

COMPLIANCE AND BEST PRACTICES IN TRANSITION PLANNING:
EFFECTS OF DISABILITY AND ETHNICITY

A Dissertation

by

LEENA JO LANDMARK

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

December 2009

Major Subject: Educational Psychology

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Approved by:

Chair of Committee,	Dan Dalun Zhang
Committee Members,	Emily Davidson
	Laura Stough
	Victor Willson
Head of Department,	Victor Willson

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ABSTRACT

Compliance and Best Practices in Transition Planning:

Effects of Disability and Ethnicity. (December 2009)

Leena Jo Landmark, B.A.; M.Ed., Texas A&M University

Chair of Advisory Committee: Dr. Dan Dalun Zhang

It is well known that individuals with disabilities have poor postsecondary outcomes. As a result, state and local education agencies are held accountable for the post-school achievements of their students with disabilities. The purposes of this study were (a) to determine the extent to which the transition components of Individualized Education Program (IEP) documents were compliant with the transition requirements of the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA), (b) to determine the extent to which the transition components of the IEP documents provided evidence of best practices, (c) to determine the effects that disability category and ethnicity had on compliance and practices as evidenced in the transition components of the IEP documents, and (d) to determine the relationship between overall compliance and best practices. The sample for the study included 212 secondary students who had a developmental disability, an emotional disorder, or a learning disability and who were African American, Caucasian, or Hispanic. Several types of analyses were conducted including descriptive, multiple logistic regression, and Spearman's rho correlation.

The overall level of compliance was 2.03 ($SD = 1.238$). The range of possible scores was 0 – 5, with 0 indicating that none of the components of compliance were 100% compliant, and 5 indicating that all of the components were 100% compliant. The overall level of best practices as evidenced in the IEP documents was 4.89 ($SD = 1.569$). The range of possible scores was 0 – 8, with 0 indicating that there was no evidence of any of the practices in the IEP document, and 8 indicating that evidence of all the practices was found in the IEP document. A student's disability category and ethnicity were found to be influencing characteristics for increasing or decreasing the probability of an IEP document being compliant and/or having evidence of best practices. A statistically significant correlation of $r = .429$ was found between the overall levels of compliance and best practices, indicating that as the level of compliance increased, so too did the level of best practices evident in the IEP document.

DEDICATION

This dissertation is dedicated to children with disabilities.

ACKNOWLEDGEMENTS

There are so many people who have helped me along this journey. The dissertation is at times a lonely endeavor, and without the support of many I would not have been able to endure.

My acknowledgments begin with my family and friends because that is where my journey began. Quinn: You have always believed in me even when I have faltered. Thank you for your love. Lauren and Shelby: Thank you for allowing your mother to grow professionally. I love you both so much; you are wonderful daughters. Mom: First you gave me life; then, you saved it. Thank you for instilling in me the characteristic of persistence. Marcia Montague: I never would have considered graduate school if it were not for you. You are an inspiration to me. Jackie Pacha: Your friendship and work ethic helped me to overcome many of my dissertation barriers. I hope to be able to return the favor. Russell Warne: Thank you for illuminating regression analyses. You have a gift for teaching statistics, and I have no doubt that you will be successful in your future.

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model to me. Dr. Willson: Thank you for spending much time explaining statistics to me. I always leave your office with so much to think about.

I would like to thank the individuals in the transition field who reviewed my instrument and provided me feedback: Dr. Ed O’Leary, Dr. Kristin Powers, and Dr. David Test. Additionally, I owe many thanks to the special education directors who allowed me to collect my data. I would love to acknowledge you all by name, but will withhold that information due to the confidentiality of the school districts.

NOMENCLATURE

Admission, Review, Dismiss (ARD)	Educators in Texas refer to the Individualized Education Program (IEP) meeting as an Admission, Review, Dismissal (ARD) meeting. The corresponding paperwork is considered to be the ARD packet. The annual goals and objectives are known as the IEP documents.
Autism	“Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences” (IDEA, 2004, 20 U.S.C. 1401(3) - 1401(30)).
Developmental Disability	In this study, a developmental disability includes autism and intellectual disability.
Emotional Disturbance	“Emotional disturbance means a condition exhibiting

one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: an inability to learn that cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; a tendency to develop physical symptoms or fears associated with personal or school problems. Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance” (IDEA, 2004, 20 U.S.C. 1401(3) - 1401(30)).

Intellectual Disability

An intellectual disability is one that “is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18” (AAIDD, 2007). Previously, this disability was known as mental

retardation.

Learning Disability

A 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, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia Specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage” (IDEA, 2004, 20 U.S.C. 1401(3) - 1401(30)).

Special Education Cooperative

A special education cooperative is an entity that provides special education services for a group of school districts. Districts and cooperatives enter into a shared services agreement so that the costs of specialized personnel or services can be shared among the participating districts (TEA, 2003).

Transition

Transition is “a change in status from behaving primarily as a student to assuming emergent adult roles in the community. These roles include employment, participating in postsecondary education, maintaining a home, becoming appropriately involved in the community, and experiencing satisfactory personal and social relationships” (Halpern, 1994, p. 117).

Transition Services

Transition services are “a coordinated set of activities for a child with a disability that—(A) is designed to be within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child’s movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; (B) is based on the individual child’s needs, taking into account the child’s strengths, preferences, and interests; and (C) includes instruction, related services, community

experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation” (IDEA, 2004, 20 U.S.C. 1401(3) - 1401(30)).

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CHAPTER I

INTRODUCTION

This chapter introduces a study that sought to determine the effects that a student's disability category and ethnicity had on the level of compliance with the Individuals with Disabilities Education Improvement Act (IDEIA) regarding transition planning and the level of substantiated best practices in transition planning as evidenced in the transition components of the Individualized Education Program (IEP) documents of students between the ages of 14 and 22 years. The beginning of the chapter presents background information indicating that individuals with disabilities fare worse than individuals without disabilities in the post-school environment. Next, the evolution of transition for students with disabilities is traced, followed by sections that discuss the influence of accountability on transition planning and what best practices in transition are. A brief discussion of the current research base regarding evidence of compliance with transition mandates and best practices in the transition components of IEP documents will show that more research in this area is necessary. The chapter concludes with the study's research questions and a brief overview of the methodology used to answer the questions.

This dissertation follows the style of *Remedial and Special Education*.

Background

Post-school Outcomes

It has been shown repeatedly that individuals with disabilities have poorer post-school outcomes than individuals without disabilities (Blackorby & Wagner, 1996; National Organization on Disability [NOD], 2004; Wagner, Newman, Cameto, Garza, & Levine, 2005). Reports vary regarding the actual rates, but all agree that the post-school outcomes for individuals with disabilities are dismal. Adults with disabilities are more likely to be high school drop-outs and to be unemployed. The poverty rate for individuals who have disabilities is estimated to be three times that of individuals who do not have disabilities (NOD, 2004). Many adults with disabilities have insufficient health care and inadequate transportation. All of these factors lead to social dependence (Kochhar-Bryant, 2003) and a lower satisfaction with life (NOD, 2004). For individuals with more severe disabilities, the outcomes are even worse. For example, the rates of competitive employment and living independently five years after leaving high school for individuals with intellectual disabilities are nearly half that as for individuals with learning disabilities (Blackorby & Wagner, 1996). Regarding individuals with emotional disturbances, more than half are high school dropouts (Sitlington & Neubert, 2004), and as a group these individuals tend to have one of the lowest unemployment rates (Blackorby & Wagner, 1996). In response to the disparity between the post-school outcomes of individuals with and without disabilities, the educational concept of transition from school to the postsecondary environment has developed.

Evolution of Transition

Before a discussion regarding the evolution of transition can occur, an understanding of the concept of transition as it is used in the special education field is necessary. The Council for Exceptional Children's Division on Career Development and Transition defines transition as:

a change in status from behaving primarily as a student to assuming emergent adult roles in the community. These roles include employment, participating in postsecondary education, maintaining a home, becoming appropriately involved in the community, and experiencing satisfactory personal and social relationships. (Halpern, 1994; p. 117)

In order for this transition to occur, transition planning that promotes student empowerment and self-determination, uses student self-evaluation and self-identification of post-school goals, and provides appropriate educational experiences in the school and community is necessary (Halpern, 1994). Transition planning is an integral piece of a student's education. In fact, planning a student's educational pathway and annual goals cannot occur successfully unless the student's postsecondary goals are known. In other words, transition drives the development of the IEP (deFur, 2003; Greene, 2003; Wehman, 2006b).

The current concept of transition evolved from cooperative work-study and career education programs (Halpern, 1991). Cooperative work-study programs were utilized during the 1960s, and involved cooperative agreements between school districts and the rehabilitation agency. The agreements allowed a portion of a teacher's day to be

assigned to the duties of a work coordinator. The goal of these programs was to integrate academic, social, and vocational curricula with real work experience for students with mild disabilities (Halpern, 1991). Thus, students with mild intellectual disabilities were able to receive work experiences while in high school. Additionally, the transfer of services from the high school to the rehabilitation agency was facilitated by these agreements. However, because the teachers were paid with both school district and rehabilitation monies, there were some issues regarding the oversight of the teachers. This led to the demise of cooperative-work study programs.

