaboration and disempowering students and their families. Special education has a stigma felt by students and families (Harry & Anderson, 1994; Patton, 1998). Focusing on disability and conversing with families from a position of greater knowledge fosters dependency, inhibiting collaborative partnerships (deFur, 2003). The language used in transition discussions can empower or stigmatize the individual and family members and inhibit positive transition outcomes (Dudley-Marling, 2004). Furthermore, school personnel’s stereotypes about racial and ethnic minority students as well as the perceptions of racial and ethnic minority students’ themselves can also inhibit
their transition outcomes. Promoting positive transition outcomes requires building cultural competence with careful attention to assumptions based on stereotypes (O'Hara, 2003).

Movement Styles

Cultural differences may be mistaken for learning difficulties. In an exploratory study of 136 middle school teachers, Neal, et al. (2003) investigated teacher perceptions of African-American adolescent boys with respect to aggression, achievement, and the need for special education referral based on culture-related movement styles of the boys. Using a questionnaire based on the Adjective Checklist (ACL; Gough & Heilbrun, 1983), the researchers assessed teacher perceptions after having viewed a videotape of European-American adolescent boys and African-American adolescent boys presenting culturally derived movement styles of African-Americans and European-Americans. Study results indicated that teachers perceived students with African-American movement styles as lower in achievement, higher in aggression, and more likely to need referral for special education services than students with European-American movement styles. The results of this study have direct implications for future research on factors affecting post-secondary educational planning of students with learning disabilities. Teachers, school counselors, and others who work closely with African-American students in the educational setting are at risk for mistaking cultural differences for learning disabilities.

Stereotype Threat

Students with learning disabilities internalize negative societal stereotypes about themselves (Delpit, 2001). Claude Steele's research (1997) identified "stereotype threat"
as the internalizing of negative stereotypes emanating from society. “Every time a child is evaluated, he receives the message that something is wrong with him” (Lieberman, 1986, p. 5). “For an African-American with a learning disability, stereotype threat could create anxiety, which depresses the individual’s performance leading to an outcome fitting the stereotype. Research on stereotype threat has not been extended to students with disabilities. However, in a social cognitive framework, the effect of outcome expectations on performance is noted by Betz as particularly applicable to members of groups for whom socially constructed bias strengthens the anticipated outcome barriers to their goals (Betz, 2004).

Low Expectations

An abundance of research exists about the implications of low teacher expectations for minority children (Neal et al, 2003; Harry, Klingner, & Hart, 2005). Low teacher expectations for minority children are mentioned throughout the general education literature (Rosenthal & Jacobson, 1992). Research indicated that school personnel often have the same low expectations for minority children in special education (Levine & Nourse, 1998; National Council on Disability, 2004; Ferri & Connor, 2005). The emphasis on cultural deficiencies rather than strengths perpetuates educational inequities (Skiba, 2000). Low expectations contribute to low self-efficacy and the conclusion that something within the student is wrong and needs fixing (Harry & Anderson, 1994).

Research indicates that there are significant consequences for those disproportionately represented in special education (Patton, 1998; Salend & Duhaney, 2005). Consequences of disproportionate representation of students of color in special
education include disparate treatment and disparate impact (Salend & Duhaney, 2005) and the blocking of access to reaching their full potential (Patton, 1998). Overidentification and mislabeling African American students has resulted in an increased rate of these students dropping out or never completing their high school diploma (Halloran, 2000; Durodoye, Combes, & Bryant, 2004). An additional consequence of overrepresentation is segregation and highly restrictive educational placements (Ferri & Connor, 2005).

According to Ladner (2003), measuring the impact of racial bias is not possible, but its existence cannot be denied and there are significant consequences to minority students in terms of access to postsecondary education and employment outcomes. Skiba (2000) and Durodoye, Combes, & Bryant (2004) found that major consequences of mislabeling in the primary grades include a high drop-out rate for African-American students, poor academic achievement, poor performance expectations by teachers, and a rise in school suspensions for these students.

It is imperative that the overrepresentation of minorities in special education as well as the risk of misdiagnosis be recognized by those who work with African-American students receiving special education services. It is equally important that school personnel respect and understand cultural factors such as movement styles in social interaction (Skiba, 2000). In their conceptual article highlighting the pivotal role of the school counselor in post-secondary planning and critical elements for successful transition interventions, Durodoye, Combes, and Bryant (2004) emphasized the importance of school counselors' knowledge of the specific needs of African-American youth with disabilities. For example, students with learning disabilities gain an
occupational identity in a different way than their peers without learning disabilities (Skinner & Lindstrom, 2003; Durodoye, Combes, & Bryant, 2004). Also, these students are often slower in their career development and unrealistic in terms of their career aspirations and expectations, underestimating their own abilities and the effect of their disabilities on career choice. College preparation should start earlier for students with learning disabilities (Cordoni, 1987; Skinner & Lindstrom, 2003). Durodoye, Combes, and Bryant (2004) recommended that school counselors increase their knowledge about factors that contribute to successful post-secondary outcomes for African American students with disabilities.

**Factors That Affect Post-Secondary Educational Planning for Students with Learning Disabilities**

As previously discussed, race and socio-economic status significantly impact post-secondary outcomes for students with learning disabilities. Students with disabilities from low-income and racial/ethnic minority background often have negative self-perceptions about their ability to continue their education following high school (Wahl & Blackhurst, 2000). Given the overrepresentation of minorities in the special education population, race/ethnicity is a critical variable in research into factors impacting post-secondary educational plans of students with learning disabilities. As noted by deFur (2003) in *A Practitioner's Guide to Involving Families in Secondary Transition*, building effective collaborative partnerships requires an understanding that values, attitudes, and priorities differ within cultural contexts and cultural diversity. Educators working with students and their families cannot assume that elements of transition planning have the same meaning and value for everyone, regardless of background. For example, the
African-American kinship network can be a critical transition resource because their support is linked to post-secondary success. Indeed, family and community connections are important components in the success of African-American youth. Therefore, promoting and encouraging the involvement of African-American parents of students with learning disabilities, as well as mentors, role models, community leaders, and extended kin in the African-American community in transition planning is a necessary challenge for educators seeking to promote a partnership leading to positive transition outcomes for African-American students with learning disabilities. This is a "necessary challenge" for educators because without an effort to reach out, de-code, and enable access to the system, "...such children are systematically denied true opportunities for long-term success" (Stanton-Salazar, 1997, p.9).

"High cultural competence by professionals and high system awareness by families" is optimal for effective transition partnerships between educators and professionals providing transition services to families. School representatives must become aware of the cultural context of the family and make the effort to understand and respect it (Skiba, 2000). According to Ladner (2004), what those in education have been doing to comply with special education law has not been working. If school representatives tell the family that their child needs help and special education programs are the answer, the family trusts the wisdom of that choice. The process needs to include more listening and collaborating. The kinship network can be a critical resource in ensuring a positive transition into post-secondary education. (Durodoye, Combes, & Bryant, 2004).
Knowledge of African-American culture as well as the characteristics and needs of students served in special education is critical to assisting African-American students with learning disabilities in post-secondary planning and career exploration (Durodoye, Combes, & Bryant, 2004). For example, African-American students with learning disabilities are often reluctant to disclose their disability and request needed accommodations for fear of being deemed incompetent (Durodoye, Combes, & Bryant, 2004). The implications of ignoring such tendencies include seriously hindering efforts to promote self-advocacy. Therefore, school counselors must begin by becoming more culturally self-aware. Durodoye (2004) emphasizes that “before school counselors can work successfully with students with disabilities, they must understand how cultural and ethnic identity as well as disabilities relate to their own life circumstances” (p. 133). Neal, McCray, Webb-Johnson, Gridgest (2003) stressed the importance of students working with teachers who possess “sociocultural knowledge” because it results in higher teacher expectations and higher student achievement. Furthermore, Skiba (2000) and Neal, McCray, Webb-Johnson, and Gridgest (2003) found academic achievement rises when students are educated by teachers who understand their background and culture and incorporate that understanding in educational program design, implementation, and management. Indeed, counselors and teachers need to understand cultural as well as other factors that promote positive post-secondary outcomes for students with disabilities (deFur, 2003).

Other factors identified in the literature as predictive of successful post-secondary education for students with learning disabilities include students’ intellectual functioning, familial support, self-efficacy, and decision-making strategies (Satcher, 1993; Durodoye,
Combes, & Bryant, 2004). Furthermore, students' and their families' self-advocacy skills, knowledge of the law, and understanding of their disability and strategies to overcome them are also critical to successful transition to post-secondary education (Skinner & Schenck, 1992; Skinner & Lindstrom, 2003).

Self-efficacy is a critical element in career development interventions designed for groups of individuals with self-imposed limitations (Betz, 2004). Contextual factors such as disability status, ethnicity, socio-economic status, and family configuration can contribute to individuals' underestimating their capabilities. Students with learning disabilities are at greater risk of dropping out of high school, attaining no post-secondary education, and earning substantially less income than their peers without disabilities (Scarborough & Gilbride, 2006). Adults with learning disabilities are 21% more likely to be high school drop-outs than adults without disabilities. Students from an ethnic minority group, students from low income households, and students from single-parent families experienced adverse effects on post-high school outcomes (Wagner, 1993). White students from 2-parent homes were more likely to enroll in post-secondary education and more likely to be employed than their peers who were members of ethnic minority groups (NACAC, 2005). 58.6% of students in extreme poverty live in single parent households compared with 11.3% of students above the level of poverty. At the Forum on Poverty and Disability, Tornquist and Halloran cited the National Longitudinal Transition Study-2 findings that one in four children enrolled in special education lived in poverty compared to 16% in the general population (Tornquist & Halloran, 2006). Students living in poverty and minority students continue to experience barriers to post-secondary education (NACAC, 2005).
Students with learning disabilities progress at a slower rate than their peers without disabilities in terms of their emotional development and their levels of self-efficacy (Cordoni, 1987). Self-efficacy is an individual's belief that they have the capability of performing a specific behavioral task (Herr & Cramer, 1988; Bandura, 1994). School personnel and parents are cautioned not to speak and act for the student with a learning disability to such a degree that the student loses the opportunity to feel capable and able (Cordoni, 1987). Individuals experience their sense of self through their interactions with others. Dudley-Marling (2004) distanced himself from the concept of the "able" and the "disabled" and convincingly argued that a disability does not lie within the student. The identity as a "student with a learning disability" is constructed in a social context (Dudley-Marling, 2004).

Like social constructionism, Social Cognitive Career Theory addresses the different experiences of students with learning disabilities. Based on the social cognitive theory of Albert Bandura, Social Cognitive Career Theory posits that contextual factors such as socio-economic status, ethnicity, and culture influence outcome expectations. Lent, Brown, and Hackett have been identified as leaders in Social Cognitive Career Theory. According to Social Cognitive Career Theory, the higher an individual’s self-efficacy, the more career options are perceived to be open which promotes interest and educational preparation (Bandura, 1994). Social Cognitive Career Theory considers environmental variables and their impact on the perceptions of the individual.

School reform initiatives have mandated that children leave school more prepared to meet the challenges in their lives. Increasingly, an individual's skill level and economic mobility are contingent upon post-secondary education. If children’s economic
mobility is directly related to their educational attainment and children with disabilities are not able to obtain regular diplomas, then the implications are that children with disabilities are not going to get diplomas (General Accounting Office, 2003). In *Locating the Dropout Crisis*, research at John Hopkins University found that graduation is not the norm at high schools (termed “dropout factories”) where approximately 50% of minority high school students are educated (Balfanz & Legters, 2004). Research by the General Accounting Office in 2003 found that students with disabilities were less likely to graduate from high school with a standard diploma than their peers without disabilities. They are going to fail, drop out, and face their future ill equipped to enter the workforce. Many opt to go into service occupations with low skill requirements and concomitant low wages. More disturbingly, a disproportionate number of inmates in the prison population have diagnosed learning disabilities (Rodis et al, 2001). One of every three young inmates in correctional facilities has been identified and served in special education programs (Halloran, 2000). This suggests a need for improving transition services for students with learning disabilities and conducting further study addressing inhibiting and facilitating factors to post-secondary educational planning in order to close the gap in rates of entry to post-secondary education for students with learning disabilities when compared to their peers without disabilities.

**Purpose of the Study**

The purposes of this study were to examine the extent to which a school counselor coordinated career development program and other student and contextual factors such as diploma status, disability status, family configuration, socio-economic status, IQ function, and ethnicity affected the post-secondary educational plans of students with
learning disabilities and to assess the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes. This study uses a social constructionist framework to examine the constructed barriers to post-secondary educational planning as experienced by students with learning disabilities.

When compared to their peers without learning disabilities, a larger percentage of graduates with learning disabilities do not have post-secondary educational plans (United States General Accounting Office, 2003; National Council on Disability, 2004). The literature shows there is a discrepancy between what students with learning disabilities are capable of doing and what they think they are capable of doing (Gans, Kenny, & Ghany, 2003). Additionally, there is a disproportionately high number of students of color identified as qualifying for special education services many of whom are not going onto post-secondary education.

Those employed in education (including school counselors) are called upon to conduct research and reflect on how their work contributes to this disproportionality (Salend & Duhaney, 2005). Furthermore, there is a need for research exploring the impact of school counselors on post-secondary outcomes for students with disabilities (Scarborough & Gilbride, 2006). The current study examined the extent to which a school counselor coordinated career development program and other student and contextual factors affected the post-secondary educational plans of students with learning disabilities. Research which expands our knowledge of factors that positively and negatively impact post-secondary educational aspirations for all students is necessary for school counselors to construct effective K-12 developmental guidance programs or at least ones that meets the needs of students with disabilities (Wahl & Blackhurst, 2000).
Therefore, it is important to assess the contributions of factors such as diploma status, disability status, family configuration, socio-economic status, IQ functioning, gender, and race, and participation in career development programs on post-secondary educational plans among students with learning disabilities. This knowledge will enable school counselors and other school and community personnel in planning future interventions to increase the numbers of students with learning disabilities who enter and successfully complete post-secondary education. In addition, it is important to assess the effectiveness of the current efforts at interventions designed to ensure success of students with learning disabilities who choose post-secondary education as an option. It is important to determine whether career development programs make a difference in helping students choose post-secondary education.

This study used archival data and case studies of students with learning disabilities to address the research questions. The research questions follow.

Research Questions

1. Do diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and participation in a career development program contribute to post-secondary educational plans among students with learning disabilities?

2. What are the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes?

Significance of the Study

College access is a "national imperative" (NACAC, 2005, p. 130). According to the U.S. Department of Labor (2004), six of every ten jobs in the American economy
require post-secondary education. Employment in the global market is increasingly competitive and post-secondary education is more essential than ever for success.

Understanding the factors that affect the post-secondary educational plans of students with learning disabilities allows those who work with these students to better assist them in de-coding the language of access and removing barriers to post-secondary educational entry and attainment. To evaluate success or failure, those who work with these students have to continually collect and monitor data and examine inconsistencies (Salend & Duhaney, 2005; Akos et al, 2007). Adopting the ASCA National Model’s (2005) recommended practice of incorporating the collection and analysis of data to guide and evaluate school counseling programs as a performance standard for school counselors will enable more accurate determination of the extent of disproportionate under-representation of students with disabilities with post-secondary educational plans. Collecting data on student perceptions is helpful in examining the effectiveness of strategies designed to address disproportionate representation as well as under-representation of students with disabilities with respect to their post-secondary educational planning.

Many students who continue into post-secondary education, particularly those who are second-generation college and beyond, have been socialized from an early age to anticipate and expect to continue their education beyond high school. A similar shift in expectations occurring with children in special education can increase not only self-efficacy, but also the likelihood of securing admission and persisting through graduation at the college. This shift in expectations would require building an infrastructure for children with disabilities. Within the framework of Social Cognitive Career Theory, a
supportive environment with high expectations is necessary to promote self-efficacy expectations which influence career choice for these children and counter self-imposed limits (Betz, 2004).

The school counselor can play a pivotal role in building an infrastructure in the school. However, to create and support an infrastructure for students with learning disabilities requires a knowledge base for school counselors that does not currently exist. Korinek and Prillaman (1992), Frantz and Prillaman (1993), Wood Dunn and Baker (2002), and McEachern (2003) found that there has been a lack of counselor preparedness in working with students with learning disabilities. There is a discrepancy between the perceived need for counselor preparation to work with students with exceptionalities and the training provided to meet that need. There is an expectation that school counselors advocate for students with disabilities and assist all students in planning for their future. Yet research is lacking that focuses on school counselor services for students with learning disabilities (Scarborough & Gilbride, 2006).

A school counselor coordinated intervention described herein is an opportunity for school counselors to build their knowledge base, skills, and awareness, enabling them to better serve all students including those with disabilities. This study will provide practicing school counselors an opportunity to consider a proactive career development program that will inform them and enable them to become more effective partners in the transition process and active in increasing access to post-secondary education for students with learning disabilities. Graduate coursework in counselor education lacks training in post-secondary educational planning (NACAC, 2005). Improving high school counseling services with professional development training on career development
programs that make a difference would also significantly improve college access for minority students and low-income students.

Implications for not addressing post-secondary educational planning for students with learning disabilities include adding to the number of drop-outs, prison inmates, low wage service occupations, and students not prepared to enter the workforce (Rodis et al, 2001; National Council on Disability, 2004). Research investigating the factors contributing to post-secondary educational planning, including the impact of school counselor intervention, is critical if students with disabilities are not to be “left behind” in American society (Scarborough & Gilbride, 2006).

In our global economy, a competitive workforce is essential. A small percentage of students with disabilities graduate with employment or the necessary support needed for successful acquisition of employment (Luecking & Certo, 2002). All children are not benefiting from our educational system. A disproportionate number of them are poor, minority students that are enrolled in special education (Ferri & Connor, 2005). Living in a highly technological society, we need literate students and this requires post-secondary educational planning. It is a problem with serious implications that the majority of students who have been labeled as having a learning disability do not make post-secondary educational plans.

An unequal distribution of educational opportunity has serious consequences. Strategically planned interventions can provide educational experiences that empower students and support an infrastructure of resources to access post-secondary education (Stanton-Salazar, 1997). School counselors set the normative expectations of students and serve as a critical support of a college-bound infrastructure (NACAC, 2005).
School-counselor coordinated and strategically planned interventions like the one examined in this study should increase the access to post-secondary education for students who have not had equal access. School counselors are in a key position to open a gate to access educational and economic mobility and build social capital. School counselors can choose to play a strategic role of providing institutional support to students who have not been privileged to access such support and the impact can be significant (Stanton-Salazar, 1997).

Career development for all students was identified in the National Model developed by the American School Counseling Association as a major role for school counselors (ASCA, 2003). Yet the post-secondary enrollment rate for students with disabilities continues to lag behind at half the rate of the general population (National Council on Disability, 2004). Students with learning disabilities have not been adequately served. The National Model mandates school counselors engage in advocacy, systemic change, and leadership. Research is needed that applies Social Cognitive Career Theory to diverse populations to close the gap between those who choose post-secondary education and those who do not (Gibbons & Shoffner, 2004). Failing to do so leaves these students behind. This creates a compelling rationale for counselors working toward the letter of the model to increase the students who are underrepresented in college.

The No Child Left Behind Act of 2001 mandates that children leave school more prepared to enter an increasingly complex society. It is problematic that students are graduating without post-secondary educational plans and that they are not transitioning well to the world of work (Sabel, 2000). Many students with learning disabilities do not have a level of self-efficacy necessary to ensure their success should they choose post-
secondary education. Transition services are inadequate for students with learning disabilities (Janiga & Costenbader, 2002). Transition problems, according to the 2003 Special Education Report of the United States General Accounting Office Report to the Ranking Minority Member, Committee on Health, Education, Labor and Pensions, United States Senate, include student knowledge and understanding of the transition process and the ability to advocate for themselves.

School counselors have a knowledge base in areas such as interviewing, career assessment, testing accommodations, post-secondary settings and options, and exploration strategies that is critical for post-secondary planning. To successfully compete in the future marketplace, students with disabilities need school counselors' expertise. Without pro-active interventions with major involvement of school counselors, students with disabilities will not realize their full education and career potential (Omizo & Omizo, 1992; Satcher, 1993).

Transition should be proactive and capacity building (Patton, 1998). The findings of this study may prove significant in that they will help clarify the role of diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and participation in a career development program on the post-secondary plans of students with learning disabilities. This knowledge should help school counselors to be proactive and build capacity in transition services for students with disabilities.

Operational Definitions

For the purpose of this study, the following definitions apply:

*Individualized Education Plan (IEP)*
An IEP is a written statement developed by a representative of the local education agency who is qualified to provide or supervise specialized instruction to meet the unique needs of children with disabilities, a teacher, parents, and when appropriate, the child. It shall include statements of (a) present level of educational performance, including how the child’s disability affects involvement and progress in the general curriculum; (b) special education and related services and supplementary aids and services to be provided and program modifications or supports provided to those working with the child with a disability; (c) explanation of the extent to which the child will not participate in the regular classroom environment; (d) any individual modifications needed for the student to participate in general assessments, explanations for assessment exemption, and specific methods for assessment; (e) the frequency and location of services and modifications; (f) beginning at age 14, transition service needs focusing on the child’s course of study; (g) beginning at least one year before the child reaches the age of majority, information regarding the transfer of rights upon reaching the age of majority; (h) an explanation of how the child’s progress toward annual goals will be measured and the means by which parents will be regularly informed of the child’s progress. (Individuals with Disabilities Education Act Amendments [IDEA], 20 U.S.C., Section 614 (D), 1997).

Individualized Education Plan Meeting

The IEP meeting is held annually (or more frequently if necessary). Discussion covers the student’s present level of functioning, progress made since the last meeting, and establishes goals and objectives for the upcoming year. Every third year, the IEP planning group conducts a review of the student’s status based on re-evaluation data.
**Learning Disability**

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written. The disorder may manifest itself in an imperfect ability to listen, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimum brain dysfunction, dyslexia, and developmental aphasia. The term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantage (IDEA, 1997).

**Post-secondary Education**

Post-secondary education options include adult education, technical college, community college, or college or university programs.

**Post-secondary Education Plan**

Each student's post-secondary plans are indicated on a Career Plan worksheet completed by the student. Two additional sources for post-secondary planning are the senior interview documentation and the post-graduate survey. These documents serve as evidence of post-secondary education plans for all students.

**Self-efficacy**

An individual’s beliefs that he/she is capable of performing a specific behavioral task (Herr & Cramer, 1988; Bandura, 1994).

**Socio-Economic Status (SES)**

The definition used in this study is a student’s qualification for free or reduced-priced school lunch according to the federal guidelines.
Transition

Movement of a high school student from a condition, place, or activity (e.g. high school) to another condition, place, or activity (e.g. post-secondary education) and the psychological response of an individual to the change or preparation for change which that movement entails.
CHAPTER 2: REVIEW OF LITERATURE

The “No Child Left Behind Act of 2001” requires states to establish assessment and reporting procedures for all public school students in an effort to ensure that all children, including those children with disabilities, reach their academic potential (United States General Accounting Office, 2003). States must set goals and monitor assessment results for students diagnosed as having learning disabilities. School districts are held accountable so that “no child is left behind.” State and school district accountability established by the “No Child Left Behind Act of 2001” extends beyond the attainment of a diploma to post-secondary outcomes.

Research has documented that students with disabilities continue to experience poor post-secondary outcomes including low rates of employment and post-secondary educational enrollment (United States General Accounting Office, 2003). According to a Harris poll cited by Elizabeth Halloran Tornquist and Bill Halloran at a Forum on Poverty and Disability, 35% of adults with disabilities are employed compared with 78% of adults without disabilities (Halloran & Tornquist, 2005). National Longitudinal Transition Study (NLTS) data indicated that 14% of high school graduates with learning disabilities participated in post-secondary education compared to 53% of their peers without disabilities (Levine & Nourse, 1998). The post-secondary enrollment rate for students with disabilities continues to lag behind at half the rate of the general population (National Council on Disability, 2004).
Students with disabilities have been prone to avoid or be excluded from academic and vocational activities that emphasize the area of their disability (Skinner & Schenk, 1992; Ruben, McCoach, McGuire & Reis, 2003). Research further found that students served in special education have not been receiving the necessary assistance to become successful students and community members (Durodoye, Combes, & Bryant, 2004). The emphasis for legislators and educators has been developing and implementing programs to assist students with learning disabilities to complete coursework leading to a high school diploma, but the disability most often continues to challenge these students as adults (Skinner & Lindstrom, 2003). The efforts of school districts to prepare students with learning disabilities for success in the competitive global economy have not been optimal.

In this chapter, relevant literature and empirical research were reviewed in order to understand post-secondary educational planning of students with learning disabilities. This chapter is organized into 11 sections. The first section is The Role of the Law in Transition Outcomes for Students with Disabilities and this will cover the legal framework supporting the identification of students to be served in special education and the distribution of services. The next section is an Overview of Post Secondary Education Planning for Students with Learning Disabilities and this will address the historical development and critical need for transition services. The next section presents a Conceptual Framework, Social Cognitive Career Theory, the lens through which to view the participants in this study and the critical nature of internal and external barriers to career development. In the next section, The Impact of Self-efficacy on Post Secondary Planning for Students with Learning Disabilities, self-efficacy is defined with
its impact on career options and educational planning. The next section is The Career Developmental Trajectory of Students with Learning Disabilities and this will describe a developmental model of career development. The next section, The Applicability of Social Constructionism and Social Cognitive Career Theory, discusses a theory that takes into account the role of environmental stressors and their impact on self-efficacy and career choice. The next section, The Role of the School Counselor in Successful Post-Secondary Educational Planning for Students with Learning Disabilities, describes the key attributes of school counselors and the value of their role in transition planning. The final 3 sections state the Purpose of this Study, Significance of the Study for Research, and closes with a Summary which presents a compelling rationale for research with the goal of increased college access for students with learning disabilities.

The first section discusses the role of the law in providing services including post-secondary educational planning for students with disabilities and accountability for transition outcomes.

The Role of the Law in Transition Outcomes for Students with Disabilities

*IDEA*

The Individuals with Disabilities Education Act (IDEA, 2004) (Section 300.5) prohibited discrimination and identified students with disabilities as those children who, because of their impairments, need special education and related services. As a result of this legislation, school personnel, including school counselors, are legally mandated to address the needs of students with disabilities. Prior to investigating post-secondary educational planning for students with disabilities, it is useful to consider the process of disability determination and what it means to have a disability or to be considered eligible
for special education services. An understanding of the eligibility process is necessary in order to: (a) align student success initiatives for identified students with the law covering identification and educational services, (b) identify key service providers in student success initiatives, and (c) identify assessment information critical to providing services to eligible students.

*Eligibility*

The eligibility process begins with a discussion between educators, parents, and administrators of interventions in the classroom and/or in the home. A parent, school personnel or any person concerned about a student may refer the student to a child study team that discusses the problem that led to the referral and suggests interventions to address the problem. If the suggested interventions do not effectively address the problem, the team may recommend the student for assessment by a psychologist, physician, or appropriate specialist to determine eligibility for special education services.

The Education for All Handicapped Children Act of 1975 and the Individuals with Disabilities Education Act (IDEA, 2004) require the use of a multidisciplinary team to determine eligibility for special education services. This mandate grew out of a desire for an objective eligibility process that best serves the needs of children with disabilities (Knotek, 2003). The team usually consists of the child’s teacher, director of special education, school principal, school psychologist, school nurse, school counselor, and school social worker. At an eligibility meeting, the multidisciplinary team reviews information with respect to aptitude, achievement, behavioral observations, sociological data (family background information), and psychological data (based on testing). Federal eligibility criteria are used to make eligibility determinations.
Disability diagnoses in the United States affect decisions about the distribution of services and support. Determination of eligibility for special education services, distribution of Social Security benefits or other disability insurance, protection against discrimination, and accommodation in education and employment make it necessary to have objective criteria and measures of disability so resources and services may be perceived as having been distributed fairly (Stanton-Salazar, 1997).

**Accountability for Setting Goals and Producing Outcomes**

The federal government has mandated accountability requirements for states in an effort to raise performance expectations for youth and ensure that “no child is left behind.” These mandates have been driven by reports that suggest that American students are unable to meet the economic and societal demands of contemporary society. The *No Child Left Behind Act* (United States Department of Education, 2004) requires states to establish assessment and reporting procedures for all public school students in an effort to ensure that all children, including those children with disabilities, reach their academic potential (United States General Accounting Office, 2003). States are required to set goals and monitor assessment results for students diagnosed as having a learning disability. Research has documented that students with disabilities continue to experience poor post-secondary outcomes including low rates of employment and post-secondary educational enrollment (United States General Accounting Office, 2003). This research has supported claims that those charged with providing for students in special education have not rendered the necessary assistance for students with disabilities to become successful students and community members (Durodoye, 2004).
Laws such as Section 504 of the Rehabilitation Act of 1973 (Section 504), Title II of the Americans with Disabilities Act of 1990, and the Individuals with Disabilities Act (IDEA) which prohibit discrimination on the basis of disability, have changed in the direction of increased accountability for results (Lordi, 2005). Those who work with students with disabilities are mandated to comply with these laws. School reform initiatives mandate that children leave school prepared to meet the challenge of the working world. The ASCA National Model (ASCA, 2005) stresses federal legislation that mandates the involvement of school counselors in the educational planning of students with disabilities.

Transition Planning

The Individuals with Disabilities Education Act (IDEA) (Section 300.5) defined students with disabilities as children who need special education services because of their impairments. The 1990 amendments to IDEA included a requirement for transition planning for students age 16 and older. Section 504 of the Rehabilitation Act of 1973 (Public Law 93-112, 1973; Public Law 93-516, 1974) stated that “... no otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal assistance ...” (Subpart E, Section 504). As a result of this legislation, many more students with learning disabilities are choosing to enter higher education (US Dept. of Education, 2004). Colleges and universities have admitted them in increasing numbers nationwide. However their numbers are not as high as their peers without disabilities (National Council on Disability, 2004).
The *Individuals with Disabilities Education Act* (IDEA) and Section 504 legally mandated that school counselors address the needs of students with learning disabilities (ASCA, 2005). Considering that learning disabilities continue to challenge students as they transition into adulthood and more students with learning disabilities are entering college at the present time, there is a need for interventions in high schools to better inform these students of their options and prepare them if we want them to succeed in furthering their education (Durodoye et al, 2004).

**Overview of Post-Secondary Educational Planning for Students With Learning Disabilities**

Vocational education and job placement had been the emphasis of transition planning for students with learning disabilities in the early years in the field of special education (Masters & Mori, 1986; National Transition Network, 1999). The entrance of special education into school systems was marked by a war of territoriality. Classroom teachers did not teach reading. Reading teachers taught reading. Students identified as needing special education were taught by special education teachers. According to Lieberman (1986), “The day a handicapped child was taught in a regular classroom and a non-handicapped child received special education services, the world changed” (p. iv). A remnant of the period of territoriality remains in the school counseling services of many districts. Many school counselors continue to defer to special education teachers and service providers (e.g. Department of Rehabilitation Services personnel) regarding responsibility for transition planning for students with learning disabilities (Scarborough & Gilbride, 2006).
A successful transition is defined by Patton (1999) in his exploration of transition basics as a successfully functioning adult who has reached personal fulfillment and an outcome reflecting the individual’s potential. Transitions require preparation for successful outcomes (Turner, 2007). Assisting students in planning for a successful transition from high school to post-secondary education requires a pro-active approach, an intervention embracing the diversity of students and encompassing a collaborative partnership between students, parents, educators, administrators, transition specialists, and counselors.

The U.S. Department of Education Office for Civil Rights (2007) highlights the importance of providing accurate knowledge to students with learning disabilities. Transition programs must promote self-advocacy skills. Students must be knowledgeable about their disability and encouraged to communicate with disability coordinators at the post-secondary educational level for assistance and secure needed accommodations.

Conceptual Framework

This study used a constructionist theoretical framework as implemented in Social Cognitive Career Theory to examine the constructed barriers to post-secondary educational planning as experienced by students with learning disabilities and to examine the extent to which a school counselor coordinated career development program and other student and contextual factors such as diploma status, disability status, family configuration, socio-economic status, IQ function, and ethnicity affected the post-secondary educational plans of students with learning disabilities and to assess the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes.
Social Constructionism

Social constructionism is a “relativist epistemology that recognizes no universal criteria for assessing the validity of any form of belief” (Lyddon, 1995). Social constructionism comes with a whole new set of definitions. Definitions of rationality and reality are reflective of a consensus rather than any one person’s truth. Gergen (1985) argued that “knowledge is not something people possess in their heads, but rather something people do together” (p. 266). Viability and usefulness are key concepts of social constructionism. By assuming the experience of one group is reality and imposing their power in working with students and their families, researchers and change agents often disempower them (Fish, 1996). Feminists and advocates of multicultural counselor education have long rejected traditional approaches wherein positive mental health outcomes are defined in terms of the majority culture (Lyddon, 1995). In this sense, social constructionism renders traditional perspectives backward and no longer germane (if they ever were). Problems can be traced to a dysfunctional system rather than to the victim of the system. Social constructionism allows researchers and change agents to depart from blaming the victim and move forward to contextually sensitive ways of promoting change, removing the socio-cultural restraints that hold individuals back from experiencing success. Previous approaches impose what works for one group onto another whereas social constructionism does not hold this assumption (Fish, 1996).

There is a revolutionary contextual shift in adopting social constructionism. According to Goddard, Lehr, and Lapadar (2000), counselors need to leave the medical model, the old way of thinking, behind. In the old way of thinking, a disability existed within the student. The educational environment identified the pathology and focused on
discovering the cause and the solution to fix it. The view of a student with a disability using the medical model places responsibility for learning problems in the student. In “The Social Construction of Learning Disabilities,” Dudley-Marling (2004) provides a lens through which to view a student with a learning disability. Through this lens, a disability does not reside within the student. A disability resides in the social context of an educational environment. Using this perspective, school counselors must recognize that a change in the patterns of social context, a change in the environment, can significantly impact constructing students as “smart” and “able.” Such an intervention promoting self-awareness, career development and self-efficacy can impact outcome expectations.

In Goddard, Lehr, and Lapadar’s study (2000), the reconstructed view of the parents of students with disabilities leaves no room for the old way of discourse where the primary focus was on disability. The voices of these parents emphatically state, “Our children are not broken.” Parents’ words convincingly highlight the subjugating effect of the interactions of school personnel with students with disabilities and their parents. Instead of focusing on what is broken, parents are leading the way in examining what is working for their children. In a three year qualitative study, Harry, Klingner, & Hart (2005) found that school representatives' focus on negativity and pathology led to poor educational outcomes for students with disabilities. Adopting this strength-based viewpoint calls into question the ways in which disabilities are defined in the United States, “which is impairment need not be dysfunctional or tragic, but that it is socially and historically constructed as such, often to the detriment of individuals who have
impairments” (Goddard, et al., 2000, p. 278). As opposed to focusing on deficits, comprehensive transition planning should recognize strengths (Patton, 1998).

Social constructionism does not, by itself, explain human behavior and experience, but provides a lens through which one can examine the experiences of students with disabilities. Historically, the assumption of special education referral and placement has been that the individual deemed qualified for services as a student with a learning disability has an inherent deficit that needs to be fixed (Harry & Anderson, 1994). Social constructionism does not view a student with a learning disability as flawed or broken. Without the social context of a school setting, there is no student with a learning disability, only a student who has been given a label by the educational institution in order to organize itself (Dudley-Marling, 2004). The student is not the problem. The environment (school setting) is not the problem. The factors that make up the social context in interaction with the student construct an “able, bright student” or a student with a “disability.”

Like social constructionism, Social Cognitive Career Theory addresses the different experiences of students with learning disabilities. For example, research by Alston, Bell & Hampton (2002) found that parent, teacher, and employer perceptions of students with learning disabilities created career barriers in science and engineering and contributed to underrepresentation in science related careers (2002). Contextual factors such as societal attitudes and perceptions of students with learning disabilities as less capable and educators with low expectations of these students influence outcome expectations. Lent, Brown, and Hackett have been identified as a leaders in Social Cognitive Career Theory. The higher an individual’s self-efficacy, the more career
options are perceived to be open which promotes interest and educational preparation (Bandura, 1994). Social Cognitive Career Theory considers environmental variables and their impact on the perceptions of students with learning disabilities.

The Career Developmental Trajectory: Students with Learning Disabilities

Ginzberg, Ginsberg, Axelrad, and Herma (1951) were the first theorists to approach career choice from a developmental standpoint. Their theory concluded that there are three stages in the developmental process of career choice (Wahl & Blackhurst, 2000). The fantasy period normally takes place before age 11. It is characterized by play and make-believe occupations ("I want to be an actress." "I want to be a fireman") in the early stage which becomes more work-oriented play in the latter part of this stage. The tentative period normally takes place during early adolescence between the ages of 11 and 17. It is characterized by thinking about occupations as something that you have to do and developing an ability to recognize and assess interests and abilities. The realistic period takes place during middle adolescence from age 17 to young adult. It is a stage where many children have to really think critically about their skills and abilities in relationship to occupational choice. Although clearly a part of this developmental theory, the realistic stage lies outside the scope of study involving post-secondary educational planning of high school students with learning disabilities. This is a theory that speaks directly about the process that occurs in terms of occupational choice or career selection.

Participants in Ginzberg's research were Caucasian, male, average to above-average income, with no identified learning disabilities (Ginzberg, Ginsberg, Alexrad, & Herma, 1951). Ginzberg's (1951) study reflected what may be true in general about non-minority, male, non-poor, non-learning disabled students. The literature suggests that
students with learning disabilities gain an occupational identity in a different way 
(Skinner & Lindstrom, 2003; Durodoye, Combes, & Bryant, 2004). They often do not 
take into consideration all of their abilities (Skinner & Schenck, 1992). Furthermore, 
they often underestimate what it is they are capable of doing. If the student with a 
learning disability believes that there is an innate flaw within that needs to be repaired, 
self-efficacy is bound by this mistaken belief and impacts outcome expectations. 
Ginzberg’s model does not explain the differences among mainstream students and 
students with learning disabilities. Social Cognitive Career Theory (SCCT) recognizes 
that institutional discrimination, low expectations, and environmental barriers such as 
poverty impact self-efficacy that may lead to a student’s premature elimination of careers 
requiring post-secondary education (Lent, Hackett, & Brown, 1999).