Although career education has a long history, it was during the early 1970s that the career education movement really gained momentum when the Commissioner of Education declared career education an educational priority (Halpern, 1991; Kochhar-Bryant, Shaw, & Izzo, 2007). Career education is comprised of four interrelated stages (Brolin & Loyd, 2004). The first stage, career awareness, is intended to provide elementary students with a beginning awareness of work in our society. The second stage is career exploration. This stage is typically emphasized during the middle school years, and it focuses on helping students examine their interests, abilities, and needs regarding the world of work. The next stage is career preparation. During this stage, high school students are directed toward making a rudimentary decision about future careers. The last stage, career assimilation, occurs when students leave secondary school and either enter the work force or obtain additional skills in order to gain employment in their chosen field. Originally, career education was intended for general education students. It was not until the 1977 passage of the Career Education Implementation

Incentive Act that students with disabilities were formally included in career education programs (Halpern, 1991).

The transition movement began during the 1980s when the Career Education Incentive Act was repealed and when the Office of Special Education and Rehabilitative Services published a position paper on transition (Halpern, 1991). This paper introduced the “Bridges Model” that contained three “bridges” from high school to employment: no special services, time-limited services, and ongoing services (Will, 1984). This model focused on employment only, which is not surprising given the previous career education movement. Halpern (1985), recognizing that there is more to adulthood than just working, expanded the Bridges Model to include community adjustment. Community adjustment consists of the residential environment, employment, and social and interpersonal networks.

At about the same time, the amendments to the Education of the Handicapped Act (1983) were authorized, officially and legislatively defining transition services. This piece of legislation encouraged, but not required, states and school districts to develop transition programs for their students with disabilities. It was not until the passage of the Individuals with Disabilities Education Act of 1990 that transition services were required. Since that time, IDEA has been reauthorized two times with minor changes to the transition requirements. The most current reauthorization (i.e., Individuals with Disabilities Education Improvement Act [IDEIA], 2004) requires that transition services be in effect by the time the child with a disability is 16 years old. IDEIA also is aligned with the No Child Left Behind Act (NCLB) of 2001 in that states and school districts are

held accountable for how well students with disabilities fare on standards-based assessments and post-school outcomes. Currently, IDEIA defines transition services as:

a coordinated set of activities for a child with a disability that—

(A) is designed to be within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation;

(B) is based on the individual child's needs, taking into account the child's strengths, preferences, and interests; and

(C) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation. (20 U.S.C. 1401(34))

The transition services must assist the child in reaching the child's "appropriate measurable postsecondary goals [that are] based upon age appropriate transition assessments related to training, education, employment, and where appropriate, independent living skills" (20 U.S.C. 1401(34)). Thus, transition services are integral to the development of a student's IEP.

Age of Accountability

When *A Nation at Risk* was released in 1983 (National Commission on Excellence in Education), it shocked the public by stating that American schools were not producing graduates who were ready for college or work. The report called for excellence in education and made several recommendations including strengthening academic high school graduation requirements and implementing standardized tests of academic achievement. The response to *A Nation at Risk* eventually led to NCLB (2001). This piece of legislation increased the accountability of states, school districts, and schools in ensuring that all students are prepared for post-school outcomes by meeting minimum academic standards. The premise behind this accountability movement is that data collection facilitates progress towards meeting set standards. Moreover, accountability allows states, districts, and schools to compare themselves objectively with each other. By using data to document how well students are achieving, a more accurate representation of how well educational processes are functioning is achieved. By attaching sanctions such as requiring the provision of supplementary education services or total school restructuring, districts and schools have tremendous pressure to ensure that their students are performing at the highest levels.

When Congress reauthorized the IDEIA in 2004, it ensured that IDEIA was aligned with NCLB (2001). The importance of planning the educational program so that students with disabilities have the greatest opportunity to achieve their postsecondary goals was stressed. As a result, the performance of students with disabilities on standards-based tests became a factor that contributed to the accountability ratings of

school districts and schools. Additionally, states were required to develop state performance plans that address the five monitoring priorities and twenty performance or compliance indicators as identified by the U.S. Department of Education's Office of Special Education Programs (refer to Appendix A for a list of the monitoring priorities and corresponding indicators; OSEP, 2007).

One of the monitoring priorities is *Effective Transition*. There are three indicators within this priority, but one of the indicators (i.e., Indicator 12) pertains to the transition from Part C early childhood intervention services to Part B early childhood special education services. The other indicators are Indicators 13 and 14. Indicator 13 is the "percent of youth aged 16 and above with an IEP that includes coordinated, measurable, annual IEP goals and transition services that will reasonably enable the student to meet the post-secondary goals" (IDEIA, 2004, 20 USC 1416(a)(3)(B)). Indicator 14 is the "percent of youth who had IEP documents, are no longer in secondary school and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school" (IDEIA, 2004, 20 U.S.C. 1416(a)(3)(B)).

This study is affiliated with Indicator 13. In the state of Texas, Indicator 13 is measured and reported as a percent:

Percent = # of youth with disabilities aged 16 and above with an IEP that includes coordinated, measurable, annual IEP goals and transition services that will reasonably enable the student to meet the post-secondary goals divided by # of youth with an IEP aged 16 and above times 100. (TEA, 2006b, p. 44)

At state and district levels, data are collected and reported regarding the congruence between a student's postsecondary goals and annual IEP goals and transition services. Both TEA (2007b) and the National Secondary Transition Technical Assistance Center (NSTTAC, 2007) have developed data collection checklists for measuring the compliance with Indicator 13. Because these checklists were developed to only measure the level of compliance with Indicator 13, other data regarding compliance with the transition mandates of IDEIA (2004) are not collected. Therefore, this data collection does not comprehensively measure level of compliance with IDEIA. In order to obtain a more in-depth picture of the level of compliance to IDEIA regarding the transition components of IEP documents, more thorough data collection and deeper analysis are required. Additionally, the reporting requirement for Indicator 13 does not disaggregate the information based on disability category or ethnicity. Therefore, states and districts do not receive information that can help them more effectively plan for the individual transition needs of their students. Research is needed in this area so that states and districts can have a more accurate understanding of what factors influence compliance.

Best Practices in Transition

Transition services in IEP documents were not mandated until 1990; however, transition planning, whether formal or informal, has been occurring for students with disabilities since at least the early 1980s. Indeed, because of the long history of poor post-school outcomes for individuals with disabilities, researchers and educators have sought to determine the best practices in transition. Greene (2003) provides a definition

for best practices in transition as “a number of specific recommendations for facilitating successful movement from school to adult life for youth with disabilities.” (p. 155)

Kohler (1993) conducted a review and synthesis of the literature pertaining to best practices in transition, and concluded that vocational training, parent involvement, social skills training, paid work experience, follow-up employment services, employer input during transition process, integration in the general education curriculum, daily living skills training, and employability skills training were the transition practices that were substantiated by research. Interagency collaboration; individualized transition planning; interdisciplinary transition teams; community-based instruction; vocational assessment; community-referenced curricula; identification of vocational, residential, and social outcomes; IEP reflects transition; career education curricula, formal interagency agreement, early transition planning, and academic skill training were identified as implied best practices in transition. Kohler used her review (1993) of best practices as a catalyst for the development of the taxonomy for transition programming (Kohler, 1996). The taxonomy includes transition practices and transition program attributes that serve as a framework for transition planning. The five categories of transition practices in the taxonomy are student development, student-focused planning, family involvement, interagency collaboration, and program structure and attributes.

A more recent review of the transition literature by Greene (2003) resulted in an initial list of 19 best practices that were condensed to a common core of the 10 best practices. These 10 best practices were then categorized into three types of practices: (a) transition services agency practices, (b) transition education programming practices, and

(c) transition planning practices. Transition services agency best practices include interagency collaboration and interdisciplinary collaboration. Transition education programming best practices include integrated schools, classrooms, and employment; functional, life-skills curriculum and community-based instruction; social and personal skills development and training; career and vocational assessment and education; and business and industry linkages with schools. Transition planning best practices include the development of an effective IEP planning document and process addressing IDEA transition services language requirements; student self-determination, advocacy, and input in transition planning; and family/parent involvement in transition planning.

Compliance and Best Practices Studies

Documenting compliance with IDEA is not a new concept. Researchers have been investigating and publishing articles regarding the level of compliance with transition mandates in IDEA since IDEA's authorization. The results from these studies indicate that the overall level of compliance with IDEA is low, but has seemingly increased over the years. However, no studies have found any states, districts, or schools 100% compliant with IDEA's transition mandates. For example, Williams and O'Leary (2001) determined that approximately 50% of the states and entities who received Part B funds of the IDEA 1990 did not have transition services with the required components (i.e., instruction, community experiences, the development of employment and other postschool living objectives). Tillmann and Ford (2001) investigated the level of compliance with IDEA 1997 transition components and determined that the level of compliance varied (ranged from 50%-100%) based on the component. Shearin, Roessler,

and Schriener (1999) also found that IEP documents did not consistently address the IDEA 1997 mandates regarding transition. As of yet, no studies have been conducted and published reporting the level of compliance with the transition components of IDEIA of 2004. Because each successive reauthorization of IDEA has had corresponding studies that examined the level of compliance with the transition mandates, and because IDEIA has stricter policies regarding compliance, it is necessary to determine if states, districts, and schools are making progress toward 100% compliance. This study adds to the literature in this way.