Social Cognitive Career Theory

Social Cognitive Career Theory (SCCT) posits that self-efficacy, outcome 
expectations, and goals interrelate with student and contextual factors. The environment 
includes supports as well as internal and external barriers (Lent & Brown, 1996). SCCT 
considers or takes into account environmental stressors and their impact on the 
individual. Environmental stressors are social, cultural, and economic conditions that 
impact the individual’s socially constructed world (Lent, Hackett, & Brown, 1999). 
Borowsky & Resnick (1998) found that students with learning disabilities served in 
special education are exposed to environmental stressors such as familial substance 
abuse, family violence, and sexual abuse, and they experienced poor emotional health 
when compared with their peers without learning disabilities. Having a disability 
increases the probability that a student will have stressors that may be associated with
poverty such as being a student in a poor rural or urban school setting. A greater proportion of students with learning disabilities live in single-parent and non-traditional households (Borowsky & Resnick, 1998). These environmental stressors impact career choice and post-secondary educational planning (Ferri & Connor, 2005).

An individual's career choice encompasses setting a goal, taking active steps to reach that goal, and experiencing success or failure which impacts future career behavior. High self-efficacy and individual expectations of success positively influence career interests which influence goals which lead to positive experiences and outcomes. It is a path in which contextual and ecological factors play a critical role (Zunker, 1998; Lent, Hackett, & Brown, 1999). Problems experienced by the individual do not result from a defect in the individual, but rather a defect in the system (Rudes & Guterman, 2007).

An individual's behavior is guided by their self-efficacy, goals, and outcome expectations. Self-efficacy is an individual's belief with respect to their capabilities of accomplishing a task. An outcome expectation is defined as what an individual believes will happen as a result of their effort. An individual sets goals as a means of exercising personal agency (Lent, Hackett, & Brown, 1999). Personal agency provides an individual with the option of intention and action to change and adapt outcome expectation and re-set goals. Personal agency provides a path of freedom from socially constructed barriers and to form and pursue goals and self-direct their life course (Wandrei, 2001).
The Effects of Environmental Variables on Students with Learning Disabilities Examined Through the Framework of Social Cognitive Career Theory

Social Cognitive Career Theory considers the effect of environmental variables on the perceptions of students with learning disabilities regarding opportunities available to them. According to the principles of Social Cognitive Career Theory as outlined by Brown and Lent (1994), if a student with a learning disability does not perceive a positive outcome from any efforts expended toward post-secondary education, such an outcome expectation will lower self-efficacy needed to support academic efforts required for successful post-secondary planning, application, admission, and program completion. Students with a learning disabilities who perceive significant barriers to post-secondary education are less likely to make such plans for themselves (Brown & Lent, 1996). The components of Social Cognitive Career Theory can assist with post-secondary educational planning by promoting positive educational outcome expectations and modifying faulty self-efficacy beliefs (Brown & Lent, 1996). To prevent premature elimination of post-secondary education as an option, school counselors can intervene by providing opportunities for high school students with learning disabilities to listen to college directors of services to students with disabilities discuss the process of college application, and to hear successful college graduates with learning disabilities discuss their experiences. Such experiences correct barriers from within and without the student in the educational environment.

Social Cognitive Career Theory addresses ecological factors surrounding children with learning disabilities and the impact of these factors on career behavior. For
example, students with learning disabilities internalize negative societal stereotypes about themselves just as Steele’s (1997) “stereotype threat” operates in his research studies by lowering self-efficacy which may limit career choice and post-secondary educational planning (Steele, 1997). Low expectations of students with learning disabilities may be internalized and serve as a barrier to career aspirations and career options. Social beliefs and expectations lower self-efficacy and lead to a restricted range of career options.

Study of environmental stressors, which may impact individuals and their career development and choices, are important in Social Cognitive Career Theory. What makes this particular theory an ideal lens for research involving students with learning disabilities is that environmental influences leading to career outcomes are emphasized rather than ignored (Lent, Hackett & Brown, 1999; Betz, 2004). Social Cognitive Career Theory considers the fact that students with learning disabilities may not follow the same developmental trajectory as students without disabilities. This theory addresses some of the needs of this population that have been neglected by other theoretical frameworks. Environmental factors are considered as they impact individual choice and behavior. Many students do not follow the path of conventional theories that do not take into consideration all of the difficulties, the challenges, the experiences, and different learning styles that are critical to understanding the developmental trajectory of students with disabilities.

**Self-Efficacy: The Impact of Self-Efficacy on Post-Secondary Planning for Students with Learning Disabilities**

Low self-efficacy is defined as “the possibility that low expectations with respect to some aspect of career behavior may serve as a detriment to optimal career choice and
the development of the individual (Betz, 2004). An individual may avoid or procrastinate continuing education due to low self-efficacy.

Before introducing research on the impact of self-efficacy on post-secondary educational planning for students with learning disabilities, an explanation of the concept of efficacy is needed. The concept of efficacy specifically for students with learning disabilities encompasses whether or not they perceive educational and occupational doors of opportunity as closed that may or may not be closed to them. It encompasses their sense that they can impact or act on their own behalf, that they have options or their belief that there are options available. It encompasses their belief that there are opportunities for them as opposed to the sense that because they have this diagnosed learning disability, there is a foreclosure on certain career options. In other words, efficacy involves their sense that there are certain things that they are going to be able to do. This concept is related to their belief that they can have an impact on their life, that something can be done, that there are options out there (Fall & McLeod, 2001). The whole notion of efficacy for students with learning disabilities is their belief that they can accomplish their goals and it impacts whether or not they will attempt to do so.

*Factors Inhibiting Self-Efficacy: Attitudes, Biases, and Assumptions.*

According to Standon-Salazar and Dornbusch (1995), “Social relationships from which an individual is potentially able to derive institutional support, particularly support that includes the delivery of knowledge-based resources, for example, guidance for college admission or job advancement” (p. 119) is social capital. A lack of social capital is linked to frequently held assumptions by educators about children with disabilities (National Council on Disability, 2004; Harry, Klingner & Hart, 2005). Although teachers
and others in the daily lives of students with learning disabilities may know on an intellectual level that these children have average to above average intelligence, it is too often assumed that they are not going to college. School personnel often make implicit assumptions about the ability level of students with disabilities, stigmatizing the identity of the child with a disability (Lieberman, 1986; Harry & Anderson, 1994). Those involved in their daily life at home and at school assume that children with disabilities may not be capable of doing college level or graduate level work, believing that the best these students will be able to do is secure a trade. Bias and low teacher expectations reduce self-efficacy and are major barriers to successful post-secondary educational planning for students with learning disabilities (Sabel, 2000).

Social capital informs our understanding of contextual influences of Social Cognitive Career Theory. The concept of social capital encompasses the possession of social connections (Harry, Klinger & Hart, 2005) which form an infrastructure. Many students with learning disabilities lack social capital which is defined as “instrumental or supportive relationships with institutional agents” (Stanton-Salazar, 1997, p. 4) as it pertains to post-secondary educational planning. This is not the case for their peers without disabilities. Students in college preparatory classes, Governor’s Schools, and students from multi-generational college educated families are often expected to pursue post-secondary education. There is an infrastructure that guides them through the process. For many students with learning disabilities, there is no infrastructure for them at home or at school providing information of benefit to them in pursuing post-secondary educational plans. The infrastructure that guides their non-disabled peers through the transitional process into making post-secondary educational plans does not exist for them.
According to a researcher cited by the National Council on Disability in its report on *Improving Educational Outcomes for Students with Disabilities* (2004), "... attitudinal barriers are sometimes a bigger disability than the disability itself" (p. 11). Lynn Pelkey, a student with learning disabilities, describes this tendency. "The teachers were very kind, but I believe now that they underestimated me" (p. 21) (Rodis, Garrod, & Boscardin, 2001). Helping behaviors are directly influenced by the assumptions made about children (Harry, Klingner, & Hart, 2005). If those who work with students with disabilities have an assumption about students that they are not going to perform, or they are incapable of accomplishing a college education or college level work, then that will misguide their efforts with students with disabilities. Such assumptions may lead school counselors not to encourage students with disabilities to take the SAT. Such assumptions may prevent them from encouraging students with disabilities to see the recruiters at college fairs. There may be a whole set of activities that these students are excluded from almost exclusively on the basis of their disability. This is a topic that is not openly discussed. No one in the lives of children with learning disabilities would likely say, "I think that students with learning disabilities are not bright and not capable of performing on a college level." But actions are indicative of those implicit assumptions and stereotypes. In an analysis of National Longitudinal Transition Study (NLTS) data (1996), 14% of high school graduates with learning disabilities participated in post-secondary education compared to 53% of high school graduates without disabilities (Levine & Nourse, 1998). Low expectations on the part of the adults in their daily lives at school and at home continue to be an issue (Levine & Nourse, 1998; National Council on Disability, 2004).
Racism and classism of school personnel who work with students with disabilities inhibit progress in working with these students and their families (Harry, Klingner, & Hart, 2005). Preconceived beliefs about families forged from limited knowledge and selective retention of data reinforcing those beliefs impacted the interaction of school personnel with students and their families. Such beliefs led to inappropriate placements in special education and negative school experiences for students and their families (Harry & Anderson, 1994).

Durodoye, Combes, and Bryant (2004) cite research indicating that school counselors often refer students with learning disabilities to other school personnel. School counselor attitudes toward students with learning disabilities include overall bias (judging student functioning on the basis of disability), pity, a protective stance, playing the "expert" and patronizing. School personnel and adult service providers' low expectations of students with learning disabilities have contributed to poor post-secondary outcomes. These attitudes, biases, and assumptions are not always openly discussed, but actions are indicative of these implicit assumptions and stereotype (Harry & Anderson, 1994; Levine & Nourse, 1998). Students with learning disabilities are not receiving information about testing accommodations and are not being encouraged to take requisite tests for college. School counselors and teachers are not making provisions for them to get to college or to receive post-secondary educational training (Satcher, 1993).

There are implicit messages received by students with learning disabilities. Qualitative data (Lamm, 2004) indicates that students are keenly aware of their label as learning disabled and experience ostracism. This ostracism that students receive for
being in special education erodes their efficacy, their sense of self and accomplishment, and their belief that they can do more. There is a stigmatized identity of the child with a disability (Lieberman, 1986; Harry & Anderson, 1994) and it is directly related to low teacher and counselor expectation (Durodoye, Combes, & Bryant, 2004). Low teacher expectation is discussed throughout the literature in general education (Rosenthal & Jacobson, 1992). These implicit assumptions are also made about children in special education. Schools, according to Delpit in Learning Disabilities & Life Stories, have “taught them a lifelong lesson. (These students) have learned that they are incompetent, inadequate, damaged” (p. 159). Aaron Piziali, a student with a learning disability that affects his ability to sequence and organize thoughts and words, quite movingly described this stigmatized identity. “My disability is that I have been disabled, as well as discouraged and discounted by a temporarily able-minded, able-bodied general public” (Rodis et al, p. 31).

In a descriptive study of 16 public high school graduates who qualified for services as students with learning disabilities, Sabel (2000) investigated facilitating and inhibiting factors to the transition process. Using a student interview guide, semi-structured telephone interviews were conducted to assess transition factors that were facilitating or inhibiting from the student perspective. Data was categorically analyzed and synthesized conforming to the principles of grounded theory. A notable theme of the responses was that teachers thought students with learning disabilities could not achieve the same standard or perform as well academically as their peers without learning disabilities. Students reported feeling discouraged by the attitudes of teachers and school counselors. There are serious implications of this study on post-secondary planning for
students with learning disabilities. The results of this study indicate that students are aware of attitudes, biases, and assumptions of school counselors and teachers and report that they feel these factors limit their potential.

In an exploratory study of 174 transition coordinators for students with disabilities, Janiga and Costenbader (2002) investigated the coordinators' perceptions of the level of preparedness of students with learning disabilities pursuing post-secondary educational options. Using a mail survey, the researchers collected demographic data and assessed the effectiveness of current efforts at interventions designed to ensure success of students with learning disabilities who choose post-secondary education as an option. Study results indicated that a majority of coordinators were least satisfied with self-advocacy skills of students with learning disabilities as they transition from high school to college. Coordinators were also concerned with inadequate documentation of accommodations needed for individual students. Although the researchers could have used a more rigorous methodology, this was an exploratory study that generated an understanding of the needs of children before they enter college and provided compelling implications for high school counselors who will need to prepare growing numbers of students who are pursuing post-secondary plans. College-level transition coordinators surveyed indicated through their responses that secondary counselors need to do a better job of preparing students with learning disabilities for the transition process. Given the concerns of transition coordinators emphasized in this study, further research is needed which focuses on the self-efficacy of students with learning disabilities at the high school level as they make post-secondary decisions and the effectiveness of transition strategies to address their needs. The results reported by Janiga and Costenbader (2002) underscore
the importance of studying post-secondary educational plans of students with learning
disabilities to more adequately prepare these students for a successful transition.

*Factors Inhibiting Self-Efficacy: Focus on Deficits, Negativity*

In an ethnographic study, Knotek (2003) focused on the process of problem
solving and referral of multidisciplinary teams and found evidence of racial bias
predominantly linked to socio-economic status. Bias can be discerned in the language
used in interaction between team members and their emphasis on weaknesses and
negative behaviors. The contribution of team members clearly illustrates the medical
model with its emphasis on pathology. This can be distinctly heard in a counselor’s
contribution to a session: “It’s a really messy situation at home and I should tell you
about it. There are five children in the family, three in this school, and all of them under
8. There are two brothers in the same class who have a different father. Mom works and
the children set Mom’s trailer on fire earlier this year, they rolled a van into traffic, sat on
their infant brother’s legs and broke [one]” (Knotek, 2003, p. 11). This student has
literacy skills, but the emphasis on family dysfunction casts a cloud over any positive
discussion of academics as judgments are made about the quality of the student and
various aspects of his life.

Those charged with providing for students in special education must view these
students as more than a collection of disabilities, “a bundle of problems to be solved”
(Rodis et al, p. 157), or “packages of pathologies to be fixed” (p. 160). In our
interactions, the focus must change to strengths rather than weaknesses. In describing a
favored teacher, Lynn Pelkey, a student with a learning disability, said, “She treated me
as normal, and her expectations were normal” (p. 22).
The research supports the finding that focusing on deficits rather than strengths impacts children's self-perceptions and their individual assessment of their own capabilities. In a study of 124 middle school students from predominantly Hispanic background in a large urban public school district, Gans, Kenny, and Ghany (2003) conducted a comparative analysis regarding the self-concept of children with and without learning disabilities. The researchers used the Piers-Harris Children's Self-Concept Scale (PHCSCS) to assess the self-concept of children with learning disabilities and their peers without learning disabilities. Correlational analyses showed that the children with learning disabilities underestimated their intellectual abilities and academic potential and assessed their own behavior more negatively than the self-assessment of their peers without learning disabilities. The children with learning disabilities in this sample were educated in self-contained classrooms with other students with learning disabilities as well as students with mental retardation and emotional disturbances. Children's self-perceptions tend to be influenced by those with whom they compare themselves. Limiting the sample to children from a self-contained classroom environment shared with behaviorally and intellectually challenged students may have skewed the results.

Because self-perceptions of children often conflict with teacher and parent ratings, it would have been helpful to have added an alternative self-concept measure completed by a teacher or parent. Contrary to the prediction of the researchers, there was no difference in self-concept between boys with learning disabilities and girls with learning disabilities. Although no differences in self-esteem were found based on ethnicity, the researchers attributed this to the fact that Hispanic children comprised the majority of the school population and stressed the importance of continuing to examine
diverse populations of exceptional children, including larger samples of African-Americans. Results of the study by Gans, Kenny, and Ghany (2003) supported findings from Janiga and Costenbader's (2002) survey of transition coordinators. For example, both studies underscored the importance of emphasizing self-efficacy of children with learning disabilities in further research and developing strategies to assist them in gaining an expectation that they can succeed in their post-secondary educational plans.

School counselors are in a particularly critical position to impact self-efficacy of children with learning disabilities and promote an expectation that they can succeed in their post-secondary educational plans. The results of the 2004 Lamm study indicated that students who participated in a career development program coordinated by the school counselor were significantly more likely to plan for post-secondary education. The Lamm study was limited to a small number of cases which included a high percentage of minority students and a high percentage of students from low socio-economic backgrounds which limited generalizability.

The numbers of students with learning disabilities choosing post-secondary education has increased dramatically (deFur & Getzel, 2003). In a conceptual article discussing the role of high school counselors in ensuring a successful transition for college-bound students with learning disabilities, Skinner and Schenck (1992) postulated that the career developmental pathway for children with learning disabilities differs from their peers without disabilities. High school counselors are in the best position to facilitate their growth and development and outline strategies for helping students make the transition to college (Synatschk, 1999; ASCA, 2007). Their learning disabilities are lifelong and a successful transition requires understanding and accommodation. Self-
advocacy skills, knowledge of the law, awareness of available support personnel and allowable accommodations, organizational and study skills, an understanding of one's areas of disability and strategies to overcome them were among the elements identified as critical for a successful transition to post-secondary education for students with learning disabilities. Although this conceptual article and supporting research is dated, the findings continue to be pertinent and useful. Based on the interventions suggested, the Lamm study (2004) implemented transition strategies at the secondary level to encourage success among college students with learning disabilities.

The Role of the School Counselor in Successful Post-Secondary Educational Planning for Students with Learning Disabilities

The American School Counselor Association (ASCA) considers a major responsibility of school counselors to assist all students, including those students with disabilities, with post-secondary educational planning (ASCA, 2005). School counselors are in a pivotal role to assist students in developing self-advocacy skills, which are critical to post-secondary educational planning and success (Satcher, 1993; Synatschk, 1999). However, there is a perceived knowledge base that counselors must possess to effectively advocate for students with disabilities not included in school counselor preparation programs (Wood, Dunn, & Baker, 2002).

School Counselor Preparation for Working with Children with Learning Disabilities

Required preparatory coursework for school counselors includes child and adolescent development (Council for the Accreditation of Counseling and Related Education Programs [CACREP], 2000). The ASCA National Model (2005) considers expertise in child and adolescent development to be critical in preparing students for
transitions between school levels as well as the transition to post-secondary education. However, CACREP (2000) does not require school counselor trainees to receive preparation in special education. Lack of school counselor preparation for working with students with disabilities is a barrier because school counselors may not be able to structure appropriate post-secondary educational planning interventions for them. Yet, school counselors maintain increasingly heavy involvement in special education. The ASCA National Model (2005) cites the major roles of school counselors as leading, advocating, and collaborating for systemic change to better meet the needs of all students, including students with disabilities. The laws, such as IDEA, are changing in the direction of increased accountability for results (Lordi, 2005). A serious problem is the lack of knowledge of many of those who work with children who receive special education services. Many school counselors do not have the requisite skills, and as a result, they do not understand and are not able to meet the needs of children with disabilities (Scarborough & Gilbride, 2006).