As noted by deFur (2003), compliance with the transition mandates does not necessarily equal quality transition planning. Although the premise behind accountability is justifiable, the danger of requiring minimal levels of compliance is that the minimal level becomes the maximum level and the focus is on compliance rather than quality. Therefore, investigation of the incorporation of best practices in transition planning is also needed to provide the most comprehensive look at the state of the transition components in students' IEP documents. Some researchers (e.g., Blankenship, 2004; Everson, Zhang, & Guillory, 2001; Grigal, Test, Beattie, & Wood, 1997) have already begun to review the transition components of IEP documents in search of evidence supporting transition planning best practices. Their findings indicate that when best practices are identified they are not reflected in the IEP documents at a high level. For example, Grigal et al. determined that inclusion in the general education curriculum, use of transition assessments, and provision of modifications or accommodations were best practices, but evidence in the transition components of the IEP documents that these

practices were occurring was sparse. This is another way that this study supplements the transition planning literature.

Problem Statement

Researchers have been studying transition practices for over 20 years, and transition planning has been mandated for students with disabilities since 1990. However, individuals with disabilities continue to have poor post-school outcomes. Attempts to eliminate this discrepancy have resulted in transition professionals advocating for best practices in transition planning as well as Congress creating laws that mandate minimal requirements for effective transition planning. Although best practices in transition planning have been proposed, there has not been much research conducted on the implementation of substantiated best practices. Additionally, compliance with IDEA studies have shown that states, districts, and schools are only somewhat compliant with IDEA mandates pertaining to transition (e.g., Blankenship, 2004; Everson, Zhang, & Guillory, 2001; Grigal et al., 1997; Tillman & Ford, 2001). As a result of the continued disappointing post-school outcomes for students with disabilities and the educational initiatives of NCLB and IDEIA; states, districts, and schools are now held even more accountable for the post-school achievements of their students with disabilities. Therefore, the purposes of this study were (a) to determine the extent to which the transition components of the IEP documents are compliant with the transition requirements of IDEIA, (b) to determine the extent to which the transition components of the IEP documents provide evidence of substantiated best practices in transition planning, (c) to determine the effects that disability category and ethnicity have on

compliance and practices regarding transition planning as evidenced in the transition components of the IEP documents, and (d) to determine the relationship between overall compliance and level of best practices as evident in the transition components of the IEP documents.

Research Questions

1. To what extent do the transition components of the IEP documents reflect compliance with the transition requirements of IDEIA?
 - a. What effects do a student's disability category and ethnicity have on the extent to which the transition components of the IEP documents are compliant with the transition requirements of IDEIA?
2. To what extent do the transition components of the IEP documents provide evidence of substantiated best practices in transition?
 - a. What effects do a student's disability category and ethnicity have on the extent to which the transition components of the IEP documents provide evidence of substantiated best practices in transition planning?
3. What is the relationship between compliance and substantiated best practices in transition?

The study had three research questions and two sub-questions. The first two questions were concerned with determining the extent to which the transition components of the IEP documents provide evidence of compliance and substantiated best practices in transition planning. These two questions do not have corresponding hypotheses because previous studies that have looked at these aspects of the transition

components of IEP documents did not consistently report their findings. Therefore, it is difficult to determine compliance or best practices standards to which the current study can be compared. Also, previous studies were conducted prior to the implementation of IDEIA, so it was not appropriate to compare compliance with IDEIA to compliance with IDEA 1997. The two sub-questions were extensions of the first two research questions, and had implicit hypotheses that disability category and ethnicity affect the extent to which the transition components of the IEP documents provide evidence of compliance and substantiated best practices in transition planning. According to the lifespan theory that is detailed in Chapter II, disability and ethnicity are both non-normative influences that affect development, and thus transition because the transition from adolescent to adult is partly a developmental process. The third research question sought to determine the overall relationship between compliance and substantiated best practices as evidenced in the transition components of the IEP document.

Significance of the Study

The professional and practice significance of this proposed study were two-fold. First, this study sought to extend the existing knowledge regarding compliance and transition planning practices as evidenced in the IEP document. Other studies (e.g., deFur, Getzel, & Kregel, 1994; Everson, Zhang, & Guillory, 2001; Grigal, Test, Beattie, & Wood, 1997; Powers, Gil-Kashiwabara, Geenen, Powers, Balandran, & Palmer, 2005) have reported variable, yet overall low levels of compliance with IDEA mandates and best practices as evidenced in the transition components of IEP documents. Additionally, previous studies in this area were conducted prior to the reauthorization of IDEIA, so a

new study that determined the level of compliance with the new mandate was appropriate.

Second, this study provides a greater depth of knowledge about the compliance and substantiated best practices evidenced in the transition components of IEP documents by determining the effects that disability category and ethnicity have on compliance and best practices. This information may provide states, districts, and schools with targeted areas in which to monitor their transition planning practices so that transition is compliant, optimal, and equitable.

Overview of Methodology

The study was of the quantitative research perspective with three levels of analysis. The first level was descriptive. The sample was described to facilitate generalization and the components of compliance and substantiated best practices were detailed. The second level of analysis consisted of multiple logistic regression analyses to determine how well disability category and gender explained the level of compliance and the presence of best practices in transition planning as evidenced in the transition components of the IEP documents. The third level of analysis consisted of a Spearman's rho correlation to determine the relationship between the composite variables of compliance and best practices.

Delimitations

The study only investigated the extent to which compliance and best practices in transition planning were evident in the transition components of the IEP documents. It is recognized that the IEP documentation may not fully represent what occurred during the IEP meeting. However, the IEP documentation is the legal contract between a school and a family regarding the educational programming of the student with a disability, and as such it is the only required documentation of what occurred during the meeting.

The study only targeted students in a region of Texas who were between the ages of 14-22 years; who had as a primary disability a developmental disability (i.e., autism or intellectual disability), emotional disturbance, or learning disability; and who were African American, Caucasian, or Hispanic.

Organization of the Dissertation

This dissertation is comprised of five chapters. Chapter I is the introduction to the study, Chapter II is the review of the literature, and Chapter III describes the methodology used in the study. Chapters IV and V present the results and ensuing discussion. Appendices are also included.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter is divided into three broad sections: the theoretical literature, the conceptual framework, and the empirical literature. The theoretical literature section discusses adolescent developmental theories with a particular emphasis on adolescents with disabilities. The conceptual framework provides the link between the theoretical literature and the empirical literature. The empirical literature section consists of two parts. First, studies that investigated the level of compliance with IDEA throughout the years are presented. Second, the empirical literature section concludes with a review of substantiated best practices in transition planning.

The Theoretical Literature

Adolescent Development

The period of adolescence is ontogenetically (i.e., relating to the origin and development of an individual organism from embryo to adult) second only to the prenatal and infancy periods of development. Adolescence encompasses the time from puberty to sexual maturity (Berk, 2007). During this period of development, the individual transitions from child to adult. The study of adolescent development as its own field did not occur until G. Stanley Hall published his two-volume *Adolescence* in 1904. Although many of his beliefs regarding human development are no longer considered valid, Hall did ignite interest in the field of adolescent development. Modern theories of human development all recognize that adolescence is a time of great growth

and unique challenges. How theorists currently explain the adolescent period of development depends on their views regarding human development. The following paragraphs briefly introduce the differing theories, with an emphasis on adolescent development.

Psychoanalytic Theories

The psychoanalytic perspective on human development asserts that people progress through a series of stages in which they confront conflicts between biological drives and social expectations (Berk, 2007). Psychoanalysis focuses on the life histories of individuals and the inner-workings of their minds. Two of the most influential individuals who contributed to the psychoanalytic perspective include Sigmund Freud and Erik Erikson.

Freud constructed a psychosexual theory that emphasized parental management of childhood sexual and aggressive drives as the crucial factor to personality development (Berk, 2007; Pressley & McCormick, 2007). Freud felt that the way parents handled a child's sexual impulses resulted in how well-adjusted the child would become as an adult. The psychosexual stages and the corresponding periods of development that Freud advanced were the oral stage, the anal stage, the phallic stage, the latency stage, and the genital stage. The genital stage encompasses adolescence through adulthood. During this stage, an individual prefers to act as an adult rather than a child. However, if the individual is fixated on a particular stage (i.e., the individual has unresolved instinctual or social demands from earlier stages) the individual will experience

personality problems (Pressley & McCormick, 2007). Thus, Freud believed that early childhood experiences significantly contributed to future development.