Students with learning disabilities encounter many barriers to post-secondary educational planning such as a lack of self-efficacy. School counselors can address this deficiency through interventions designed to build student self-confidence and self-determination. However, it is difficult for counselors, lacking the requisite training, to assist students with disabilities in overcoming low self-efficacy (Wood, Dunn & Baker, 2002; Frantz & Prillaman, 1993). When students are unable to overcome their lack of self-efficacy, the educational community, parents, and students served in special education look to school counselors for information and understanding, especially with respect to current requirements and the consequences of various educational choices. If
school counselors do not have the requisite knowledge and preparation, how are they
going to prepare these students for the world of work?

Without requisite training, it is difficult for counselors to advocate for students
with disabilities. The educational support system in the United States incorporates many
people who work daily with children with disabilities receiving special education services
yet know nothing about these children and their needs. School counselors defer to
special education teachers and service providers (e.g. Department of Rehabilitation
Services personnel) to meet the transition needs of students with disabilities (Scarborough & Gilbride, 2006). According to the literature, course work specifically
related to working with students with disabilities is not required in the majority of school
counselor education programs (McEachern, 2003). CACREP accreditation does not
require the inclusion of any course in special education for school counselors (Milsom &
Akos, 2003). Counselors do not have the requisite skills and they are often called upon to
assist although they do not understand the needs of children with disabilities
(Scarborough & Gilbride, 2006). As a result, they may not be able to structure
appropriate interventions for children with disabilities or provide the information and
understanding required from parents, students, and the community. This researcher made
a concerted effort to understand the needs of children with disabilities and the skills to
structure an intervention. This study incorporates recommendations from research and
feedback from high school graduates with learning disabilities to structure an intervention
at the high school level coordinated by the school counselor to promote post-secondary
educational planning and assess its effectiveness.
In an exploratory study of 238 representatives of counselor education preparation programs throughout the United States, Korinek and Prillaman (1992) investigated the preparation provided to students in counselor education programs. Survey results indicated that there is a discrepancy between the perceived need for counselor preparation to work with students with exceptionalities and the training provided to meet that need. Respondents indicated that counselors often acquire needed preparation on their own initiative. The majority of respondents considered working with students with disabilities and their parents to be a major role of counselors. The implications of expecting graduates of counselor education programs to meet the discrepancy between their preparation and the requirements of their position include the risk that many will not adequately serve the needs of students with disabilities. Although Korinek and Prillaman's (1992) study is dated, the discrepancy indicated by the data still exists. The results of their study have implications for the school counselor's role in impacting post-secondary educational plans of students with learning disabilities. The school counselor cannot work with parents, students, teachers, and others to successfully coordinate and implement an intervention addressing the self-efficacy of students with learning disabilities and encourage a successful transition to post-secondary education without adequate preparation and a sufficient knowledge base of the population served.

In an exploratory study of 51 state supervisors of teacher certification, Frantz and Prillaman (1993) investigated the required special education course work of school counselors. Using a mail questionnaire, the researchers assessed whether special education course work was required for school counselor certification. Study results indicated that the majority of states do not require course work in special education for
school counselor certification. The implications of this lack of required training are severe. The special education laws are changing, currently requiring the provision of the least restrictive environment, which is often the regular education classroom, for students with learning disabilities. School counselor responsibilities increasingly involve special education. It is not possible for school counselors to adequately serve children needing special education services without having received the requisite training and preparation. Charged with guiding students with disabilities through the educational process, school counselors cannot adequately prepare them with inadequate knowledge of special education.

A positive development came out of research conducted by Wood Dunn & Baker (2002). They found that many school counselors reported acquiring knowledge of working with students with disabilities despite working in a state where course work is not required for licensure as a school counselor. These school counselors voluntarily chose to enhance their knowledge, indicating that it was important to build competence to effectively serve all students, including those with disabilities.

Role of the School Counselor in Developing Students' Self-Advocacy Skills

The results of Frantz and Prillaman's (1993) study have direct implications for the current study of variables impacting post-secondary educational plans of students with learning disabilities. School counselors will need to acquire the requisite knowledge of special education and the characteristics and needs of students with learning disabilities in order to plan and implement interventions to assist them in successfully exploring their post-secondary options and transitioning successfully from high school to college.
Knowledge of post-secondary options as well as societal attitudes toward students with disabilities is necessary to promote self-advocacy in students with learning disabilities.

The high school counselor plays a pivotal role as a link between secondary school and post-secondary options (Satcher, 1993). This role is critical in many ways, one of which is the opportunity to influence post-secondary choices as well as increase the probability of a successful transition. School counselors are in a key position to assist students in learning self-advocacy skills necessary for such a transition (Synatschk, 1999; ASCA, 2007). According to research by the College Board, school counselors can significantly impact students' post-secondary educational plans in a positive direction (ASCA, 2007).

In an exploratory study of 168 North Carolina elementary school counselors, Wood, Dunn, and Baker (2002) investigated elementary school counselors' perceptions of others' view of their role as well as their self-perceived role in working with students with disabilities and their self-perception of the level of information necessary to prepare for working with students with disabilities. Using a mail survey, the researchers assessed self-reported knowledge of special education law, self expectations of their role as school counselor in working with students with disabilities, and self-perceived expectations others have of the role of the school counselor in working with students with disabilities. Correlational analyses were used to compare expectations. A qualitative analysis was done to identify predominant themes related to self-perceived role expectations of self and others. Study results indicated no significant difference between self-expectations of their role as school counselor in working with students with disabilities and self-perceived expectations others have of the role of the school counselor in working with
students with disabilities. Advocacy on behalf of students with disabilities was perceived as a major role requirement by counselors as well as a role they perceived others had of them. Counselors reported in the qualitative portion of the study that they felt they were viewed as experts in working with students in special education when they lacked adequate training. The results of the Wood, Dunn, and Baker (2002) study have direct implications for findings of the current study of variables impacting post-secondary planning of students with learning disabilities and implications for the school counselor’s role in impacting post-secondary educational plans of students with learning disabilities which include the fact that it is difficult for counselors to advocate for students with learning disabilities while lacking the requisite knowledge of special education and training. The researchers failed to take into account the level of counseling experience of survey respondents. Those with greater counseling experience may have sought needed training.

In an evaluative survey study of 146 representatives of counselor education programs in the United States and Puerto Rico, McEachern (2003) investigated state certification requirements of school counselor preparation programs with respect to knowledge of exceptional students and specific program requirements for university graduates in preparing to work with exceptional students. Using a mail survey, the researcher assessed program and state special education course work and experiential certification requirements for school counselors. Cross-tabulations were calculated to determine if there was a relationship between special education courses included in certification requirements for school counselors and inclusion of such courses in counselor education programs. A significant relationship was found. Study results were
similar to the findings of Korinek and Prillaman (1992) that course work specifically related to working with students with disabilities was not required in the majority of school counselor education programs. The implications of this study are that special education course work is not included in counselor education programs because they are not required for counselor education program approval or school counselor certification. As noted by Wood, Dunn, and Baker (2002), the responsibilities of school counselors are changing and increasingly involve students served in special education. Federal legislation mandates the involvement of the school counselor in the educational planning of students with disabilities (McEachern, 2003). Although study participants were not representative of all regions of the United States, the results supported previous research conducted with samples from other areas of the country. The results of the McEachern (2003) study have a direct impact on any research findings of variables contributing to post-secondary educational plans of students with learning disabilities and include implications for the school counselor’s role in impacting post-secondary educational plans of students with disabilities. Interventions coordinated and implemented by the school counselor in working with students with learning disabilities, their parents and their teachers require that the school counselor possess the necessary understanding of the needs and characteristics of this population. Korinek and Prillaman (1992), Frantz and Prillaman (1993), Wood, Dunn and Baker (2002), and McEachern (2003) found that there has been a lack of counselor preparedness in working with students with learning disabilities.
Emerging Practices: School Counselor Interventions for Students with Learning Disabilities

The American School Counselor Association (ASCA) considers a major responsibility of school counselors to assist all students, including those students with disabilities, with post-secondary educational planning (ASCA, 2005). Durodoye & Bryant (2004) recommend school counselor interventions which require the counselor to serve as an advocate and pro-actively assist the student in post-secondary educational planning and transition. Attention should be directed toward facilitating self-confidence or self-efficacy. Milsom (2007) emphasizes working collaboratively with other professionals to prepare students with disabilities for successful transitions.

A study conducted by Lamm (2004) addressed the following specific questions: (1) What are the post-secondary choices of students with learning disabilities who are high school graduates of a southeastern, rural high school? (2) What were the in-school and post-school experiences of students with learning disabilities in comparison with the peers without learning disabilities? What variables account for differences in these experiences? Results of the aforementioned study found that 98 out of 149 (66%) of the regular education graduates of the class of 2003 of this southeastern, rural high school were admitted to a 2-year or a 4-year college and attended the following year. In marked contrast, none (0 out of 18) of the graduates of the class of 2003 with learning disabilities were admitted to a 2-year or a 4-year college. Such results spoke to the need for an intervention.

The purpose of Lamm’s study (2004) was to use the resulting data to develop a counseling intervention aimed at increasing the numbers of high school students with
learning disabilities choosing college as a post-secondary option and preparing these students for a successful transition. Milsom (2007) recommends the use of a group setting for increasing postsecondary educational expectations for students with learning disabilities.

Lamm (2004) implemented a career development intervention for 34 students enrolled at a rural high school in grades 10 to 12. The intervention consisted of 4 career assessment sessions, one annual college planning assembly followed by a group transition meeting, 2 annual small group sessions with college disability coordinators, 3 skill building sessions, and a field trip to attend a program on a large urban college campus specifically designed to encourage post-secondary education planning for students with disabilities. Students received career counseling; increased awareness of college programs and requirements; explored strategies to find the most appropriate college; learned about the laws related to special education and how it impacts students with disabilities. The intervention also promoted the development of organizational and study skills; assisted students in developing compensatory strategies; eased social adjustment; promoted self-advocacy skills, and provided students with opportunities to visit a college campus, to speak with a coordinator of services for students with learning disabilities, and to interact with successful college students and graduates with learning disabilities.

Descriptive statistics (percentages) calculated for the above-referenced study by Lamm, (2004) indicated that 2 out of 34 students (5.88%) who did not receive the career development intervention indicated post-secondary educational plans. Fourteen out of 27
students (51.85%) who received the career development intervention indicated post-secondary education plans.

Logistic regression analysis performed on data from the pilot study (Lamm, 2004) revealed that the career development intervention coordinated by the school counselor had a significant positive effect on post-secondary educational plans of participants. Based on the Wald statistic and the beta coefficient, participation in a school counselor coordinated career development program appeared to significantly increase post-secondary educational planning of students with learning disabilities. Students with learning disabilities who received the intervention in the pilot study made continuing post-secondary educational plans at a significantly higher rate than did students with learning disabilities who did not receive the intervention.

There are varying cognitive skill levels of students with learning disabilities. Some students transition into the college setting without identifying themselves as having a learning disability and compensate for their disability without any assistance. Not all students are able to do so. Those that are able do not always ask for assistance, preferring to keep their learning disability to themselves. Not asking for help is often a barrier to these students in pursuing further education.

Research has shown that another area of difficulty for students with learning disabilities is social competence (Durodoye, Combes, & Bryant, 2004). Success in college is more likely with assertiveness and self-confidence required to ask for help when needed. Many colleges and universities offer support groups for students with learning disabilities. The high school counselor can inform students with learning disabilities of the existence of such resources and encourage participation. The
intervention (Lamm, 2004) addressed social skills in a group setting as well as individually.

The successful completion of the aforementioned study (Lamm, 2004) yielded encouraging results, but future research needs to be longitudinal and include a greater number of participants. The study provided essential information on post-secondary outcomes for students with learning disabilities as well as an intervention aimed at increasing the probability that greater numbers of students with learning disabilities choose to continue their post-secondary education and those that do choose to attend college become successful students and community members. The Lamm study (2004) as well as Janiga and Costenbader (2002) stress the need for future research to address strategies to promote independence and a clearer understanding of their specific disabilities, strengths, and challenges. The results reported by Janiga and Costenbader (2002) underscore the importance of studying post-secondary educational plans of students with learning disabilities to more adequately prepare these students for a successful transition.

Summary

The ASCA National Model (2005) supports the use of data to identify discrepancies in serving the needs of all students and to make systemic changes to close such “gaps.” Students with learning disabilities are graduating from high school and many of these students are receiving modified diplomas. Students with learning disabilities are graduating from high school and they do not have any post-secondary educational plans. Entry to post-secondary education for students with disabilities is significantly lower than their peers without disabilities (United States General
Accounting Office, 2003; National Council on Disability, 2004). The literature reveals that there is a discrepancy between what these students are capable of doing and what they think they are capable of doing. They do not know how to advocate for themselves.

There are a large number of students with learning disabilities. This number reflects the disproportionate representation of minority students in special education (Ferri & Connor, 2005). Consideration must be given to the fact that we are living in an increasingly complex society and success and social and economic mobility of individuals is contingent upon their ability to obtain the requisite skills to perform in the workforce. Increasingly, the acquisition of these skills is contingent upon post-secondary education (Satcher, 1993; Akos et al, 2007). With changes in graduation degree requirements, this succession of contingencies has an adverse impact on children with learning disabilities.

School reform initiatives have mandated that children leave school more prepared to enter this increasingly complex society. High stakes testing is another issue reflecting this expectation, and is an additional area in which children with learning disabilities struggle (Ruban et al, 2003). If children’s social mobility is directly related to their educational attainment and children with learning disabilities are not able to obtain regular diplomas, then the implications are that many of these children are not going to get diplomas, they may experience school failure, subsequent school drop out, and difficulty transitioning into the world of work.

Outcome studies of students with learning disabilities report dismal post-secondary outcomes for students with learning disabilities including low rates of employment and post-secondary educational enrollment (Levine & Nourse, 1998;
National Council on Disability, 2004). The numbers of students with learning disabilities choosing post-secondary education has increased dramatically. However, rates remain significantly lower than rates for students without disabilities (United States General Accounting Office, 2003; National Council on Disability, 2004). These studies have supported claims that those charged with providing for students in special education have not rendered the necessary assistance for students with learning disabilities to become successful students and community members (Satcher, 1993). The existence of bias and low expectations are crucial factors in such a claim. There is a disproportionate representation of minority students in special education. School reform initiatives have mandated that children leave school more prepared to enter this increasingly complex society (Wahl & Blackhurst, 2000). There are many in the daily life of these students who share low expectations about children in special education. Consequences of students with learning disabilities internalizing such low expectations include the "stereotype threat" and the increased likelihood that they are going to fail, they are going to drop out, and they are going to be ill equipped to enter the workforce. An added consideration is that it is common knowledge that the prison population is swollen with people who have diagnosed disabilities (Rodis, Garrod & Boscardin, 2001). An understanding of the career developmental trajectory of students with learning disabilities, the impact of self-efficacy, the impact of race, barriers, attitudes, biases, and assumptions with respect to students with disabilities, and results of emerging practices and interventions in the field point to the importance of continuing research with respect to post-secondary educational plans of students with learning disabilities.
CHAPTER 3: PROCEDURES

This study examined the post-secondary educational plans of students identified as having learning disabilities in a rural high school in the southeastern United States. The specific purposes of this exploratory study were as follows: (a) to determine the extent to which student and contextual factors such as diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and participation in a school counselor coordinated career development program contribute to post-secondary educational plans among students with learning disabilities and (b) to assess the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes. The study uses a social constructionist framework to examine the constructed barriers to post-secondary educational planning as experienced by students with learning disabilities. Information was collected by quantitative and qualitative methods. The methodology and procedures used to investigate the research questions addressed in the study are summarized in this chapter in the following sections: Research Questions, Population and Sample, School District Descriptions, Intervention, Instrumentation, Data Analysis, Limitations and Delimitations, and Ethical Safeguards.

Research Questions

The research questions were as follows:

1. Do diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and participation in a school counselor coordinated career development program contribute to post-secondary educational plans among students with learning disabilities?
2. What are the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes?

Research Design

A mixed method design with both quantitative and qualitative research methods was most useful for addressing research questions. Creswell (1994) considers the combination of quantitative and qualitative research to be an advantage in exploratory studies. Quantitative methods used in this study comprised the extraction and analysis of data from archival records to examine the relationships between diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, participation in a career development program and post-secondary educational plans for secondary school students identified as having learning disabilities.

Qualitative methods were used to examine the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes. A descriptive design was selected for the qualitative component of this study. This type of design is appropriate for research to determine the existence of a problem and is often selected for use in a pilot study which can later be expanded. A descriptive design, according to Creswell (1998), works well alongside quantitative research, serving to describe and then interpret present and past situations, conditions, behaviors, interactions, events, and trends. The data source for qualitative research consisted of in-depth interviews which were audio taped and transcribed by the researcher. Interviews lasted from forty-five minutes to one hour. Interviews were used to obtain data about students' educational experiences. All interviews were conducted at the high school from which the students graduated at the participants' convenience. Participants were informed of
the purpose of the study and asked to give informed consent. Data analysis was
completed at the analytic inductive level, collecting all data prior to analysis. Transcripts
were analyzed at level one for common responses and at level two for commonalities,
differences, and themes (Creswell, 1998).

Population and Sample

Data was collected on a convenience sample of an intact group of 108 youth with
learning disabilities who were 18 to 26 years old in the 2007-2008 school year.
Participants included all students with learning disabilities who graduated in the years
2001 through 2007 from a rural high school in the southeastern United States. Table 1
illustrates the characteristics of the participants used in the quantitative analysis.

Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Male</td>
<td>80</td>
<td>74</td>
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<tr>
<td>Female</td>
<td>28</td>
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</tr>
<tr>
<td>Race</td>
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<td></td>
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<tr>
<td>Non-Minority\textsuperscript{a}</td>
<td>32</td>
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<tr>
<td>Minority\textsuperscript{b}</td>
<td>76</td>
<td>70.37</td>
</tr>
</tbody>
</table>

\textit{Note.} Participant Total = 108. \textsuperscript{a}(European-American). \textsuperscript{b}African-American, Hispanic
Narrative Descriptions of Interview Participants

In this section, each participant interviewed in this study is introduced in a narrative format. All 10 participants interviewed were high school graduates with a learning disability. Participants are divided into two groups, those who graduated after 2004 and participated in a career development program (graduates 6 through 10) and participants who graduated prior to 2005 and did not participate in a career development program (graduates 1 through 5).

Graduate #1. Graduate #1 is an African-American young man. He comes from a home with two parents who are college graduates with above-average income for the area. He had post-secondary educational plans and is currently attending college and working.

Graduate #2. Graduate #2 is an African-American young man. He lives with his mother and step-father. Neither of his parents completed high school. The student is considered low income by the researcher for purposes of this study as evidenced by his qualification to receive free lunch. Graduate #2 is currently working at a fast food restaurant earning $6.50 per hour. He has no health benefits. This is his third job since graduating from high school.

Graduate #3. Graduate #3 is an African-American young man who lives with his mother but receives support on many levels from his grandmother. Neither of his parents nor grandparents attended college. His family is socio-economically disadvantaged as evidenced by his qualification to receive free lunch. Graduate #3 works for a family member in the construction trade and earns $300 per week. He has no health benefits or insurance coverage.
Graduate #4. Graduate #4 is an African-American young woman. Her family is below average in income. Neither of her parents completed high school. Graduate #4 is currently working as a cashier in a fast food restaurant earning $6.25 per hour. She has no health insurance benefits.

Graduate #5. Graduate #5 is an African-American female living with both parents. Her mother graduated from a 2-year community college, her father graduated from a 4-year college, and the family is not low income. Graduate #5 is not currently employed nor attending college.

Graduate #6. Graduate #6 is an African-American young man who was raised by a single mother who was a high school graduate. He is currently attending college as well as working and supporting a toddler at home which he is raising with his girlfriend. He is the first on both sides of his family to attend college.

Graduate #7. Graduate #7 is a Caucasian young man who was raised by a single father with a high school education who supports the family working at a convenience store. His grandmother also lives in the home and she completed high school as well. This young man is the first in his family to attend college.

Graduate #8. Graduate #8 is a Caucasian young man who lives with his mother and step-father. His mother completed a Bachelor’s Degree. Graduate #8 is currently attending college.

Graduate #9. Graduate #9 is an African-American young man who lives with his parents who both completed high school. His family is not socio-economically disadvantaged. He is currently seeking work preparing food at a fast food restaurant.
Graduate #10. Graduate #10 is an African-American young woman raised by two parents who completed high school. Graduate #10 is currently working and attending college.

Participant characteristics accurately reflect the population of students with learning disabilities in this rural high school in the southeastern United States. Seventy percent of participants indicated that no one in their family had ever attended college. They would be first-generation college students. Several participants mentioned that their parents had not completed high school. Table 2 illustrates the qualitative participant characteristics.

School District Description

The selected site for this study was a rural high school located in the southeastern United States on the boundary line between two states. Over the last decade, the student enrollment at the high school has decreased from 800 students to an enrollment of 770 which can be partially attributed to the loss of several major employers in the area. The racial composition has remained relatively constant with a 33% to 65% European-American to African-American ratio. The students of the high school are residents of a rural community with a population of 17,800 and a median household income of $16,000. The average home value for this area is $65,000. Median household income in the time period from 2000 to 2004 increased by 9.5% in this southeastern state; however, the median household income went down in this area by 4.1% in the same time frame. According to the 2000 census, 11.9% of children under 18 in this southeastern state live below the poverty level, yet twice as many children under age 18 in this area live below the poverty level.
Table 2

*Gender, Ethnicity, Socio-economic Status and First Generation Post-secondary Status of Interview Participants*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
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<td>70</td>
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<td>Female</td>
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<td>30</td>
</tr>
<tr>
<td><strong>Race</strong></td>
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<td></td>
</tr>
<tr>
<td>Non-Minority*</td>
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<td>20</td>
</tr>
<tr>
<td>Minority*</td>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td><strong>Socio-Economic Status</strong></td>
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<td></td>
</tr>
<tr>
<td>Low</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>Average or Above Average</td>
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<td>40</td>
</tr>
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<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Generation College</td>
<td>7</td>
<td>70</td>
</tr>
</tbody>
</table>

Note. Participant Total = 10

*European-American*

*African-American, Hispanic*
The high school selected for this study was a public high school located on approximately 28 acres. The only high school in the county, it is a 4-year, comprehensive high school offering academic, vocational, and extracurricular programs. Each student is provided a program of instruction in the academic areas of English, Science, Mathematics, and History/Social Science which enables students to meet the graduation requirements. Students also have the opportunity to qualify to attend the Southeastern Regional Governor’s School for Global Economics and Technology. This program is open to juniors and seniors from several surrounding counties. The majority of students are enrolled in regular and college preparatory classes. Students with disabilities are enrolled in classes according to their Individualized Educational Plan, which specifies regular or resource class setting.

At the high school, a 4 X 4 block schedule is utilized to organize learning opportunities. Students are offered a choice of a general, advanced, modified, or special diploma with academic general and college preparatory classes. A variety of electives are offered to broaden their exposure to many fields.

To date, no known formal comprehensive study has been conducted to evaluate the contributing factors to post-secondary plans for students with learning disabilities.

*Career Development Intervention*

Beginning in January 2004 and continuing to the present, I implemented an career development intervention to increase the number of students with disabilities who had postsecondary plans. The intervention was multi-faceted and involved key advocates in the lives of students with disabilities. Key collaborators included the lead school counselor, the career coach, a Department of Rehabilitative Services (DRS) field
counselor, college coordinators of services for students with disabilities, special education instructors, and parents. The school counselor coordinated the overall intervention. This coordination was accomplished proactively and deliberately behind-the-scenes with the collaborators in such a way that participants and parents did not know the activities and events were orchestrated by the school counselor. The coordination was completed in this way to give a greater sense of ownership for positive results because credit for those results could be shared among key collaborators and participants. For example, field trip invitational flyers and permission forms were developed by the school counselor and signed by the chairperson of the high school resource department serving students with learning disabilities and then distributed to students with learning disabilities and their parents. The school counselor jointly met with students and parents to explain the purpose of the trip and motivational incentives. Since this intervention was put in place, elements of it have been consistently present while key participants progressed through their academic program.

Milsom (2007) recommended a group setting for interventions aimed at increasing postsecondary educational expectations for students with learning disabilities. A critical component of this intervention consisted of group meetings with juniors and seniors who chose to participate in a group setting. The school counselor individually met with students to describe any aspect of the intervention which entailed a group setting to allow them to decide whether or not to participate. The school counselor was highly respectful of the sensitivity of students with learning disabilities. Those students who were sensitive about a group setting were offered the opportunity to receive the information individually.
As suggested by Lent, Hackett, and Brown (1999), experiences were selected for the intervention which would strengthen the impact of modeling. The majority (70%) of students in this study are African-American. Speakers at group sessions were African-American and shared their successful compensatory strategies as they faced factors familiar to study participants. Table 3 below illustrates service delivery activities, service delivery time, and focus of activities for the school counselor coordinated career development intervention.

Activities and Service Delivery

Recent literature clearly indicates the need for intervention for helping students with disabilities. “School counselors should promote programs designed to enhance the academic, career, and personal/social domains of students” (Gibbons & Shoffner, 2004). This intervention was comprised of a number of activities to develop competencies in students. Table 3 outlines the service delivery activities, their timing, and their foci. The foci of the program were to provide career counseling; increase student awareness of college programs and requirements, provide opportunities to visit a college campus and speak with a coordinator of services for students with learning disabilities, and to provide opportunities to interact with successful college students and college graduates with learning disabilities. Based on the literature, the program wanted to develop the following competencies in students: (1) Student knowledge of post-secondary options, strategies to select the most appropriate post-secondary setting, navigate testing, admissions and financial aid; (2) student knowledge of the laws related to special education and how it impacts students with learning disabilities; (3) student organizational and study skills; (4) compensatory strategies; (5) social competence; (6) enhanced social adjustment; and (7)
<table>
<thead>
<tr>
<th>Service Delivery Activities</th>
<th>Time of Service Delivery</th>
<th>Focus of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest inventory</td>
<td>Sophomore year</td>
<td>Assess career interests.</td>
</tr>
<tr>
<td>Skills Inventory/Aptitude</td>
<td>Junior year</td>
<td>Compare interests/skills.</td>
</tr>
<tr>
<td>Work Values</td>
<td>Junior year</td>
<td>Assess work values.</td>
</tr>
<tr>
<td>Career Assessment</td>
<td>Junior and / or senior year</td>
<td>Set realistic career goals.</td>
</tr>
<tr>
<td>College Planning Assembly</td>
<td>Annually/juniors, seniors</td>
<td>Navigate college admission, testing, and financial aid.</td>
</tr>
<tr>
<td>DRS field counselor</td>
<td>Annually / juniors, seniors</td>
<td>Discuss post-secondary options.</td>
</tr>
<tr>
<td>Group Transition Meetings</td>
<td>Annually / juniors, seniors</td>
<td>Build self-advocacy skills, self-efficacy, and knowledge of legal rights.</td>
</tr>
<tr>
<td>College Disability Coordinator Sessions</td>
<td>Bi-annually</td>
<td>Build self-advocacy skills and ability to articulate their disability.</td>
</tr>
<tr>
<td>Field Trip/College 4-U</td>
<td>Every other year</td>
<td>Build self-advocacy skills and compensatory strategies. Build strategies for navigating college as modeled by panelists.</td>
</tr>
<tr>
<td>Skill Building Sessions</td>
<td>Tri-annually</td>
<td>Build organization and study skills.</td>
</tr>
</tbody>
</table>
building self-advocacy skills and outcome expectations, increasing student sense of competence and self-efficacy.

According to Omizo and Omizo, results and improvements will not be seen without intervention. "It is unlikely that [students with disabilities] will make any major gains in the world of work unless there is a concentrated effort to identify and introduce interventions" (Omizo & Omizo, 1992). The activities and foci of the intervention are described below.

1. Provide career counseling: career assessment program with career coach

Beginning in the spring of 2003 with grades 10 and 11, students with identified specific learning disabilities participated in an annual career assessment group session with a career coach. The career coach commented prior to the beginning of this intervention that students, and most especially the students with learning disabilities, seemed to lack direction after graduation. They had no hard or soft skills so they were not able to transition from school to work. Soft skills, otherwise known as people skills, are not necessarily taught, but are picked up on by osmosis. Hard skills encompass the abilities needed to apply for a job, college, or a loan. The career coach felt that these students graduate without a plan and live on minimum wage never reaching their true potential (M. Martin, interview, January 7, 2003). The intervention included three sessions coordinated by the school counselor and conducted by the career coach wherein students with learning disabilities used assessment tools to assist them in setting realistic career goals. These sessions began using a national career assessment program, KUDER (National Career Assessment Services, Inc, 2001). This program had three components: an interest inventory, a skills inventory or aptitude, and a composite score that compares
the interests and skills of the students. An additional assessment, Work Values, was completed in their junior year. This assessed what was important to the student in terms of work, e.g. security, work environment, income, and lifestyle. With the completion of the Work Values assessment, students individually discussed their career goals.

2. *Increase awareness of college programs and requirements: post-secondary education options by DRS field counselor and school counselors.*

The field counselor with the Department of Rehabilitative Services attended IEP meetings for students with learning disabilities. He began attending IEP meetings in spring 2003 and has continued to the present. During these meetings, the field counselor presented transition options including post-vocational training and training programs at Woodrow Wilson, a large rehabilitation facility, community colleges, 4-year colleges, job development and placement, and, if necessary, supported employment. As a collaborator in this intervention, the DRS representative participated in college field trips with the school counselor and educators working with students with learning disabilities. His response to his inclusion in this intervention was enthusiasm and gratitude for witnessing the excitement of the students with learning disabilities as they learned about their college options and the support that was in place in order for them to achieve their goals.

The lead school counselor coordinated and participated in an annual college planning assembly program beginning in 2004 for all juniors and seniors to share information with respect to navigating the college application process, testing tips, scholarship searches, and financial aid. These assembly programs were followed by transition meetings attended by juniors and seniors with learning disabilities and their parents, and the high school special education faculty. At the transition meetings,
students were advised of college programs and requirements and options available to students with disabilities.

Beginning in spring 2004 and continuing every other year, field trips to College Quest / College-4-U allowed students, parents, school counselors, and special education faculty to attend a College Resource Fair with exhibits from public and private colleges that included information on post-secondary supports and resources for students with disabilities.

3. Learn strategies to select the most appropriate college for each individual student:

   school programs with college disability services directors.

   Disability support services program coordinators from various community colleges, 2-year colleges, and 4-year colleges met twice yearly beginning in the spring 2004 in a group setting with sophomores, juniors and seniors with learning disabilities and discussed their programs. Topics covered include consideration of (a) the size of the college, (b) the importance of each student being knowledgeable about how they (as an individual student with a disability) learn best and being able to articulate that knowledge to the program coordinator for services to students with disabilities in order to receive needed assistance and/or accommodations at the college level, (c) the importance of being able to advocate for themselves.

4. Increase student knowledge of the laws related to special education and how it impacts students with learning disabilities.

   The lead school counselor made presentations at high school level group transition meetings with respect to the laws related to special education and how it impacts students with learning disabilities. The school counselor presented a copy of
Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities (U.S. Department of Education Office for Civil Rights, 2002) to students and their parents.

5. Promote the development of organizational and study skills by special education faculty and school counselors.

The instructors working with students with learning disabilities in collaboration with the school counselor provided tri-annual individualized skill building sessions in organizational and study skills, time management, and test-taking for those students needing support. Students were identified by their case managers or were self-referred to the lead counselor as needing assistance and training in organizational and study skills.

6. Assist students to develop compensatory strategies.

During group sessions at College Quest / College 4 U, panelists composed of successful college graduates with learning disabilities shared compensatory strategies for participants with learning disabilities. In annual transition group sessions for students with disabilities and their parents, special education faculty and the lead school counselor also presented individual compensatory strategies to students with disabilities and their parents. Visiting college level coordinators of services for students with disabilities provided additional compensatory strategies at several yearly sessions coordinated by the lead school counselor.

7. Provide opportunities to visit a college campus and speak with a coordinator of services for students with learning disabilities.

Every other year, high school sophomores, juniors, and seniors with learning disabilities and their parents participated in field trips to College Quest / College 4 U held
at an urban college campus in the state capitol. Participants attended several interactive sessions conducted by coordinators of services for students with learning disabilities which included detailed discussions of making a successful transition from high school to college.

8. *Provide opportunities to interact with successful college students and college graduates with learning disabilities.*

Students with learning disabilities and their parents participated in field trips to College Quest / College 4 U and attended a session comprised of a panel of college students with learning disabilities who shared their experiences and discussed what was helpful to them in their journey through the college application process and successfully navigating college life.

9. *Promote social competence and ease social adjustment.*

According to Durodoye, Combes, & Bryant (2004), a critical area of need for students with learning disabilities is social competence. Beginning in the spring of 2004 and continuing to the present, the school counselor addressed social skills, assertiveness, and self-confidence in annual transition group settings (as well as individually via instructor referral) and informed students of resources in the post-secondary educational environment.


Beginning in spring 2004, in annual group transition meetings attended by students with disabilities in grades 11 and 12, their parents, special education faculty, and the field counselor from the Department of Vocational Rehabilitation, the lead school counselor promoted self-advocacy utilizing resources such as "Self-Advocacy: Speak
Up, Speak For Yourself!,” a video presentation prepared by the Virginia Beach City Public Schools Office of Programs for Exceptional Children in which high school students with learning disabilities addressed the importance of being able to advocate for one’s self in the post-secondary setting.

Instrumentation

Position of the Researcher

Qualitative data requires the researcher to exhibit a high degree of self-awareness (Miles & Huberman, 1994). I, the researcher, have worked closely with students included in this study as their school counselor in their elementary school years and throughout their high school years. I have formed a relationship of trust and confidence with them. Having assumed a leading role as the coordinator of this intervention, there is a risk that participant responses reflect what the graduates perceive as helpful to me as the intervention coordinator and researcher. There is a further risk that as the researcher, I subjectively interpreted participant responses in a manner that supports the overall aim of furthering post-secondary educational outcomes for students.

Quantitative Data Collection

During the 2007-2008 school year, information was extracted from students’ school records for their most recent year in secondary school. This information included diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and post-secondary educational plans. All information about participants was available in a data base and in archival records. Required data was limited to these sources because the participants take a multitude of academic tests to
meet graduation requirements and additional testing might have created more anxiety for them.

Data were collected on the following variables: diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and post-secondary educational plans. Information was extracted from student cumulative records, testing information, and Individualized Educational Plans. Minority (African-American/Hispanic) and non-minority racial group membership information (European-American) were taken from student enrollment data. Family configuration, categorized by whether a student lives with a single parent, both parents, or a guardian, was also gathered from student enrollment data. Earned diploma status, indicated as modified, special, or standard diploma and disability status were gathered from the most recent Individualized Educational Plans as well as graduate records. IQ functioning was ascertained from the results of the Wechsler’s Intelligence Scale for Children, administered by a licensed psychologist as directed in the eligibility process and reported in the most recent psychological report for each student. WISC results from the psychological report are referenced in the student triennial evaluation. Socio-economic status information was measured as low socio-economic status or average/above average socio-economic status. Low socio-economic status students were identified in school lunch eligibility listings as eligible for free or reduced lunch. All 2005, 2006, and 2007 graduates with learning disabilities participated in a guidance coordinated career development program, while 2001 through 2004 graduates with learning disabilities did not participate in a guidance coordinated career development program. Whether or not a student had post-secondary educational plans was reported by each student annually on a
Career Planning/Development record kept on file in the Career Resource Center of the high school.

The Wechsler Intelligence Scale for Children (WISC III) was used for assessing level of functioning. This third edition of the Wechsler Scale was representative of the United States population, having been standardized on a census-based normative sample. The Wechsler Scale can be used with children ages six to sixteen (Hood & Johnson, 2002). It is based on the concept that intelligence is expressed through tasks that reflect as many abilities as possible. The WISC III has good test-retest reliability and split half reliability (.90 to .96). Based on factor analysis, the WISC III test is valid and reliable (Hood & Johnson, 2002).

Results of the WISC III reflect a Verbal IQ, a Performance IQ, and a Full Scale IQ. The full scale has a mean of 100 and a standard deviation of 15. Scores are classified as follows: Intellectually Deficient (69 and below); Borderline (70-79); Low Average (80-89); Average (90-109); High Average (110-119); Superior (120-129); Very Superior (130 and above) (Hood & Johnson, 2002).

Variables of interest for this study were extracted from students' school records for their most recent year in secondary school. All analyses of the archival data were conducted using SPSS. Logistic regression using SPSS was used to test for variables predictive of post-secondary educational plans and those who did not. Variables in the data set were diploma status, disability status, family configuration, socio-economic status, participation in a career development program, IQ functioning, and race.
Qualitative Data Collection

The data source for the qualitative research component of this study consisted of in-depth interviews with a total of ten high school graduates which were audio taped and transcribed. Interviews were conducted with five randomly selected graduates from the years 2001 through 2003 and five randomly selected graduates from the years 2004 through 2007. Interviews lasted approximately 45 minutes to one hour in length. Interviews were used to obtain data about students’ educational experiences prior to and after graduating from high school. Four of the five graduates from the years 2001 through 2003 were interviewed in March through May 2004 during a pilot study. One graduate from 2001 and 5 graduates from the years 2004 through 2007 were interviewed in February through March 2008. All interviews were conducted at the participants’ convenience at the high school from which the students graduated.

Participants were informed of the purpose of the study and asked to give informed consent. A consent form for participation in the study was signed by participants prior to the interview. Participants were informed that they were free to decide not to participate or to withdraw at any time. Assurance was made that their identity as a participant would not be associated with the research findings and would be known only to the researcher. Transcripts and findings were provided to participants to review for accuracy and feedback.

Interview Protocol

Appendix C contains the interview questions used to assess the educational experiences of students with learning disabilities relative to post-secondary educational outcomes. The first questions of the interview protocol identified and verified basic
demographic information from quantitative data drawn from archival sources such as IEPs, free and reduced lunch records, and enrollment records. Interview data allowed access into student perceptions of facilitating and inhibiting factors to their postsecondary planning. Qualitative data consisted of student' words used in discussing individual educational experiences as a high school student with a learning disability and employment and educational experiences since graduating from high school. The qualitative component of this study revealed strategies individual students may have developed for coping with their learning disability and perceived barriers to post-secondary education.