Originally a follower of Freudian psychosexual theory, Erikson modified and expanded Freud's theory into his own psychosocial theory. Erikson felt that development was caused by the interplay of biology and social interactions with the environment. Therefore, development could only be understood in relation to the individual's culture. The psychosocial stages of development as posited by Erikson include the basic trust versus mistrust stage, the autonomy versus shame and doubt stage, the initiative versus guilt stage, the industry versus inferiority stage, the identity versus role confusion stage, the intimacy versus isolation stage, the generativity versus stagnation stage, and the ego integrity versus despair stage. The identity versus role confusion stage coincides with the period of adolescence. During this stage, the main task for the adolescent is to develop an identity (Pressley & McCormick, 2007). Adolescents struggle to determine who they are, what they believe in, and what they want to become as adults. At each of Erikson's stages, a type of conflict occurred that needed to be resolved. However, if a conflict was not sufficiently resolved during a particular stage, it could still be resolved during a future stage. In this manner, Erikson differed from Freud by believing that conflicts could be resolved during subsequent stages, thus allowing development to continue.

Behavioral Theories

The behaviorism perspective uses the observation of stimuli and responses to explain human development (Berk, 2007). The foundation of behaviorism is based on Ivan Pavlov's studies of animal learning in which he noticed that a certain stimulus (e.g., seeing the individual who fed the dogs) would elicit a certain response or behavior (e.g., salivation). The psychologist, John Watson, applied Pavlov's classical conditioning to human development. He felt that adults could mold children's behavior by controlling stimulus-response associations. Another behaviorist, B. F. Skinner, extended Watson's ideas about human development by developing the operant conditioning theory which states that the frequency of behavior can be increased or decreased depending on subsequent reinforcers. In other words, what happens following a response will determine if the individual completes the response again in the future.

Another theory within the behaviorism perspective is social learning theory. This theory was built upon the principles of classical conditioning, but had expanded views of how individuals acquire behaviors. Albert Bandura, one of the most influential social learning theorists, emphasized modeling as a source of human development. Additionally, Bandura stressed the importance of cognition when determining which behaviors an individual will imitate. For example, an individual who watches others engage in certain behaviors develops personal standards for behavior and a sense of self-efficacy. These beliefs then are used by the individual when deciding which behaviors to imitate.

Cognitive Developmental Theories

Another perspective on development, the cognitive developmental perspective, was first presented by Jean Piaget. His cognitive developmental theory stated that children actively construct knowledge as they manipulate and explore the world. As the child's brain develops and the child acquires more experiences, the child progresses through four stages: sensorimotor stage, preoperational stage, concrete operational stage, and formal operational stage. Each stage is marked by different types of thinking. The last stage, i.e., the formal operational stage, is the stage that corresponds with adolescence and is the stage during which a child develops abstract and systematic thinking.

The information processing theory asserts that individuals are actively involved in their own cognitive development by processing information like a computer (Berk, 2007). In other words, informational input is coded, transformed, and organized before a behavioral response is output. The information processing theory does not divide development into stages; rather, development is considered to be one of continuous change through the development of short-term memory capacity, long-term knowledge, and strategies for acquiring knowledge (Pressley & McCormick, 2007). During adolescence, the three types of strategies (i.e., rehearsal, elaboration, and organization) are more fully developed so that adolescents are more easily able to use the strategies to acquire long-term knowledge.

Contextual Theories

The contextual perspective of human development asserts that the environment influences one's development. Ethology (i.e., the study of animal behavioral patterns that have evolutionary explanations), is the foundation of the ethological theory of development. This theory suggests that there are critical, or sensitive, periods during which humans are biologically primed to acquire specific behaviors. However, these behaviors are only acquired if the environment is conducive to stimulating the acquisition of the behavior. In other words, certain cognitive or behavioral skills are best learned during certain time periods and under specific environmental conditions (e.g., window of opportunity).

Another theory within the contextual perspective is Lev Vygotsky's sociocultural theory. This theory investigates how culture is passed from generation to generation, and asserts that development must be considered within the context of the culture (Pressley & McCormick, 2007). Vygotsky believed that through communication older individuals helped younger individuals master culturally meaningful activities. He posited the Zone of Proximal Development (ZPD). The ZPD states that older, more experienced individuals help younger, less experienced learn to complete tasks by gradually providing hints, prompts, and assistance as needed (Pressley & McCormick, 2007). Thus, cognitive development is dependent on the support that adults provide children as they attempt to master new tasks. This theory also asserts that individuals in different cultures develop different strengths due to the different contexts in which they develop.

Another theory within the contextual perspective is Urie Bronfenbrenner's ecological systems theory. This theory views development as occurring within a complex system of relationships that are affected by multiple levels of the environment (Berk, 2007). Alternatively stated, individuals are products and producers of their environments. Bronfenbrenner viewed the entire environment as consisting of layers of multiple environments (i.e., microsystem, mesosystem, exosystem, and macrosystem). The environments include both physical structures as well as human components, and are fluid throughout one's lifetime.

Lifespan Theory

The lifespan theory of development asserts that development is influenced by multiple, interacting forces such as age-graded influences, history-graded influences, and non-normative influences (Berk, 2007). Age-graded influences are those that can be predicted based on one's period of development, such as adolescence. For example, the physical changes that occur during adolescence occur for everyone. History-graded influences are those that are unique to a historical time period, such as a war. This type of influence affects everyone within the cohort. Non-normative influences are those that are unique to a small number of individuals. Typically, these types of influences occur haphazardly and can have either positive or negative influences on development. One example of a non-normative influence is the presence of a disability.

The lifespan theory also states that development is lifelong, multidimensional, multidirectional, and plastic (Berk, 2007). As mentioned previously, theorists originally considered development to occur during childhood and stop once adulthood is reached.

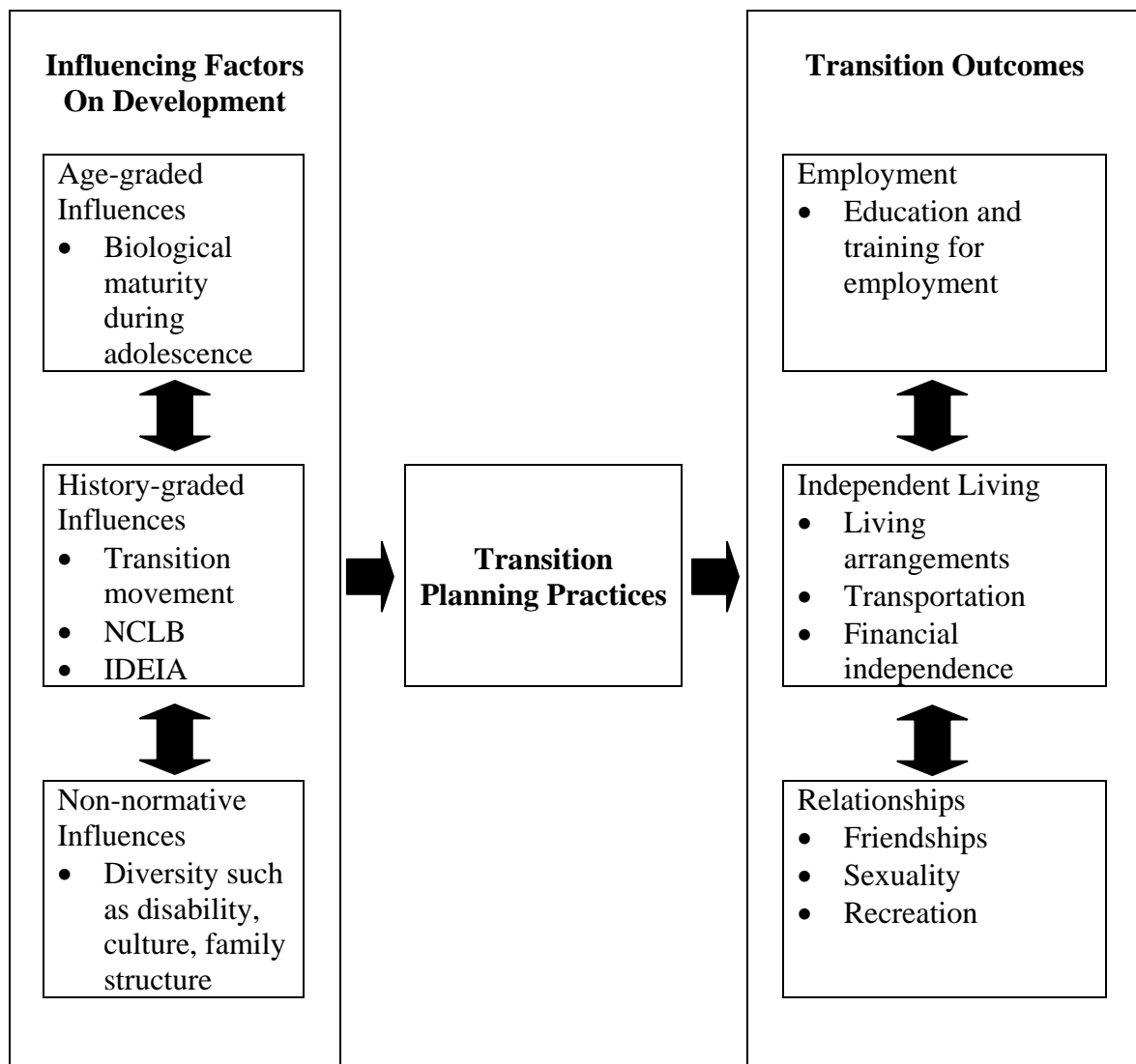
Today, it is recognized that individuals change physically, cognitively, and emotionally/socially throughout the lifespan. Another assertion of the lifespan perspective is that development is multidimensional and multidirectional. This means that development is influenced by multiple dimensions such as biological, psychological, and sociological forces and that development is simultaneously progressive and regressive. As individuals age, some developmental areas experience gains while other developmental areas experience declines. Development according to the lifespan theory is also plastic. Plasticity has to do with the extent to which individuals are able to change based on events that occur throughout a lifetime. This study applies the lifespan theory to transition.