Interview questions were piloted in 2004. Graduates of the class of 2003 were interviewed in the fall of 2004. None of these graduates indicated post-secondary educational plans prior to graduation, and none of them were enrolled in post-secondary educational institutions.

A descriptive design was selected for the study. The social constructionist research paradigm was the lens through which transcripts were analyzed for common responses and commonalities, differences, and themes (Creswell, 1998). Through this lens, there is no student with a learning disability without the social context of a school setting, only a student who has been given a label by the educational institution in order to organize itself (Dudley-Marling, 2004). Social-contextual factors such as family support that promote career development are valued as they constitute the social context in interaction with the student that contribute to the construction of an “able, bright student” or a student with a “disability” (Lent, Hackett & Brown, 1999). This emphasis on social context is exemplified in interview questions in which students were asked
ways in which their immediate or extended family was supportive of them. Students also spoke of difficulty in the social context in requesting help from others and regretted that they did not ask for needed assistance.

Many students held a great hatred of math. A word count using the feature on MSWord revealed words most commonly used among participants were “help,” “teacher,” and “math.” Participants spoke about strategies they developed for coping with their learning disability and its impact on their lives. Participants indicated throughout their interviews that attributes of certain teachers helped make schoolwork more effective and enjoyable and the biases of other teachers and school personnel had a negative impact on them.

Data Analysis

Research Question 1: Logistic Regression

The dependent variable, post-secondary educational plans, is dichotomous. Logistic regression is a special case of regression when the dependent (target variable) is dichotomous (Gall, Gall, & Borg, 2003). The dependent variable is treated as a category, not as a linear function. Logistic regression with a binary dependent variable was chosen for the following reasons: (a) With the use of linear regression, the predicted values become greater than 1 and less than 0 if one moves far enough on the X-axis. Such values are theoretically inadmissible; (b) One of the assumptions of regression is that the variance of \( Y \) is constant across values of \( X \) (homoscedasticity). This cannot be the case with a binary variable; (c) The significance testing rests upon the assumption that errors of prediction are normally distributed. Because \( Y \) only takes the values 0 and 1, this assumption is difficult to justify, even approximately. Therefore the tests of the
regression weights are suspect if using linear regression with a binary dependent variable (Grimm & Yarnold, 2001).

Logistic regression was selected to test for predictive variables because the dependent variable is dichotomous (Yes, No) (Gall, Gall, & Borg, 2003). Odds ratios (ORs) describe the predictor variables’ impact by estimating the odds of a one-unit change in each independent variable relative to a change in the dependent variable. The odds ratios (OR) generated from logistic regression are the exponents of B coefficients, Exp (B), and odds ratios show, for each independent variable, the probability that students made post-secondary educational plans relative to that variable. (Grimm & Yarnold, 2001). The significance of the independent variables was tested with the Wald statistic. The Wald statistic is used to test the significance of individual predictors and their logistic regression coefficients. The Wald statistic equals the ratio of the logistic coefficient B to its standard error S.E., squared. If the Wald statistic is significant (i.e. less than .05), then the parameter is significant in the model (George & Mallery, 2001).

Gall, Gall, and Borg (2003) recommended a sample size of 15 participants for each independent variable. Six independent variables would require a minimum of 90 subjects. There are 108 students in the current study. Logistic regression was used to describe the relationship between independent variables and an outcome of post-secondary educational plan or no post-secondary educational plan. For every one-unit increase in the predictor variable, the odds ratio is an estimate of a change in the odds of membership in the target group (Grimm & Yarnold, 2001).

Quantitative data were analyzed using SPSS. Independent variables in this study were coded into an SPSS data base as follows in Table 4.
Table 4

*SPSS Code Variable Assignments*

<table>
<thead>
<tr>
<th>Variable</th>
<th>SPSS Code: 1</th>
<th>SPSS Code: 2</th>
<th>SPSS Code: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma Status</td>
<td>Modified</td>
<td>Special</td>
<td>Standard</td>
</tr>
<tr>
<td>Socio-economic Status</td>
<td>Low SES</td>
<td>Average or above</td>
<td></td>
</tr>
<tr>
<td>Race*</td>
<td>Minority</td>
<td>Non-minority</td>
<td></td>
</tr>
<tr>
<td>Family Configuration</td>
<td>Single parent</td>
<td>Both parents</td>
<td>Lives with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>guardian</td>
</tr>
<tr>
<td>Level of IQ Functioning</td>
<td>Low (&lt;80)</td>
<td>Average (80-110)</td>
<td>High (&gt;110)</td>
</tr>
<tr>
<td>Intervention</td>
<td>No intervention</td>
<td>Intervention</td>
<td></td>
</tr>
<tr>
<td>Educational Plans</td>
<td>No Educational</td>
<td>Educational Plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plans</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Minority=African-American/Hispanic

*Research Question 2*

Data analysis was completed at the analytic inductive level, collecting all data prior to analysis. Analytic induction requires the researcher to meticulously analyze data and identify patterns, and make inferences (Gall, Gall, & Borg, 2003). Although data was analyzed carefully, it was not mechanistic. Social constructionist theory was applied to the data analysis. The data spoke to the researcher. There was an openness on the part of the researcher to learn and understand from the participants' words and to be informed.
by their experiences. It was this researcher's belief that this stance added validity to the data, decreasing the likelihood that patterns and inferences were forced into preconceived categories (Jankowski, Clark & Ivey, 2000).

**Coding procedure.** The data consisted of audiotapes which were personally transcribed by the researcher. The analytic process required immersion in the data which consisted of several hundred pages of transcription. Transcripts were read and reread to build a high level of familiarity (Miles & Huberman, 1994). Transcripts were coded and analyzed at level one for common responses and at level two for commonalities, differences, and themes (Creswell, 1998). For example, when asked how they felt about “being in special education,” students would discuss coping strategies and repetitive themes emerged. Words and phrases within the transcripts were counted, compared, and examined by the researcher individually using highlighting, cutting, sorting, sifting, and re-sorting multiple times to identify similar words, phrases, patterns, and themes.

**Limitations and Delimitations**

Delimitations imposed by the researcher include drawing a sample from a single rural school district which limits the generalizability of the study’s findings. There were a small number of cases in this single high school. Participants included a high percentage of minority students and a high percentage of students from low socio-economic backgrounds. These limitations may have impacted study results as well as limited generalizability.

Participants were not administered survey measures, limiting the collection of information which may have been useful in the study. Limiting data collection to information available from a data base and archival records may not capture all of the
variables that contribute to whether or not students with learning disabilities make post-secondary educational plans. For example, ecological factors such as socio-economic status, race, family configuration, and parental support in addition to substance abuse, family violence, and sexual abuse, may impact self-efficacy and decision-making strategies of children with learning disabilities. Borowsky and Resnick (1998) found that environmental stressors are associated with eligibility and placement in special education to address learning problems.

There is a rationale for the delimitation imposed by the researcher related to the decision not to administer other measures or collect other data. This study focused on archival data, a delimitation imposed by the researcher to narrow the focus of the study due to the nature of the participants' disabilities. The researcher chose to narrow the focus of this study and not administer any other measures or collect any other kinds of information from students for several reasons. In addition to yearly standardized tests, mastery tests of the Standards of Learning and regular course final examinations, students with learning disabilities are administered psychological tests and tests to determine progress toward goals of their Individualized Educational Plans (IEP). Children with learning disabilities are overtested. Further, there is a stigma associated with their disability (Harry & Anderson, 1994; Sabel, 2000). Many students with learning disabilities do not wish to call attention to their disability by being recipients of additional testing and information-gathering efforts.
Ethical Safeguards

This study was conducted in a manner that protected the anonymity of the individual students involved. All student test score information had names of students or other identifying information removed.

The research proposal was submitted to the Human Subjects Review committee in the School of Education (SOE-HSRC) for approval. Any necessary revisions were made to bring the study design into compliance with appropriate regulations.
CHAPTER 4: ANALYSIS OF RESULTS

The purpose of the quantitative component of this study was to determine whether diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and participation in a career development program contributed to post-secondary educational plans among students with learning disabilities. The purpose of the qualitative analysis was to add to an understanding of the quantitative results. Such analysis served to assess the educational experiences of students with learning disabilities relative to post-secondary educational outcomes. This chapter presents findings from the study’s quantitative and qualitative analyses.

Presentation of Results

Quantitative Research Results

Over the course of this study, 2001 to 2007, data was analyzed on 108 high school graduates. Sixty-nine participants did not receive the career development intervention. Of these 69, only four (5.79%) indicated post-secondary educational plans. Thirty-nine participants received the career development intervention. Of those 39, 25 (64.10%) indicated post-secondary education plans. Table 5 contains demographic information for the 69 students who did not receive the intervention and the 39 who did.

The records for the 2000-2001 academic year indicated that for all students post-graduate choices included the following options: attending 4-year institutions (35.44%); attending 2-year institutions (18.35%); and entering the workforce or military (45.57%). Over 61% of 2001 graduates who were not served in special education during high school were admitted to a 2-year or 4-year college and were attending post-secondary educational institutions during the 2001-2002 academic year.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>No intervention</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma Status</td>
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<td>28</td>
</tr>
<tr>
<td></td>
<td>Special</td>
<td>30</td>
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</tr>
<tr>
<td></td>
<td>Standard</td>
<td>34</td>
<td>9</td>
</tr>
<tr>
<td>SES</td>
<td>Low SES</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Average or above</td>
<td>32</td>
<td>18</td>
</tr>
<tr>
<td>Race</td>
<td>Minority</td>
<td>52</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Non-minority</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Family Configuration</td>
<td>Single parent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Both parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lives with Guardian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IQ Function</td>
<td>Low (&lt;80)</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Average (80-110)</td>
<td>42</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>High (&gt;110)</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Educational Plans</td>
<td>Had no plans</td>
<td>65</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Had plans</td>
<td>4</td>
<td>25</td>
</tr>
</tbody>
</table>
Of the graduates with learning disabilities from the class of 2001, 0% were admitted to a 2-year or 4-year college or were attending post-secondary educational institutions during the 2001-2002 academic year. Of the 2001 graduates (those with and without learning disabilities), 73.25% earned a Standard Diploma, 17.19% earned an Advanced Studies Diploma, 6.37% earned a Special Diploma (Special Education), and 3.18% earned a Certificate of Completion (Lamm, 2004). Appendix A lists requirements for diploma options. Table 6 shows post-secondary plans for graduates of the 2001 to 2007 school years.

There were no graduates with learning disabilities from 2001 through 2003 who made post-secondary educational plans, were admitted to any post-secondary educational institution, or continued their post-secondary education during the year following graduation. There were 18.75% of graduates with learning disabilities from the class of 2004 who made post-secondary plans, were admitted to a post-secondary educational institution, and continued their post-secondary education during the year following graduation. For graduates of 2007, this number had grown to 76.9% (See Table 6).

The records for the 2006-2007 academic year indicate that for all students post-graduate choices included the following options: attending 4-year institutions (49.9%); attending 2-year institutions (22.5%); and entering the workforce or military (21.3%). Seventy-one percent of 2007 graduates who were not served in special education during high school were admitted to a 2-year or 4-college. Of the graduates with learning disabilities from the class of 2007, 76.9% were admitted to a 2-year or 4-year college or
Table 6

Percentages of Graduating Class with Post Educational Plans from 2001 -2007

<table>
<thead>
<tr>
<th>Graduates</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Graduating Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending 2 or 4 year institutions</td>
<td>53.79%</td>
<td>54.2%</td>
<td>64.4%</td>
<td>72.1%</td>
<td>64.2%</td>
<td>59.1%</td>
<td>72.4%</td>
</tr>
<tr>
<td>Entering workforce or military</td>
<td>45.57%</td>
<td>N/A</td>
<td>29.6%</td>
<td>24.1%</td>
<td>24.5%</td>
<td>39.2%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Students without disabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admitted to a 2-year/4-year college</td>
<td>61.65%</td>
<td>56.34%</td>
<td>71.52%</td>
<td>80.85%</td>
<td>70.12%</td>
<td>63.41%</td>
<td>71.0%</td>
</tr>
<tr>
<td>Students with learning disabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admitted to a 2-year or 4-year college</td>
<td>0%</td>
<td>6.25%</td>
<td>0%</td>
<td>18.75%</td>
<td>73.33%</td>
<td>33.33%</td>
<td>76.9%</td>
</tr>
</tbody>
</table>
| N/A = not available.
were attending post-secondary educational institutions during the 2007-2008 academic year. Of the 2007 graduates (those with and without learning disabilities), 53% earned a Standard Diploma, 31.7% earned an Advanced Studies Diploma, 7.3% earned a special Diploma (Special Education), and 0% earned a Certificate of Completion.

Do diploma status, disability status, family configuration, socio-economic status, IQ functioning, race, and participation in a career development program contribute to post-secondary educational plans among students with learning disabilities?

Table 7 displays the logistic regression results. A logistic regression was conducted to determine the effect of student variable and the school counselor coordinated career development intervention on student post-secondary educational plans. The relationship between participation in a school counselor coordinated career development program and post-secondary educational planning of students with learning disabilities was significant, $B = 2.885$, $\text{Exp}(B) = 17.896$, $p = .000$.

The odds ratios (or Exp $(B)$) generated from the logistic regression show, for each of the independent variables, the odds or likelihood that students made post-secondary educational plans relative to that variable. An odds ratio of 17.896 indicates that students with learning disabilities who received the intervention had 17 times greater odds of having post-secondary educational plans than those that did not receive the intervention. The model is significant, Wald $\chi^2 (6) = 47.454$, $p < .005$, indicating that participation in a school counselor coordinated career development program appeared to have a significant relationship to the post-secondary educational planning of students with learning disabilities. The predictors model contributed to explain 51% of the variance in students’ post-secondary plans (Nagelkerke $R^2 = .517$).
Table 7

Logistic Regression Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Wald</th>
<th>Exp (β)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma Status</td>
<td>-.601</td>
<td>2.606</td>
<td>.548</td>
<td>.106</td>
</tr>
<tr>
<td>SES</td>
<td>-.195</td>
<td>.089</td>
<td>.823</td>
<td>.766</td>
</tr>
<tr>
<td>Race</td>
<td>.322</td>
<td>.192</td>
<td>1.379</td>
<td>.661</td>
</tr>
<tr>
<td>Family</td>
<td>.408</td>
<td>.347</td>
<td>1.503</td>
<td>.556</td>
</tr>
<tr>
<td>Configuration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IQ Function</td>
<td>-.138</td>
<td>.049</td>
<td>.871</td>
<td>.825</td>
</tr>
<tr>
<td>Intervention</td>
<td>2.885</td>
<td>17.782</td>
<td>17.896</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note. Exp (β) is the odds ratio. Wald $\chi^2 (6) = 47.454, p < .005$. -2 Log likelihood = 78.210. Nagelkerke $R^2 = .517$.

Qualitative Research Results

What are the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes?

Throughout the interview process and data analysis, the researcher was guided by curiosity and the belief that participant words would add to her understanding of their experience (Jankowski, Clark & Ivey, 2000). The researcher was a collaborator, fully aware throughout data collection and interpretation of her own preconceptions. Participant interview response transcripts were carefully transcribed and analyzed using the MSWord word count tool and revealed the most commonly used words among graduates who did not participate in the intervention were “school,” “help,” “work,” “teacher,” and “math.” Among graduates six through ten who participated in the
intervention, the most common words were “school,” “help,” “work,” “college,” and “teacher.” Participants spoke about strategies they developed for coping with their learning disability and its impact on their lives. Participants indicated throughout their interviews that attributes of certain teachers helped make schoolwork more effective and enjoyable and the biases of other teachers and school personnel had a negative impact on them. Table 8 indicates the word-count comparison of graduates 1-5 and 6-10.

The presentation of results incorporated two levels of data reduction. The first level of data reduction was a result of the researcher examination of interview transcriptions. The research used the constant comparative method of data analysis to complete the second level of data reduction. Data was examined for similarities and

Table 8

<table>
<thead>
<tr>
<th>Common Words</th>
<th>Graduates 1-5&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Graduates 6-10&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>62</td>
<td>58</td>
</tr>
<tr>
<td>Help</td>
<td>58</td>
<td>53</td>
</tr>
<tr>
<td>Work</td>
<td>43</td>
<td>37</td>
</tr>
<tr>
<td>Teacher</td>
<td>32</td>
<td>28</td>
</tr>
<tr>
<td>Math</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>College</td>
<td>19</td>
<td>30</td>
</tr>
</tbody>
</table>

<sup>a</sup>Did not receive intervention.  <sup>b</sup>Received intervention.
differences using within-case analysis and cross-case analysis. Content analysis of interview transcripts resulted in nine coding categories as follows: Barriers; Teacher Attributes; What We Should Be Doing; Coping Strategies; Special Education Helped Me; Appreciation to the Researcher; Feelings About Special Education; Sensitivity about not Wanting to be Perceived as “Slow”; First Generation Comments.

The second level of data reduction resulted in five major themes identified through the thematic-reduction of coded statements. The major themes were categorized as follows: Internal and External Perceived Barriers; Coping With a Stigmatized Identity; Teacher Attributes: Approachability and the Ability to Relate; Positive Elements of Resource Classes; Encourage and Build Self-Efficacy.

Transcriptions of participant interview responses were analyzed at the analytic inductive level, collecting all data prior to analysis. Transcripts were analyzed at level one for common responses and at level two for commonalities, differences, and themes (Creswell, 1998). The following themes emerged from the participants’ words in the interviews.

Theme #1: Internal and External Perceived Barriers

There are varying cognitive skill levels of students with learning disabilities. Some students transition into the college setting without identifying themselves as having a learning disability and compensate for their disability without any assistance. But not all students are able to do so. Those that are able do not always ask for assistance, preferring to keep their learning disability to themselves. Not asking for help is often a barrier to these students in pursuing further education. Janiga and Costenbader (2002)
"rated students' preparation for self-advocacy as the greatest weakness of current transition services" (p. 462).

Several students often spoke of wishing they had asked for help and regretting they did not ask for help. "When I needed help, well, when I asked for help, that's when they helped me. I didn't really ask for a lot of help with my homework cause I really didn't do homework in high school. I didn't do it. I mean I really didn't have that much homework really so I didn't ask for help . . . I really didn't do good in classes. I did good in classes, but I didn't do as well as I could have done because I didn't really assess myself in high school like I should have. I look back now and I wish that I would have tried more. I wish I would have tried more in high school with doing my work and asking for help because in high school, I didn't ask for help. I didn't ask for help." "Cause sometimes I be telling my teacher I know it but I don't know it just to make them not embarrass me or whatever." Asked if there was anything in particular that was or would have been helpful for him that we could have done, Graduate #1 responded, "Really. No. Because I mean, no, because it's up to the student to want to be helped and ask for help and I didn't ask for help because I didn't want to be helped. I didn't ask. And so, I guess no."

Graduates described practicalities as significant barriers: the price of gas, long commutes, time, and money. Graduate #7 found a major barrier to continuing his education was "finding a job that could juggle with work. Like at school, they had night classes and morning classes, and if they didn't have it at night class, you had to take it at morning class or you didn't take it, and that was a hard part: looking for a job that could
juggle it.” Graduate #2 found finances to be a barrier. Transportation was a barrier for Graduate #9.

**Theme #2: Coping With a Stigmatized Identity**

Participants related their feelings about having a stigmatized identity as a student with a disability, shared how they feel about being in special education, and coping strategies. Graduate #5 revealed a sensitivity about not wanting to be perceived as “slow.” As she talked about a specialized vocational training school, she explained her reasoning: “Cause their disability is not like mine. They’re like totally different, and I want to be somewhere that I can, so I can learn from some schools, not mainly be around handicapped people.” Participants spoke about strategies they developed for coping with their learning disability and its impact on their lives. In describing how she felt about being in special education, Graduate #5 said, “At first, I didn’t like it cause I felt different from the other students and I wanted to be, you know, like everybody else. It was very hard cause kids would pick on me and say I’m slow and all that (eyes tearing). That really affected me a lot cause I felt real low. I had low self-esteem for awhile. And then I just started ignoring people.” Graduate #2 described how he felt about being in special education: “I mean, it didn’t bother me. That’s just the person I was. I didn’t care what anybody else said. I mean, with me and the strong type of family I came from, you don’t really care what people say. I mean because, my grades, I was bringing my grades home every day, I mean every grade period, and they was just looking good, so I didn’t care about what kind of class that was. That was just me.” Graduate #9 said he “felt a little different, but after a couple of weeks, I started feeling okay when I have a little help from my teacher or some other classmate.” In his description of how he felt about being in
special education, Graduate #3 said very matter-of-factly, “It was all right with me. Everybody’s got a problem. When I was in special ed, I dealt with it.”

Theme #3: Teacher Attributes: Approachability and the Ability to Relate

Participants indicated throughout their interviews that attributes of certain teachers helped make schoolwork more effective and enjoyable and the biases of other teachers and school personnel had a negative impact on them. Honesty, approachability, and the ability to relate were common threads through participant responses. In describing his English teacher, Graduate #9 said, “She was kind of honest...(I) treated her with respect.” In describing what was special about his English teacher, Graduate #1 said, “He was just like a down-to-earth teacher, you know. I mean he could relate to you. He wasn’t really, you know, he wasn’t on your back all the time and making you...I just like being in his class. I liked going to his class. I had English under him my senior year and that was one of my favorite classes to go to was his class.” Graduate #6 fondly recalled a teacher who could relate well to students. “You could just go to (him) and you could talk about anything. You could talk to him with a personal problem. He’ll understand. He’ll have an answer for that cause, you know, he done been through it. He’s not ashamed to say what he’s been through and throw out some advice, help me out here and there, so I respect him a lot for that.” Graduate #7 also recollected the teacher who inspired him most as approachable. He was “outgoing and laid back or whatever. He’d help you. It won’t like regular class. It was like, it was actually giving you the work and you know, you do it, but if you do it wrong, he’d tell you what you did more than like the other folks really. He was more outgoing than everybody really.” Graduate #2 was grateful for teachers who were easy to approach. “It just seemed like they could
relate, like if you had a problem and you go to them with a problem, they could relate to your problem. They just don’t do like some teachers do: Well, it’s not my problem...They’ll sit down and talk it out with you and let you know your choices and all that. So that’s what I liked about those teachers.” Graduate #3 described his appreciation for “certain teachers.” In describing what was special about them, he said, “They didn’t ignore me and stuff like all the other teachers did. They made sure I got my work done. Made sure I did good in all my classes and stuff, like checking up on me and stuff.” In describing teachers that she didn’t like, Graduate #5 stated that “They were showing favoritism toward some students and I didn’t like that. They were showing favoritism.”

**Theme #4: Positive Elements of Resource Classes**

Graduate #4 found that resource classes taught “slower and chapter by chapter” whereas the “other teachers would teach it a little faster.” She found this to be helpful to her. Graduate #2 described similar benefits to resource classes. He said, “It helped me because it’s like when you’re not in a big class, it’s like if you need help with anything, the teacher can work with you individually, you know, if you’re not in such a big class, but, you know, things like speed along when you in a big class. You speed and the teachers tell you what to do and you just got to know how to do it and if you ask for the help, they might be with another student, you know, cause there’s so many in the class, they can’t get around to everybody or whatever.” Graduate #3 also found resource classes to be beneficial for the same reason. “In regular classes, teachers got to worry about all the students. Special education, they get to participate with one student and help all of them. It ain’t a big class like thirty people in a class, like ten people in a class and everybody can get help when they need it. That’s how I see it.”
Theme #5: Encourage and Build Self-Efficacy

Participants emphasized the importance of encouraging students with learning disabilities while they are in high school, building their self-confidence and self-efficacy, their belief in their own ability to continue their education and be successful. In response to a question about what I could tell students with learning disabilities that might help them. Graduate #3 suggested saying: “Don’t ever give up. That’s all I can tell you. And don’t say I can’t. That’s about it.” Graduate #5 suggested that those who work with students with learning disabilities “talk to them and see what their mind is heading to towards the future and what they want to do in life. Something like that.” Graduate #1 shared his wisdom for what we should be doing to help students with disabilities to become successful students and adults: “Just, I mean, just letting them know that, I mean, just because you have a learning disability doesn’t mean that you’re dumb or you’re lower than other students. It just means that you have to learn another way to do things. Like, I mean like, the student beside you might have one way of doing something and it might get done faster than I would because I have to find a way that works for me. And just teaching the students to, you know, just to find their way and to, I mean, it can be done, I mean, cause I did it. And I remember when I, at one time, I was ready to go to work somewhere and just, I mean, just leave school. I mean, I thought that school wasn’t for me at one time. But then, I mean, I just, I learned how to deal with what I have and I use it to my advantage now. Just teach the students now in high school. Just teach them that, I mean, it’s okay and it can be done. And I mean, you just have to find a way that works for you. That’s what I have to say.” This student uses his knowledge and
experiences to his advantage in a position he very recently secured working with emotionally disturbed students in a residential setting.

Graduate #10 described the strength and increase in self-efficacy, in her belief in herself and her ability to be successful she gained from the encouragement and support of her family. She stated that her family “wanted me to go to college and be something since most of them didn’t, or wasn’t able, to go to college. And then when (my grandmother) passed, I really didn’t want to go. But my momma kept telling me, ‘You’re going. We want you to go.’ Yes. That’s what I told my momma. That’s what I’m going to do. That’s exactly what I’m going to go for. Since them two didn’t end up going to college cause they didn’t have the money at the time or something. They made sure I was going. I’ll be the first one in the family on both sides that went to college.” The encouragement of family and friends was also important to graduate #7. He said, “Everybody was happy for me. First one really going to college. Actually getting it done.” Graduate #7 was awarded several scholarships and continues to work while attending college.

Summary

Analyzing transcripts at level one for common responses and level two for commonalities, differences, and themes yielded five themes: Internal and External Perceived Barriers, Coping With a Stigmatized Identity, Teacher Attributes: Approachability and the Ability to Relate, Positive Elements of Resource Classes, and Encourage and Build Self-Efficacy. These five themes surfaced throughout the transcript analysis.
Chapter 5 explores the conclusions of the study. It also provides discussion in interpreting the findings presented in Chapter 4 in light of previous research, explores the implications of those findings, and presents recommendations for further study.

**Student Feedback Following the Intervention**

Several students with learning disabilities came to the counseling office, looked at the researcher and asked, “Can we do more college exploration? I’m interested in North Carolina Wesleyan.” Another student said, “You know we talked about the fact that I would like to work on motorcycle engines and I would like to look at technical schools?” On another occasion, a student looked for the researcher in several places in order to share his future plans, indicating determination and persistence not evident prior to the intervention. Another student was referred by a teacher. The referral pertained to classroom behavior, getting along with the teacher. After a discussion about that, he was just sitting there for a minute thinking and the researcher stated, “You look like you’re deep in thought.” He said, “I’m thinking about taking the SAT” and began asking about accommodations and planning ahead for testing.

The career development intervention remains in place and initial feedback from graduates is indicative of the fact that participants are interested in planning for post-secondary education. Study results and initial feedback also says something about efficacy. These participants now can see themselves as possibly going on to school whereas before, they might have thought: “Oh, perhaps I’m not bright enough.”

In the early stages of implementing the career development intervention, a parent of one of the graduates with a learning disability was asked, “How is she doing?” She replied with a tone of frustration, “She’s not doing nothing. She hasn’t got a job. She’s
not going to school. She’s just sitting around doing nothing.” This parent revealed frustration that there’s not a realistic assessment of what her child can do, where she can go with what she has to offer. Her daughter is a student who has average ability, an average functioning student with a learning disability. This parent understandably wants more for her child and experienced frustration because her child is not keeping up with her peers without disabilities. When I interviewed her daughter, she cried and said that it was really hard having that label going through school. She’d get teased about it and she didn’t really want anybody to know about it. Not only was there an evident lack of a sense of self-efficacy, there was the added burden of carrying the stigma of a disability.

As predicted by the work of Brown and Lent (1996), by addressing outcome expectations and breaking perceived barriers, participants who expressed low self-efficacy now state that they can see themselves in the post-secondary educational setting. Prior to beginning the intervention program, one student “didn’t see myself as going to college.” After the intervention program, the same participant said, “Now I do.”
CHAPTER 5: CONCLUSIONS

The findings in this study indicate that a career development program coordinated by the school counselor as herein outlined made a difference in the post-secondary educational plans of students with learning disabilities in this rural school setting in the southeastern United States. The chapter is divided into the following sections: Discussion of the Results, Implications for Future Research, Implications for Practice, Implications for Counselor Education Programs, and Implications for Public Policy.

Discussion of Results

There are a number of limitations and delimitations that must be considered in interpreting the results of this study. Participants in the study were all graduates of a single high school in a rural school district.

Participants were from a with a large percentage of African-American students from low socio-economic backgrounds, therefore, participants may not represent graduates of school districts in which students are more advantaged economically and have lower percentages of minority students group. These limitations mandate caution when generalizing the study’s results.

Quantitative data collection was limited to the use of a data base and archival records. I, the researcher, a school counselor as well as school testing coordinator in the district, determined that students with and without disabilities were already the recipients of continuous testing throughout the year and students with learning disabilities experience additional testing related to eligibility to receive or continue to receive special education services. Therefore, I chose not to impose further testing upon participants although this action may also limit study results.
A final limitation is the risk of response bias stemming from the fact that I, the researcher, have worked closely with study participants as their school counselor in their elementary school years and throughout their high school years and have formed a relationship of trust and confidence with them. Having assumed a leading role as the coordinator of this intervention as well as researcher, there is a risk that participant responses reflect what the graduates perceive as helpful to me. There is a further risk that as the researcher, I subjectively interpreted participant responses in a manner that supports the overall aim of furthering post-secondary educational outcomes for students. This risk of response bias and subjective interpretation may also limit generalizability of study results.

The Effects of the Career Development Intervention

The study examined the extent to which a school counselor coordinated career development program and other student and contextual factors affected their post-secondary educational plans. This study contributes to research on post-secondary educational planning of students with learning disabilities, provides insight for administrators, professional school counselors, counselor educators, and policy makers who are seeking to improve college access for students with learning disabilities and close the gap between post-secondary education of students with learning disabilities and their peers without disabilities.

Quantitative methods used in this study comprised the extraction and analysis of data from archival records to assess the relationships between diploma status, family configuration, socio-economic status, IQ functioning, race, participation in a career development program and post-secondary educational plans for secondary school
students identified as having learning disabilities. Results from the logistic regression analysis indicated that the dependent variables, diploma status, family configuration, socio-economic status, IQ functioning, and race, were not significant predictors of post-secondary educational plans among students with learning disabilities. These dependent variables may not have been significant because the sample comprised more than 70% African-American students and over 60% students with low socio-economic status.

During 2001-2003, none of the graduates with learning disabilities from this rural high school in the southeastern United States made post-secondary educational plans, were admitted to any post-secondary educational institution, or continued their post-secondary education during the year following graduation. During 2004, after the implementation of the intervention in Spring of 2004, there was a small increase in the percentage of students with learning disabilities with post-secondary educational plans. About 18.75% of graduates with learning disabilities made post-secondary plans, were admitted to a post-secondary educational institution, and continued their post-secondary education during the year following graduation. For graduates of 2007, this number has grown to 76.9%. The number of graduates with learning disabilities who were admitted to a post-secondary educational institution and who enrolled in a post-secondary institution during the year following graduation increased from 0% for graduates with learning disabilities in the class of 2003, the last graduating class prior to the intervention, to 76.9% of graduates with learning disabilities in the class of 2007. There were 76.9% of graduates with learning disabilities from the class of 2007 admitted to a post-secondary educational institution and continuing their post-secondary education during the year following graduation.
Whether or not students with learning disabilities received the intervention was a significant predictor of their post-secondary outcomes. The odds of planning to and attending college were 17 times higher for students with learning disabilities who received the career development intervention than those who did not. Many factors may have contributed to the successful results of this school counselor coordinated career development intervention. The intervention provided an infrastructure of support for participants with components of skill building, information, and direction already possessed by many students with college educated parents at home (Gibbons & Shoffner, 2004). Research reveals an increase in college application and attendance for students who are beneficiaries of interventions that provide critical college preparatory information (McClafferty, McDonough, & Nunez, 2002; McDonough, 2004). Students’ exposure to post-secondary settings through College-4U” and “College Quest” field trips as well as invited speakers, such as disabilities support services specialists from area colleges, introduced them to examples of successful college students and college graduates with learning disabilities, many of whom were African-American or Hispanic and economically disadvantaged. Furthermore, these forums created the College Talk or consistent reminders of college expectations that students need to feel confident or self-efficacious that they can go on to post-secondary education (McClafferty, McDonough, & Nunez, 2002).

According to the principles of Social Cognitive Career Theory as outlined by Brown and Lent (1996), if students do not perceive a positive outcome from efforts expended toward post-secondary education planning, their low outcome expectations will lower their self-efficacy which is needed to support the efforts required to plan for,
attend, and successfully complete college. The exposure to role models with whom they could identify may have helped participants to see themselves as successful college students. The speakers who participated on panels or spoke to groups at the high school had diverse experiences in various college majors and careers, and provided an opportunity to influence the beliefs of students about their potential to be successful in a post-secondary education environment. After hearing a panelist who is a successful young female college graduate with a learning disability, one study participant shared her beliefs about her own potential and high expectations: "I am planning to study elementary education because it is my dream to become a teacher. The expectations I have of myself are high because that is what our children deserve from those who care for them."

The intervention provided participants with an infrastructure of information and support to counter faulty beliefs (Brown & Lent, 1996; Lent, Hackett, & Brown, 1999). Career interest exploratory sessions served as a forum to challenge perceived barriers such as limited financial aid and created new perceptions of support. In addition, programs for parents and students provided information on the college search, the application process, obtaining financial aid, strategies for college success, and college preparation. The intervention provided the information and resources that are critical for helping students transition to post-secondary education (McClafferty, McDonough, & Nunez, 2002).

Experiences of Students with Learning Disabilities and Post-Secondary Education Plans

This study used a constructionist theoretical framework and Social Cognitive Career Theory to examine constructed barriers to post-secondary educational planning
and the educational experiences of students with learning disabilities relative to their post-secondary educational outcomes. Social constructionism led the school counselor to consider the context in which a student's identity is constructed (Dudley-Marling, 2004). Five major themes emerged from interviews with students who received or did not receive the school counselor coordinated career development intervention: Internal and External Perceived Barriers; Coping With a Stigmatized Identity; Teacher Attributes: Approachability and the Ability to Relate; Positive Elements of Resource Classes; Encourage and Build Self-Efficacy.

In theme #5, participants stressed the importance of encouragement and building self-efficacy. Self-elimination is a likely result from the perception of inaccessibility (Stanton-Salazar & Dornbusch, 1995). When counseling interventions address outcome expectations and break perceived barriers, they help create higher self-efficacy in clients (Brown & Lent, 1996). In this study, some participants expressed that they can see themselves in the post-secondary educational setting when they previously could not. Participants who received the intervention mentioned "college" twice as often in the interview transcripts than graduates who did not receive the intervention. Graduate #10 stated, "I didn’t think I could fit in like the regular students. Now I know I can." This is a young woman who is African-American, economically disadvantaged, and the first on both sides of her family to attend college. Her words define increased self-efficacy as she insisted, "Now I know I can." Graduate #6 stated, "Students with disabilities can get out and be in one of those regular classrooms, CP classes. They can do it too, you know. Cause they can go somewhere, you know." This participant is an African-American young man who is supporting a young child and is the first in his family to attend college.
The actions of the high school graduates in this study speak to the need for continued intervention with current and future students with learning disabilities. Their words as well as their actions speak volumes about self-efficacy, personal agency, outcome expectation, and the impact on their choices. Those graduates who expressed a high level of self-efficacy are currently enrolled in post-secondary education.

Interventions that create a change in the social context of students can have a significant effect on student identity (Dudley-Marling, 2004). Qualitative Theme #2 incorporated participant words describing Coping with a Stigmatized Identity, a barrier identified by a number of participants. Students were given the opportunity to listen to a panel of successful college graduates with learning disabilities. Individuals on the panel shared their self-perceived identity not only as a student with a learning disability, but also as a daughter, sister, friend, and student. Panel members did not see themselves as “students with a disability.” Milsom (2006) emphasized that school counselor coordinated and implemented interventions can assist students with disabilities to come to the conclusion that a disability does not have to limit their dreams for the future. Graduate #10’s words substantiate this view: “Everybody in the world pretty much has a disability that don’t nobody really know about. So I just say tell them just keep trying. They will get through it just like I did. They will get through it.”

Qualitative Theme #4 reflected students’ perceptions of institutional support provided for those who have not been privileged to access such support. Qualitative data suggested that the support students received in resource classes was a form of social capital (Stanton-Salazar, 1997). “(The resource class setting) helped me because it’s like when you’re not in a big class, it’s like if you need help with anything, the teacher can
work with you individually, you know, ..." The professional literature on transition cites one indicator of success as establishing effective connections in the transition process by recruiting college graduates with learning disabilities to serve as mentors (deFur, 2003). The career development intervention created a forum where college graduates with learning disabilities returned to the high school to share their experiences with current students with learning disabilities.

The literature indicated that power differentials can damage a person's self-efficacy, a person's sense of self or sense of being capable (Jankowski, Clark, & Ivey, 2000). Qualitative Theme #3 supports this claim in the literature. Students shared how important teacher approachability and ability to relate was to them and how it affected their sense of being capable. Graduate #2 was grateful for teachers who were easy to approach. "It just seemed like they could relate, like if you had a problem and you go to them with a problem, they could relate to your problem. They just don't do like some teachers do: Well, it's not my problem...They'll sit down and talk it out with you and let you know your choices and all that. So that's what I liked about those teachers."

Graduate #3 described his appreciation for "certain teachers." In describing what was special about them, he said, "They didn't ignore me and stuff like all the other teachers did."

This intervention was a response to repeated calls in the literature over the course of many years for professional school counselors to take action and a leadership role in closing the gap in post-secondary educational planning between students with learning disabilities and their peers without disabilities (Akos, Lambie, Milsom, & Gilbert, 2007; Omizo & Omizo, 1992; Satcher, 1993) and the resulting increase in post-secondary
educational planning for study participants justified this call for action. The literature in professional school counseling continues to call for research exploring the impact of interventions which involve school counselor leadership and collaboration with other professionals with a goal of assisting students in post-secondary educational planning and transition (Scarborough & Gilbride, 2006).