Conceptual Framework

Figure 1 shows the relationships among the influencing factors on transition planning practices and transition outcomes. According to the lifespan theory of development (Berk, 2007), age-graded influences, history-graded influences, and non-normative influences interact with each other to contribute to the physical, cognitive, and emotional/social development of the individual. Thus, all adolescents experience the physical changes associated with puberty, but the adolescent with the non-normative influence of a disability will have additional factors that contribute towards his or her development. Currently, some history-graded influences include the transition movement and educational legislation such as NCLB and IDEIA. All of these interacting factors contribute to the transition planning practices for the student.

Transition planning for a student who does not have a disability involves determining the high school course of study that will allow the student to achieve his or her post-school goals. Guidance and advice is provided to the student in a general manner. More specialized advice is provided only when requested. This approach is usually sufficient for typically developing adolescents. However, when an adolescent has a non-normative influence such as a disability, more formal transition planning is necessary. This is because adolescents with disabilities need more supports (e.g., thorough transition planning based on IDEIA and substantiated best practices) in order to achieve their post-school transition outcomes (Field, Hoffman, & Posch, 1997; Wehmeyer, 1992). Transition planning practices directly influence the transition outcomes of individuals with disabilities. Most adolescents without disabilities only plan for employment and independent living, and even so, the independent living training/planning occurs through observation. For adolescents with disabilities, a more direct training plan that targets future employment, independent living, and relationships is necessary because adults with disabilities are not achieving commensurate outcomes in these areas as are adults without disabilities.

Figure 1 Conceptual Framework



The Empirical Literature

Compliance in Transition Planning

Addressing the transition needs of students with disabilities has been a legal requirement since 1990 (IDEA, 1990). With every reauthorization of IDEA, the transition component requirements for IEP documents have been modified (refer to Appendix B for the changes in the transition requirements with each reauthorization). Additionally, researchers have investigated how well schools and districts have implemented the transition requirements as evidenced in the IEP document.

IDEA, 1990

IDEA 1990 required that a statement of needed transition services be in place and updated annually for students with disabilities who were 16 years or older. Transition services were defined as a coordinated set of activities that promoted movement from school to post-school activities and were to be based upon the student's needs, preferences, and interests. Transition services included post-secondary education, vocational training, integrated employment, continuing and adult education, adult services, independent living, and community participation. A statement of interagency responsibilities and/or linkages was to be included when appropriate. There are five studies that investigated the compliance with IDEA 1990's transition requirements.

In 1993, Lawson and Everson (as cited in Everson, Zhang, & Guillory, 2001; Grigal, Test, Beattie, & Wood, 1997; Williams & O'Leary, 2001) published their seminal study that evaluated the transition plans of 61 students who were deaf-blind. Based on their review, they concluded that the participants at the IEP meetings did not

understand the purpose of transition services and the mandates regarding transition. Transition services did not address the components specified in IDEA 1990 (i.e., instruction, community experiences, employment and other adult living objectives, and interagency linkages), and the required participants at the IEP meetings that discussed transition were absent. In general, Lawson and Everson felt that there was a lack of individualized and coordinated services for the students as evidenced by the transition portions of the students' IEP documents.

deFur, Getzel, and Kregel's 1994 study evaluated the transition plans of 100 students with learning disabilities. Similar to Lawson and Everson's (1993) findings, deFur, Getzel, and Kregel found that the transition components of the IEP documents they reviewed did not contain the required transition services and coordinated set of activities. Additionally, students were present at only 48% of the IEP meetings that discussed transition, indicating that the transition services most likely were not based on the students' needs, preferences, and interests. There were few interagency linkages, but considering that the population was students with learning disabilities, the perceived need for interagency collaboration might not have been as great as for students who had more severe cognitive and functional disabilities.

Although Getzel and deFur (1997) did not review the transition planning documents of students' IEP documents, they did collect compliance data following IEP meetings using the *IEP Transition Planning Information Form* that they developed. They collected and analyzed data from the IEP meetings of 84 Virginia students with significant disabilities such as autism, multiple disabilities, and severe and profound

disabilities. The districts that the students' data were collected from were districts that had received a transition grant; therefore, these districts were considered to have a special interest in transition planning for their students. However, 30% of the students had no participation (i.e., attendance at IEP meeting or input during planning) in the transition planning process. Conversely, special educators and parents/guardians frequently attended the IEP meetings that addressed transition (93% and 89% respectfully). Those who were the least likely to be in attendance at the meetings included vocational education teachers (6%), guidance counselors (5%), rehabilitation counselors (4%), and employment-related community representatives (6%).

Grigal, Test, Beattie, and Wood (1997) evaluated the transition components of the IEP documents of 94 students between the ages of 18-21. The disabilities of the students included learning disabilities, mild mental retardation, moderate mental retardation, and emotional/behavioral disorders. The researchers used a modified version of Lawson and Everson's *Statement of Transition Services Review Protocol* (Lawson & Everson, 1993) to collect the data. Their results indicated that a special education teacher attended 90.4% of the IEP meetings that addressed transition, the family and the student attended 62.5% of the IEP meetings, and a local education agency representative attended 31.9% of the IEP meetings. Less than 10% of the meetings had a transition specialist, vocational education teacher, or community-based instruction coordinator in attendance at the IEP meetings, and vocational rehabilitation personnel attended 18.1% of the meetings.

Vocational training was the most addressed transition service (81.9% of the students' IEP documents), followed by integrated employment (60.6%), adult services (53.2%), independent living (52.1%), community participation (42%), postsecondary education (30.9%), and continuing adult education (10.6%). There were differences among the disability categories regarding the number and types of transition services activities the students had listed in their IEP documents. Compared to students with other disabilities, students who had learning disabilities had the most postsecondary education and continuing adult education activities; and the least adult services, independent living, and living arrangement activities. Students who had moderate mental retardation had the most vocational training, integrated employment, adult services, and independent living activities and the least postsecondary education, continuing adult education, and community participation activities. Students who had mild mental retardation had the most community participation and living arrangements activities, but had the least integrated employment activities. Students who had emotional and behavioral disorders did not have a transition services area in which they had the most activities. However, they did have the least number of vocational training activities.

Regarding goals, 99% of the students had employment goals, 99% had education and training goals, 90% had residential goals, and 86% had recreation and leisure goals. Grigal, Test, Beattie, and Wood (1997) also rated the quality of the goals. They determined that the quality ranged from adequate to minimal, with many of the goals not providing the specific action steps required for completion. The goals were written broadly and the timelines for implementation were imprecise. There was limited

evidence of follow-up and minimal collaboration with adult service agencies. Based on their overall findings, the authors felt that the transition components of the IEP documents were developed based on a philosophy of minimal compliance and not quality programming and planning.

The final study that evaluated the compliance with IDEA 1990's transition mandates was conducted by Shearin, Roessler, and Schriener (1999). Although this study was published in 1999, the IEP documents that were evaluated were written when IDEA 1990 was in effect. Sixty-eight IEP documents were obtained from two high schools in a moderately-sized city in Arkansas. Forty-nine percent of the IEP documents were from students who had learning disabilities and 37% of the IEP documents were from students who had mental retardation. The individuals who most often attended the IEP meetings during which transition components of the IEP documents were created included, from greatest to least, special educators, school counselors, students, and mothers. However, parents and students did not attend more than 30% of the meetings. Non-school agencies were involved in development of the transition services in less than 20% of the IEP documents. Regarding the activities specified by IDEA as a part of the transition services, 78% of the IEP documents did not address postsecondary education activities, 43% of the IEP documents did not address post-secondary employment activities, and 66% of the IEP documents did not address independent living activities. Goals that addressed daily living skills such as recreation, community functioning, domestic, and transportation were found frequently; however, goals that addressed family planning/sex

education/child care, personal safety, personal care, self-advocacy, and clothing selection and care were the least likely to be present.

IDEA, 1997

When IDEA was reauthorized in 1997, the purpose of the statute was updated to include preparing children with disabilities for employment and independent living. Transition services remained the same with the exception of the addition of related services. One of the most significant changes that IDEA 1997 made regarding transition was the requirement of a statement of transition service needs that addressed the student's course of study be in place beginning when the student was age 14. IDEA 1990 did not require that the IEP team members address the student's course of study. Finally, IDEA 1997 added the provision for the transfer of rights from the parent to the child upon the child reaching the age of majority. Because of the poor level of compliance with IDEA 1990 and the strengthened requirements regarding transition in IDEA 1997, several studies were conducted that evaluated compliance with the reauthorized mandate.

Although Thompson, Fulk, and Piercy's study (2000) sought to determine whether the transition components of IEP documents were aligned with the postschool projections of students who had learning disabilities, it also collected data regarding the level of involvement that parents and students had in transition planning. Involvement was operationalized as attending the IEP meeting or participating in the transition planning prior to the IEP meeting. Thompson, Fulk, and Piercy's findings indicated that

82% of the parents were involved in the transition planning and 64% of the students were involved in the transition planning.

Tillmann and Ford's study (2001) examined the transition components of 282 IEP documents to determine the level of compliance with transition requirements. They identified 35 items that measured procedural compliance and determined that the level of transition compliance ranged from 50% - 100% depending on the item. However, none of the 282 IEP documents were 100% compliant. They found that 73% of the IEP documents included statements of the students' interests and preferences, but only 30% of the students attended the IEP meetings as indicated by their signatures. Regarding the transition services needs, 84% of the transition components of the IEP documents included instruction, 63% included community experiences, and 73% included employment and other living objectives. Only 30% of the transition components of the IEP documents demonstrated a connection with a community agency.

Everson, Zhang, and Guillory (2001) reviewed 329 transition plans of Louisiana students who were aged 14 years and above. The disabilities of the students included, from greatest to least number, learning disabilities, mental retardation, serious emotional disturbance, other health impairments, hearing impairments, speech and language impairment, multiple disabilities, visual impairments, orthopedic impairments, traumatic brain injury, and autism. Thirty-eight percent of the transition components of the IEP documents addressed postsecondary education, 44% addressed vocational training, 29% addressed integrated employment, 34% addressed continuing/adult education, 10% addressed adult services, 46% addressed independent living, and 49% addressed

community participation. Health/medical, advocacy/legal, and transportation issues were seldom addressed in the IEP documents.

One of the purposes of Denkyirah's dissertation study (2003) was to investigate the extent to which the transition components of IEP documents adhered to IDEA 1997's transition requirements. Denkyirah reviewed 100 transition components of IEP documents from two school districts in Illinois. The majority of the students whose IEP documents were reviewed had learning disabilities. The rates of attendance at the IEP meetings that considered transition services were 83% for parents, 83% for special education teachers, 79% for students, 76% for local education agency representatives, 53% for general education teachers, and 6% for agency representatives. None of the IEP documents included a statement of transition service needs that specified the course of study needed to allow the student to achieve his or her postschool goals. However, all of the IEP documents did have statements of postschool goals and needed transition services. Only half of the transition components of the IEP documents had evidence of interagency linkages. Denkyirah also noted that there were statistically significant differences regarding the level of compliance between the IEP documents for Caucasian students and African American students and between the IEP documents for students with learning disabilities and students with other disabilities.

Similar to Denkyirah's dissertation study, Blankenship's (2004) dissertation study looked at the levels of compliance with the transition mandates of IDEA 1997. However, Blankenship focused on students in Iowa who had visual impairments. She reviewed 88 IEP documents from 50 students, of which 31 were identified as having an

intellectual disability in addition to the visual impairment. To evaluate the levels of compliance, Blankenship adapted O'Leary, Lehman, and Doty's (2001) *Transition Requirement Checklist*. The adapted instrument allowed the researcher to collect data from up to three IEP documents for each student. In general, she determined that the transition components were compliant. Although the students did not always attend their IEP meetings, their parents attended 100% of the meetings. The statement of needed transition services, including the course of study by age 14, and the statement regarding transfer of rights at the age of majority were present for most of the students.

Powers et al. (2005) analyzed the transition components of 399 IEP documents to determine the level of compliance with IDEA 1997. The IEP documents were randomly selected from two urban school districts in two western states. Gender, ethnicity (i.e., European American and non-European American), and disability (i.e., learning, physical, cognitive, and emotional disabilities) were all sampled in a nested manner. A modified and enhanced version of the "Statement of Transition Services Review Protocol" was used to evaluate the transition components of the IEP documents. The attendance rates during IEP meetings were 87.1% for administrators, 81.8% for family members, 78.2% for special education teachers, 39.1% for general education teachers, 75.8% for students, 20.8% for transition specialists, 21.6% for school psychologists, and 1.1% for vocational rehabilitation representatives. Students with developmental disabilities were the least likely to attend their IEP meetings, the least likely to have postsecondary education goals, and the least likely to have goals that were a reflection of their desires. Independent living skills were addressed in 79.4% of the IEP documents,

integrated employment was addressed in 79.4% of the IEP documents, and transportation was addressed in 60.9% of the IEP documents.

Steele, Konrad, and Test (2005) reviewed the transition components of the IEP documents of 28 students with mild to moderate disabilities (i.e., learning disabilities, behavioral/emotional disabilities, and mild or moderate mental retardation). The students exited from two high schools that were recognized as having exemplary transition programs. This study attempted to relate the compliance and reflection of best practices to the students' actual postschool outcomes. Attendance rates at the IEP meetings were 96.4% for special education teachers, 92.9% for administrators, 75% for parents or guardians, 71.4% for general education teachers, and 57.1% for students. Post-school employment was addressed in 89% of the IEP documents, living arrangements were addressed in 89% of the IEP documents, recreation/leisure goals was addressed in only one of the IEP documents, and postsecondary education/training was addressed in 21% of the IEP documents.

Williams and O'Leary (2001) took a broader perspective when they investigated the level of compliance with the transition mandates of IDEA. They used OSEP monitoring reports to determine the extent that states and entities ($n = 60$) were implementing the transition services requirements of IDEA and if there were differences between 1993 and 1997 (four monitoring cycles). They found that 35% of the states and entities did not invite students to the IEP meetings when transition services were to be considered and 26% of the states and entities did not take other steps to ensure that the preferences and interests of the students were considered if the student was not in

attendance. Fifty-two percent of the states and entities did not invite a representative from a participating agency, and 69% of the states and entities did not indicate on the notice of the IEP meeting that transition services would be considered.

The transition services portions of the IEP documents reviewed by OSEP over the four year period did not include the areas of instruction (48%), community experiences (54%), and employment and other post-school adult living objectives (50%). However, during the last cycle of reviewing and monitoring, 73% of the IEP documents did not include all three of these components. The level of compliance with the requirement that students be invited to their IEP meetings if transition was to be addressed increased from 45 to 54% over the four year period. Conversely, the percentage of states that invited a participating agency decreased from 55 to 46% over the four year period. Other disappointing results indicated that more states and entities over the four year period did not have the required transition services statements regarding instruction, community experiences, and the development of employment and other post-school living objectives (62% - 73%); more states and entities did not have IEP documents that addressed the post-school activities of the students in the statement of needed transition services (8% - 45%), and the activities were not written as a coordinated set of activities designed to promote movement from school to post-school activities (8% - 27%).

Summary

The studies that have investigated the level of compliance with the transition requirements of IDEA have used different instruments and methods for reporting their findings. To obtain a more complete snapshot of how well schools and states were adhering to the transition mandates, Table 1 was created. Most of the studies reported attendance rates as IDEA required team collaboration and due to the underlying assumption that attendance was an indicator of collaboration and input. Plus, the student was required to be invited to the IEP meeting if one of the purposes was to discuss transition. The general pattern from the attendance rates reported in the studies that investigated compliance with IDEA 1990 to the studies that investigated compliance with IDEA 1997 indicates that student and parent attendance at the meetings increased while special education teacher attendance decreased slightly. The rate of attendance by agency representatives also increased gradually. The requirements specifically spelled out in IDEA 1990 and 1997 seemed to be poorly addressed, although it did appear that schools were making some progress over time in adhering to the mandate.