Implications for Practice

Based on the results of this study, counselors need to develop interventions that specifically address the unique needs of students with learning disabilities. School counselors cannot assume that children with disabilities will self-refer with respect to college. These students may not possess the level of self-advocacy required for such self-referral. Without school-based interventions, children with learning disabilities will remain anonymous. Their dreams may remain out of reach because of their own self-imposed limitations and their lack of understanding of the resources available to them and to which they are entitled. This consequence is best exemplified by the words of Graduate #2, an African-American young man who lives with his mother and step-father, neither of whom completed high school. This young man was considered low income as evidenced by his qualification to receive free lunch. A graduate prior to the implementation of the career development intervention, Graduate #2 is currently working at a fast food restaurant earning $6.50 per hour. He has no health benefits. This is his third job since graduating from high school. In the qualitative interview, Graduate #2 described his thoughts when he was in his senior year of high school: "At that point in time, I was like, I didn’t know what I wanted to do with the rest of my life after I got out of high school. Honestly, I was thinking that...and I know this is kind of crazy...but
honestly, I was thinking that there was nothing after high school. You feel me? So I couldn't honestly say what I wanted to do after high school. I wasn't even thinking that far ahead."

School counselors cannot assume that the population of students with learning disabilities is going to step forward on their own accord to gather information about post-secondary opportunities. There must be deliberate and intentional interventions that tap into their particular needs and address issues related to efficacy and the delayed career developmental trajectory that students with learning disabilities experience. Interventions to improve college access can substantially increase post-secondary education for all youth, including those from high risk groups, heighten educational aspirations and planning, and add social capital (McDonough, 2004). A college-going culture requires school counselors to plan and develop an infrastructure supported by high expectations (Allen & Murphy, 2008). School counselors should work closely with teachers, administrators, other school staff to create a college-going culture that incorporates high expectations for all students and provide college and other post-secondary information to students and their families (Bryan, Holcomb-McCoy, Moore-Thomas, & Day-Vines, in press; McClafferty, McDonough, & Nunez, 2002).

School counselor coordinated interventions aimed at encouraging post-secondary educational planning for students with learning disabilities should begin prior to high school (McDonough, 2004). Furthermore, interventions to increase career self-efficacy and outcome expectations should begin earlier than high school and extend throughout K-12 education (Lent, Hackett, & Brown, 1999; NACAC, 2005). Recent research indicates that school counselor contact with high school students about college information is
beneficial for students when they have this contact before or in 10th grade (Bryan, Day-Vines, Holcomb-McCoy, & Moore-Thomas, 2008). Early intervention would be a more pro-active approach that prevents premature elimination of career options. This has implications for K-12 integrated career educational planning of programs for children with disabilities.

Developing and implementing a school counselor coordinated intervention such as the one developed and implemented in this study cannot rely on the efforts of the individual school counselor alone. Developing such interventions must involve multiple stakeholders and requires collaboration between key contributors: parents, students, special education faculty, Department of Vocational Rehabilitation counselors, and college coordinators of programs for students with disabilities. Implementations should involve partnerships at the federal, state, and local level and with colleges and other school districts (McDonough, 2004). Collaboration and forming partnerships are even more important in light of the fact that counselors face time constraints due to increasingly high student/counselor ratios (McDonough, 2005a, 2005b). This is especially true in rural schools with a high percentage of students from low socio-economic status and students of color where the student/counselor ratio is highest, but the need is greatest for post-secondary educational planning.

Post-secondary education is considered a requirement for success in today’s economy. Prior to 1950, one-fifth of high school students continued their education beyond high school and this number has increased to almost three-fourths of high school graduates (NACAC, 2005). Post-secondary education planning is considered to be the most critical role for high school counselors. The National Association for College
Admission Counseling considers the school counselor to be a critical element to students' post-secondary aspirations and achievement. Research indicates that minority students with low socio-economic status from rural areas would benefit most from college planning efforts by school counselors (Harvey, 2007). Yet rural school districts with high numbers of students of low socio-economic status have the highest percentage of students assigned to each school counselor (NACAC Counseling Trends Survey, 2004).

School counselors' must collect college access data to justify and advocate for their roles in increasing post-secondary planning for students with disabilities. Data are increasingly important to justify the time requirements for the intervention and progress made given that the high number of students assigned to each individual counselor allows less time for school counselors to devote to post-secondary educational planning. Barriers to planning and implementing successful programs to engage in post-secondary planning include time constraints facing school counselors nationwide. Job responsibilities outside the arena of school counseling that are assigned to the school counselor by the school principal (e.g., testing) require time that is needed for post-secondary educational planning. Time constraints for school counselors are most severe in schools with a high number of minority students (McDonough, 2005a, 2005b).

Given the above-mentioned constraints, school counselors must make advocacy a priority. School districts with limited budgets are frequently challenged with improving drop-out rates and raising test scores and student attendance. By creating a college-going culture, schools can meet and exceed these goals, reduce the number of drop-outs, improve standardized test scores, improve attendance, and close gaps in achievement. Successful advocacy requires carefully documented data (Harvey, 2007). Standard 13 of
the American School Counselor Association’s National Model (2005) accountability system sets a performance standard which mandates that the school counselor engage in student advocacy, leadership, collaboration, systemic change, and leadership. ASCA National Standards for Students requires students be able to identify post-secondary educational options and plan for post-secondary education. At the foundation of the ASCA National Model is a basic assumption that a school counseling program should serve every student. However, all students have not been served. The ASCA National Model: A Framework for School Counseling Programs mandates that school counseling programs address the needs of all students, including students of color, students of low socio-economic status, those who would be first generation college bound students, and students with disabilities. Students with learning disabilities have been excluded, creating a gap. School counselors are mandated to develop and implement interventions to close the gap. Interventions like the school counselor coordinated intervention implemented in this study could help to close a long-standing gap in post-secondary transitions between able and disabled high school graduates.

Implications for Counselor Education Programs

Many high school graduates who continue onto post-secondary education, particularly those who are second-generation college and beyond, have been socialized from an early age by parents and teachers to expect to continue their education beyond high school. A similar shift in expectations for children in special education could increase the likelihood of students with disabilities planning to attend and securing admission to college. This shift would require building an infrastructure for children with learning disabilities in the same way we have an infrastructure for gifted children and
According to Oakes, Rogers, Lipton, and Morrell (2002) in *The Social Construction of College Access*, such an infrastructure is not available to low income students and students of color. To build this infrastructure, school counselors need to be knowledgeable about college preparatory counseling and committed to building college preparation as a normative expectation (Harvey, 2007).

The new 2009 standards of the Council for the Accreditation of Counseling and Related Educational Programs (CACREP, 2008) state that school counselors should know “how to design, implement, manage, and evaluate transition programs, including school-to-work, postsecondary planning, and college admissions counseling. (p. 40).

Although, the standards do not directly address the role of school counselors in promoting these services for students with disabilities, counselor education programs should prepare school counseling to create a college going culture for all students including those with disabilities. Indeed, counselor educators must consider how to prepare school counseling trainees to meet the unique college preparation and information needs of students with learning disabilities.

Over three-fourths of school counselors have no specific coursework to prepare them for college admissions work with students. Yet, high school administrators, families, and students rely heavily on school counselors as a source of post-secondary educational information. Counselor education graduate programs should incorporate specific knowledge about college preparation and college admission into the required coursework. Furthermore, school counseling trainees need to receive training regarding how to build a college going culture (McClafferty, McDonough, & Nunez, 2002; McDonough, 2005b).
Another implication for counselor education programs is the need for school
counselors to increase their knowledge and understanding of special education and the
students served in special education. Research conducted by Wood Dunn and Baker
(2002) found many school counselors reported acquiring the knowledge of working with
students with learning disabilities despite working in a state where course work is not
required for licensure as a school counselor. Counselor knowledge of special education
could be developed through required coursework for licensure, in-service programs to
address this deficiency, and professional development experiences.

School counseling trainees should be encouraged to develop and implement
college-career interventions in their internships. Counselor educators should encourage
trainees to develop a resource base of key transition stakeholders and collaborate with
them to provide college activities to help students with disabilities to transition to
postsecondary education. Therefore, it is important that school counselor trainees develop
skills for successful collaboration in their counselor training.

Implications for Future Research

Results from this study are informative, but future research is needed in this area
of study. Future research should use an experimental design to examine the effects of
college/career interventions on the postsecondary outcomes of students with disabilities.
Research with an experimental and control school would help clarify the effects of the
intervention.

Results from this study indicate that school counselor coordinated career
development interventions can bring positive results with respect to post-secondary
educational planning for students with learning disabilities. Future research would add to
our knowledge by examining intervention outcomes using instruments measuring self-efficacy such as the high school version of the Expanded Skills Confidence Inventory (Betz & Wolfe, 2005), validated with a population of predominantly ethnic minority students and designed to identify self-efficacy or confidence in areas where interventions increase career options.

To guard against the tendency to fit everyone in the same box, future study of transition interventions should target the transition experiences of economically disadvantaged students, ethnic minorities, and students with disabilities. Perceived barriers and coping skills should be targets for analysis (Lent, Hackett, & Brown, 1999). Replication of this study in another context would add to the knowledge base of effective school counselor coordinated interventions to increase college access for students with learning disabilities.

Implications for Public Policy

The U.S. Department of Labor (2004) reported that sixty percent of jobs in the U.S. economy require post-secondary education. “Recent research studies and policy reports call for increasing the numbers of counselors available and the amount of time they devote to college advising tasks one of the top three reforms needed to improve college access” (NACAC, 2005). Increased school counselor to student ratios constrain school counselors from meeting the school counseling needs of low income and minority students for college preparation and access (McDonough, 2004).

The current structure of schools is not conducive to preparing minority, low-income, and first generation students for post-secondary education. Addressing this shortcoming will require transforming high schools from K-12 schools to an inclusive P-
system to allow for a more effective transition to post-secondary education for all students, including students with learning disabilities (McDonough, 2005). Building a college-bound school culture is promoted by aligning high school exit testing with college placement testing. School accountability has been focused on the floor rather than the ceiling, meeting the minimum requirements rather than aspiring to the maximum possible. Raising the focus of policy makers, administrators, educators, parents, and students to a college-bound culture will require incorporating incentives for middle school students to select the more difficult college-preparatory gateway classes necessary for college admission and retention. Such incentives are provided through programs such as Upward Bound and Gear-Up, but to ensure greater access for students with learning disabilities, school counselors should advocate to include them in applicant pools for these programs.

Public policy is often influenced by professional organizations; however, the organizations are separate and distinct. Shared information between professional organizations would increase the odds of under-represented students continuing their post-secondary education. There should be collaboration between professional organizations such as the National Association of Secondary School Principals, American School Counselor Association, National Association for College Admission Counseling, and Association for Children and Youth with Disabilities to forge a joint effort to implement a vision of excellence in college preparatory counseling and jointly raising its status in a time of limited resources.

In the State of College Admission Report (NACAC, 2005) counselor bias is defined in terms of determining who will be on the receiving end of college preparation
efforts, who will be discouraged from aspiring to post-secondary education, and who will be scheduled into college preparatory courses. Minority students from schools with a majority of students from low socio-economic background whose parents did not attend college are most likely to have their post-secondary educational plans influenced by their school counselor. What makes this finding most disturbing is that this is the population of students with less prepared counselors and higher student/counselor ratios where counselors are often busy performing non-college-preparatory tasks such as testing, scheduling, discipline, and administrative duties.

According to the National Association for College Admissions Counseling (NACAC; 2005), four-fifths of occupations with the most growth require post-secondary education. Post-secondary education is a major prerequisite to enable citizens to participate in our democracy and it is critical that access to post-secondary education be extended to all. A variety of federal and local initiatives have recently emerged in response to widespread perceptions that schools are not preparing students adequately to move from school to work (Lent, Hackett, & Brown, 1999). Superintendents should ask themselves the following questions: Do current student to school counselor ratios at the high school level sufficiently allow for college counseling, particularly for students with disabilities, economically disadvantaged students, and students who would be the first to attend college in their family? Is it cost effective for the school district and taxpayers to eliminate school counselor positions when school counselors are often the only source of college information for students with disabilities and other minority and low income students (McDonough, 2004)?
When the school counselor coordinated career development intervention in this study was initially implemented in 2004, the eyes of policy makers and educators were on mandates from No Child Left Behind for guidance in serving our students (McDonough, 2004). Gaps existed then and continue to exist in post-secondary education between students based on disability, ethnicity, and socioeconomic status throughout the nation. The focus of policy makers must move from meeting the minimum graduation standards necessary to maintain accreditation and focus instead on preparing graduates for a highly competitive global economy that requires post-secondary education.

School counselors must serve all students, including those with disabilities. The consequences of neglecting to equitably serve students with disabilities include alienation of that segment of the school population and a return to a time in the history of American education when students with disabilities were not served. We cannot, nor should we, leave these students behind (Gibbons & Shoffner, 2004).
# APPENDICES

## Appendix A

### Diploma Requirements

Table 9

*Credits Required for a Standard Diploma for the Classes of 2004, 2005, 2006, 2007*

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Standard Units of Credit</th>
<th>Verified Units of Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>History and Social Science</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Fine or Practical Arts</td>
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<td>N/A</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Student Selected Tests</td>
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<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>Subject Area</td>
<td>Standard Units of Credit</td>
<td>Verified Units of Credit</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>English</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Science</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>History and Social Science</td>
<td>4</td>
<td>2</td>
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<tr>
<td>Foreign Language</td>
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</tr>
<tr>
<td>Health and Physical Education</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Fine or Practical Arts</td>
<td>1</td>
<td>N/A</td>
</tr>
<tr>
<td>Electives</td>
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<tr>
<td>Student Selected Tests</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>9</strong></td>
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</table>
Table 11

Credits Required for a Modified Standard Diploma for Students Who Entered the 9th Grade in 2000-01 (Class of 2004 and Beyond)

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Standard Units of Credit</th>
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<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>2</td>
</tr>
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<td>2</td>
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<td>Health and Physical Education</td>
<td>2</td>
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<tr>
<td>Fine or Practical Arts</td>
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</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
</tr>
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</table>

*Students seeking a Modified Standard Diploma must pass the 8th grade English (Reading, Literature, and Research) and 8th grade mathematics Standards of Learning tests to meet the literacy and numeracy requirements. Students may substitute a higher-level Standards of Learning test (i.e., end of course English (Reading), Algebra 1, Algebra 2, or Geometry) for the 8th grade SOL tests in English (Reading, Literature, and Research) and mathematics or other substitute tests approved by the school board.*
Appendix B
Consent Form to Participate in Human Subjects Research

CONSENT FORM: Post-Secondary Choices of High School Graduates:

The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate or to withdraw at any time.

The purpose of this study is to understand the post-secondary choices of high school graduates from a rural high school in the southeastern United States. The procedure will be descriptive.

Data will be collected through in-depth interviews. Interviews last from one to one and one-half hours. Data collection will involve documents such as IEP’s and interviews (transcripts of interviews).

Do not hesitate to ask any questions about the study either before participating or during the time that you are participating. I would be happy to share my findings with you after the research is completed. However, your name will not be associated with the research findings in any way, and your identity as a participant will be known only to the researcher. If you have any questions at any time, please call me at 252-308-1890 or 434-634-2195 or Dr. Julia Bryan, dissertation supervisor, at 757-221-2419. Should there be any dissatisfaction with any aspect of this project, please contact Michael Deschenes, Chairperson, The College of William and Mary Protection of Human Subjects
Committee, at 757-221-2778 (e-mail: mrdesc@wm.edu). There are no known risks and/or discomforts associated with this study.

The expected benefits associated with your participation are providing information which may be useful to others in understanding the post-secondary choices of individuals who have learning disabilities. The results of this research will lead to the development of a plan for reviewing information about post-secondary options, strategies for working with students with learning disabilities, and promoting their self-advocacy.

Please sign your consent with full knowledge of the nature and purpose of the procedures. Your signature below signifies your voluntary participation in this project, and that you have received a copy of this consent form. A copy of this consent form will be given to you to keep.

_________________________________________  ____________
Signature of Participant                        Date
Appendix C

Quantitative Interview Questions

Race:

Asian/Pacific Islander
Black/African-American
Caucasian/White European
Latino/Hispanic
Native American/American Indian
Bi-racial: specify:
Other: specify:

Age:

Gender:

Female
Male

Did they receive free/reduced lunch last year?

Yes
No

Range in which final high school grade point average (GPA) fell:

4.0 or greater
3.5-3.9
3.0-3.4
2.5-2.9
Qualitative Interview Questions

Introduction:
I would like to talk with you about your experiences in school and what you have been doing since you left school. Before we start, I want to remind you that your participation is completely voluntary, and everything you say will be kept confidential. If any question makes you uncomfortable or you do not want to answer for any reason, just say so. Also, if for any reason you wish to discontinue the interview at any time, you may do so. Do you have any questions before we begin?

1. What is the highest level of education of the female head of your household?
   a. some high school
   b. high school diploma
   c. some college
   d. Bachelor’s degree
   e. Master’s degree
   f. Doctorate (Ph.D., M.D., etc.)
   g. There is no female head of the household
2. What is the highest level of education of the male head of your household?
   a. some high school
   b. high school diploma
   c. some college
   d. Bachelor’s degree
   e. Master’s degree
   f. Doctorate (Ph.D., M.D., etc.)
   g. There is no male head of the household.

3. When you were in high school, did you complete your homework assignments every night?
   a. never
   b. rarely
   c. sometimes
   d. often
   e. always

4. When you were in high school, did your parent(s)/guardian(s) make sure that you complete your homework assignments?
   a. never
   b. rarely
   c. sometimes
   d. often
   e. always
5. When you were in high school, how often do your parent(s)/guardian(s) have conversations about academics with you?
   a. never
   b. rarely
   c. sometimes
   d. often
   e. always

6. Tell me what you have been doing since you left high school starting with the period right after high school and bringing me up to the present.

7. What barriers did you have in pursuing your education? (financial, motivation, family responsibilities, academic ability, other)

8. Did you consider other occupations?

9. What are some of the barriers that prevented you from considering these occupations? (financial, motivation, family responsibilities, academic ability, other).

10. Would you think back to the time when you were still in high school and tell me about your experiences in school.

11. Tell me about your learning disability (How did it affect your school work?)

12. In what ways was your immediate or extended family supportive of you?

13. Is there anything else you would like to tell me about school? Do you think I have a good picture of what your experiences in school were?

14. Thinking again about the present, how, if at all, does your learning disability affect you now that you are out of high school? Have you told your employer(s) that you
have a learning disability? Have you shared that information with other friends or co­workers, or do you keep it to yourself?

15. Have you received any services to help you with your learning disability since you left high school? (Were they helpful? If so, in what ways were they beneficial?)

16. Based on your experiences, do you have any suggestions for what we should be doing to help students with disabilities to become successful students and adults? Is there anything in particular that was or would have been helpful for you?
REFERENCES


Borowsky, I.W., & Resnick, M.D. (1998). Environmental stressors and emotional status of adolescents who have been in special education classes. Pediatric Adolescent Medicine, 152, 377-382.


Vita

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Birthplace: Newport News, Virginia

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Bachelor of Arts