Table 1

Studies That Have Investigated Compliance with the Individuals with Disabilities Education Act

	Lawson & Everson, 1993	deFur et al., 1994	Getzel & deFur, 1997	Grigal et al., 1997	Shearin et al., 1999	Thompson et al., 2000	Tillmann & Ford, 2001	Everson, Zhang, & Guillory, 2001	Denkyirah, 2003	Blankenship, 2004	Powers et al., 2005	Steele et al., 2005	Williams & O'Leary, 2001
Sample Size	61	100	84	94	68	22	282	329	100	88	399	28	60 states
Disability Categories	Deaf- Blind	LD	AU MD MR	LD MR ED	LD MR	LD	All	All	LD+	VI	LD MR OI ED	LD ED MR	All
Attendance													
Student		48%	35%	63%	<30%	64%	30%		79%		76%	57%	65%
Family	No		89%	63%	<30%	82%			83%	100%	82%	75%	
Special Ed.	No		93%	90%	50-100%						78%	96%	
General Ed.	No								53%		39%	71%	
LEA Rep.	No			32%					76%		87%	93%	
Agency Rep.			6%	18%	<20%				6%		1%		48%
Post-School Activities													
Postsecondary Ed.		No		31%	22%			38%					21%
Vocational Training		No		82%				44%					
Integrated Employment		No		61%	57%			29%			64%	89%	
Continuing and Adult Ed.		No		11%				34%					
Adult Services		No		53%				10%					
Independent Living		No		52%	34%			46%			79%	89%	
Community Participation		No		42%				49%			61%		

Table 1
Continued

	Lawson & Everson, 1993	deFur et al., 1994	Getzel & deFur, 1997	Grigal et al., 1997	Shearin et al., 1999	Thompson et al., 2000	Tillmann & Ford, 2001	Everson, Zhang, & Guillory, 2001	Denkyirah, 2003	Blankenship, 2004	Powers et al., 2005	Steele et al., 2005	Williams & O'Leary, 2001
Based upon Student's Needs, Preferences, & Interests							73%				19%		
Includes													
Instruction	No						84%		95%				52%
Related Services (1997)	N/A	N/A	N/A	N/A	N/A								
Community Experiences	No				Yes		63%		15%				46%
Employ. & Post-School Living	No						73%		100%				50%
Daily Living Skills or Functional Vocational Evaluation					Yes								

Table 1
Continued

	Lawson & Everson, 1993	deFur et al., 1994	Getzel & deFur, 1997	Grigal et al., 1997	Shearin et al., 1999	Thompson et al., 2000	Tillmann & Ford, 2001	Everson, Zhang, & Guillory, 2001	Denkyirah, 2003	Blankenship, 2004	Powers et al., 2005	Steele et al., 2005	Williams & O'Leary, 2001
Statement													
Of Needed Transition Services beginning at Age 16									100%				
Of Transition Service Needs Beginning at Age 14 With Focus on Course Of Study (1997)	N/A	N/A	N/A	N/A	N/A				0%	Most			
Of Interagency Responsibilities or Any Needed Linkages	No	Few					30%		50%				
Regarding the Transfer of Rights One Year Before the Age of Majority (1997)	N/A	N/A	N/A	N/A	N/A					Most			

Note. The studies in boldfaced font are studies that applied to IDEA, 1997.

Substantiated Practices in Transition Planning

Much has been written regarding best practices for transition planning, and many researchers and practitioners have conducted studies and provided their opinions about what helps students with disabilities be successful after high school (e.g., Greene, 2003; Greene & Albright, 1995; Kohlar, 1993; Test, Aspel, & Everson, 2006). Because of the current focus on results-oriented transition services (IDEIA, 2004) it is important to know which practices are substantiated empirically. This issue was brought up years ago by Kohler (1993) when she published her review of substantiated and implied best practices in transition. Spanning the years from 1985 to 1991, Kohler obtained 49 documents including follow-up studies, pseudo- and quasi-experimental studies, and theory-based or opinion articles that purported best practices in transition. Kohler evaluated the espoused best practices based on whether they were substantiated empirically or implied by the authors. Transition practices were deemed substantiated when “there was a supporting link between results or outcomes and a practice.” (p. 108) The substantiated best practices in transition that Kohler identified as a result of her review included vocational training, parent involvement, social skills training, paid work experience, follow-up employment services, employer input during transition planning, integration or mainstreaming (i.e., inclusion in the general education curriculum), daily living skills training, and employability skills training.

Because Kohler’s (1993) review of substantiated transition practices was published over fifteen years ago, a more recent review of the transition literature was in order to determine if there are other practices that have since been substantiated. To

conduct this review, the original documents that Kohler identified as substantiating transition practices were collected. Then, searches of online databases, reference sections of articles regarding best practices, and transition textbooks were conducted to obtain documents that espoused best practices. Kohler's definition of substantiated transition best practices was then applied to the documents collected, resulting in a total of 23 documents that substantiated transition best practices.

Table 2 shows the eight transition planning practices that were substantiated by Kohler's (1993) review and the current review. Some of the practices identified by Kohler were combined. For example, the current review combined two of Kohler's practices (vocational training and employment skills training) into one practice (employment preparation). The resulting substantiated practices were paid or unpaid work experience, employment preparation, family involvement, general education inclusion, social skills training, community-agency collaboration, daily living skills training, and self-determination skills training. These practices are described in the next section.

Table 2

Substantiated Transition Planning Practices

Substantiated Transition Planning Practices										
Author(s), Publication Year	Community / Agency Collaboration	Paid Or Unpaid Work Experience	Parent / Family Involvement	Employment Preparation Program Participation	General Education / Inclusion	Social Skills Training	Daily Living Training	Self-Determination		
Hasazi et al., 1985a		X		X						
Hasazi et al., 1985b		X		X						
Mithaug et al., 1985				X		X				
Schalock et al., 1986			X	X						
Campbell et al., 1987				X		X	X			
Wise & Matthews, 1987		X			X		X			
Edwards et al., 1988				X						
Hudson et al., 1988		X	X	X	X	X				
Hasazi, et al., 1989		X		X						
Sitlington et al., 1989		X								
Gill & Edgar, 1990				X	X					
Heal et al., 1990	X		X			X				
Scuccimarra & Speece, 1990		X								
Fourqurean et al., 1991		X	X							
Gerber et al., 1992									X	
Schalock et al., 1992			X	X						
Benz et al., 1997	X	X		X	X	X				
Colley & Jamison, 1998		X		X	X					
Heal et al. / 1998				X		X	X			
Sample, 1998		X	X							

Table 2
Continued

Author(s), Publication Year	Substantiated Transition Planning Practices									
	Community / Agency Collaboration	Paid Or Unpaid Work Experience	Parent / Family Involvement	Employment Preparation Program Participation	General Education / Inclusion	Social Skills Training	Daily Living Training	Self-Determination		
Benz et al., 2000		X								X
Rabren et al., 2002		X				X				
Lindstrom & Benz, 2002			X		X					X
Baer et al., 2003		X			X					
Karpur et al., 2005		X								
Wagner et al., 2005		X						X		
Totals	2	16	7	15	7	6	4	3		

Note. This table was adapted from Kohler (1993, p. 175), and the bolded articles are the ones that Kohler identified.

Community or Agency Collaboration

Community or agency collaboration during transition planning has been deemed a substantiated transition practice. Heal et al. (1990) compared individuals with mental retardation who had been employed for at least six months to individuals with mental retardation who had not been successfully employed and found that the individuals who had job placement agency follow-up services were more likely to be successfully employed. Likewise, Benz, Yovanoff, and Doren (1997) found that continuing employment support for one year after exiting high school could help individuals with disabilities be competitively employed.

Paid or Unpaid Work Experience

Kohler (1993) identified paid work experiences as a transition practice substantiated by her review of the literature (Hasazi, Gordon, & Roe, 1985a; Hudson, Schwartz, Sealander, Campbell, & Hensel, 1988; Scuccimarra & Speece, 1990; Sitlington, Frank, & Cooper, 1989; Wise & Matthews, 1987). This finding continues to be supported in the literature. For example, Fourqurean, Meisgeier, Swank, and Williams (1991) conducted follow-up interviews and records reviews to determine predictors of postschool employment. They found that employment during high school was a predictor for successful postschool employment as evidenced by postschool job stability. Rabren, Dunn, and Chambers (2002) also interviewed former special education students and found that having a job when exiting high school was a predictor of having a job one year later. Benz, Yovanoff, and Doren (1997) and Benz, Lindstrom, and Yovanoff (2000) determined that having two or more paid work experiences during high school was

related to graduation with a standard diploma, engagement in competitive postschool employment, and enrollment in postschool education. Similarly, Sample (1998) found that working at least ten hours a week was related to the future employment of adults who had emotional disabilities.

Unpaid work experiences during high school have also been linked to successful postschool employment. Colley and Jamison (1998) noticed an association between paid or unpaid work experiences during high school and successful postschool employment. Specifically regarding adults with emotional or behavioral disturbances, Karpur, Clark, Caproni, and Sterner (2005) found that students who had paid or unpaid work experiences during high school were more likely to have better postschool outcomes.

Employment Preparation

The next most substantiated transition planning practice was participation in an employment preparation program (e.g., Campbell, Hensel, Hudson, Schwartz, & Sealander, 1987; Edwards, Kinneldorf, & Bradley, 1988; Gill & Edgar, 1990; Hasazi et al., 1985a; Hasazi et al., 1985b; Hudson, Schwartz, Sealander, Campbell, & Hensel, 1988; Mithaug et al., 1985; Schalock, Holl, Elliott, & Ross, 1992). Kohler (1993) separated vocational training and employment training in her review; however, the current review combines the two practices into *employment preparation* (Test, Aspel, & Everson, 2006) because participation in an employment preparation program encompasses vocational and employment trainings. Other aspects of employment preparation programs that have been linked to more positive postschool employment options include having good job search skills (Benz et al., 1997), having vocational skills

(Benz et al., 1997), participating in career education (Colley & Jamison, 1998), and participating in work-study programs (Baer et al., 2003).

Family Involvement

Long recognized as vital to successful transition planning, family involvement has also been substantiated as a best practice. Schalock et al. (1986) and Schalock et al. (1992) noted that adults with moderate to severe disabilities worked more hours, earned higher wages, and lived more independently when their parents were moderately to highly involved in their transition planning process. Likewise, Heal, Gonzalez, Rusch, Copher, and DeStefano (1990) found that adults with mental retardation who had remained employed for at least six months had families who were highly involved with their transition from high school to adulthood. One year after exiting high school, individuals with emotional disorders whose families were highly involved in their educational planning had achieved better community adjustment outcomes than individuals whose families were not as involved (Sample, 1998). Additionally, employment for many individuals with disabilities is obtained via family and friends' contacts (Hasazi et al., 1985a; Hasazi et al., 1985b; Wagner, Newman, Cameto, Garza, & Levine, 2005; Wise and Matthews, 1987) and family plays an important role in career decisions (Lindstrom & Benz, 2002; Wagner et al., 2005).

General Education Inclusion

Not only does IDEA promote educating students with disabilities in the general education curriculum to the greatest extent possible, but researchers have determined that individuals with disabilities who are included in the general education curriculum are

more likely to experience better postschool outcomes (Colley & Jamison, 1998; Gill & Edgar, 1990; Hudson et al., 1988; Rabren et al., 2002; Wise & Matthews, 1987). The receipt of a standard high diploma typically indicates that a student met the general education requirements for graduation, and a diploma is necessary for entrance to the military and postsecondary institutions (Test, Aspel, & Everson, 2006). Receiving a diploma, as opposed to a certificate of completion or dropping out, has been linked to better postschool employment rates (Hudson et al., 1988; Rabren et al., 2002; Wise & Matthews, 1987). Furthermore, having strong academic skills has been identified as a predictor for successful employment by Benz, Yovanoff, and Doren (1997).

Social Skills Training

Because successfully employed adults with disabilities have good social skills (Benz, Yovanoff, & Doren, 1997; Campbell et al., 1987; Heal et al., 1990; Hudson et al., 1988; Mithaug et al., 1985; Wagner et al., 2005), providing social skills training to students with disabilities was shown to be a substantiated transition planning practice when students have poor social skills. In particular, students with autism spectrum disorders (American Psychological Association, 1994), emotional disorders (Wehman, 2006a), and intellectual disabilities (Crites & Dunn, 2004) have deficits in their social skills and targeted social skills training is a necessary component of transition planning for these students.

Daily Living Skills Training

Possessing functional daily living skills has been linked to better post-school outcomes for individuals with disabilities (Campbell et al., 1987; Heal, Rubin, & Rusch, 1998; Wagner et al., 2005; Wise & Matthews, 1987). These types of skills are needed in everyday life and include personal care activities such as bathing, dressing, toileting, and eating (U.S. Department of Health and Human Services, 2007). Providing training to individuals who do not have these types of skills is necessary for the achievement of successful post-school outcomes.

Self-determination Training

Professionals and researchers in the transition field have identified student self-determination as a best practice in transition planning (e.g., Field, Martin, Miller, Ward, & Wehmeyer, 1998). Possessing self-determination means that the individual is the primary causal agent, or person who makes things happen, in his or her life (Wehmeyer, Gragoudas, & Shogren, 2006). Self-determination includes choice-making skills; decision-making skills; problem-solving skills; goal setting and attainment skills; independence, risk-taking, and safety skills; self-observation, evaluation, and reinforcement skills; self-instruction skills; self-advocacy and leadership skills; internal locus of control; positive attributions of efficacy and outcome expectancy; self-awareness; and self-knowledge (Wehmeyer, Gragoudas, & Shogren, 2006). Gerber, Ginsberg, and Reiff (1992) compared moderately successful and highly successful (regarding employment) adults with learning disabilities and noted an overriding theme: “the quest to gain control over their lives.” (p. 479) Although the terminology is different

(i.e., control versus self-determination), it is apparent that the authors were discussing the self-determination of the adults. The highly successful group was more self-determined than the moderately successful group. Benz, Lindstrom, and Yovanoff (2000) also noted that the completion of four or more self-identified transition goals was a predictor of competitive employment and higher education enrollment. Choosing and working towards goals are aspects of self-determination.

Evidence of Substantiated Practices in Transition Planning Documents

Although many practitioners and researchers have espoused best practices in transition, only eight practices have been substantiated in the research literature. These practices are community or agency collaboration, paid or unpaid work experience, employment preparation, family involvement, general education inclusion, social skills training, daily living skills training, and self-determination skills training. Unfortunately, the level of incorporation and documentation of these practices in the transition planning documents has not been very high. For example, Powers et al. (2005) found that just over half of the transition components of the IEP documents they reviewed indicated that students were receiving work experiences and less than 40% of the students had employment goals. Students with developmental disabilities were the least likely to have employment goals. Blankenship (2004) described collaboration between school personnel and agencies as superficial. Rehabilitation agency personnel attended the IEP meetings, but their contributions to the meetings were minimal unless the student was considered to be “academic” (p. 140) and without multiple disabilities. Powers et al. also noted that the level of collaboration seemed low because only 9 out of 1747 goals were specified as

being the responsibility of the vocational rehabilitation agent. Regarding the promotion of self-determination in transition planning, Grigal, Test, Beattie, and Wood (1997) found no evidence of self-determination promotion in the transition planning documents that they reviewed. Likewise, Blankenship (2004) found no evidence of student-led IEP meetings and few goals designed to develop student self-determination. Powers et al. noted that only 6.5% of the IEP documents indicated that the student received or will receive instruction in self-determination skills.

Summary

Chapter II of the dissertation was segmented into three sections. The theoretical literature section discussed adolescent developmental theories with a particular emphasis on adolescents with disabilities. The conceptual framework provided the link between the theoretical literature and the empirical literature. The empirical literature section consisted of two parts. First, studies that investigated compliance with IDEA throughout the years were presented. Then, a review of studies that determined substantiated best practices in transition planning was presented.

CHAPTER III

METHODOLOGY

This chapter provides more specific information regarding the participants, instrumentation, procedures, and design of the study. The study was of the quantitative research perspective, and included three types of analyses.

Participants

Population

The population for this study was students with developmental disabilities (i.e., autism and intellectual disabilities), emotional disorders, and learning disabilities; who were between the ages of 14 and 22 years; and who attended secondary schools within a region of Texas. The region consists of seven counties. It is estimated that 17% of the area's population is African American, 68% is Caucasian, 14% is Hispanic, and 1% is comprised of other ethnicities (Texas State Data Center, 2000). There are 22 school districts located in the region, with an estimated 1,509 secondary students who have as a primary disability either a developmental disability ($n \sim 219$), emotional disorder ($n \sim 146$), or learning disability ($n \sim 1144$; TEA, 2006a). Students with developmental and emotional disabilities were chosen because they have some of the poorest post-school outcomes (Blackorby & Wagner, 1996; Sitlington & Neubert, 2004), and students with learning disabilities were chosen because of the fallacy that they do not need extensive transition planning.

Sample

The sample was selected in an approximated stratified random manner because the participating school districts did not agree to participate in the study at the same time. In other words, as each district agreed to participate, the number of students sampled from all of the participating districts was adjusted so that the sample would be proportionate to the number of students in each district. This meant that more IEP documents than were needed were collected, but in order to meet the parameters of the target sample, IEP documents were randomly de-selected when necessary. Table 3 shows the projected contributions and actual contributions to the sample based upon the size of the students with disabilities populations for each of the participating districts. A chi square test ($\chi^2(7) = 3.230, p = .863$) was conducted to determine if the projected and actual percentages were statistically equal. In this situation, a non-significant χ^2 was desired because that indicates there were not any statistically significant differences between the projected and actual contributions to the sample.

Table 3
Each District's Projected Contribution versus Actual Contribution to Sample

District	Projected Contribution	Actual Contribution
1	1.4%	1.4%
2	1.7%	0.9%
3	2.8%	2.8%
4	5.7%	6.6%
5	1.7%	1.9%
6	43%	42%
7	22.7%	21.2%
8	21%	23.1%

Additionally, the sample was stratified by disability category and ethnicity. The goal was to obtain twenty-five students per cell (i.e., 3x3) for a total sample size of 225. Based upon this sampling scheme, students with developmental disabilities and emotional disabilities were over-sampled, as well as students who were African American or Hispanic. However, because only eight of the twenty-two school districts agreed to participate in this study, and a total sample size of 212 (139 males and 73 females) was obtained. There were not enough Hispanic students in the participating districts to meet the targeted number of students for the sample. The ethnic distributions of the obtained sample were African American ($n = 80$, 37.7%), Caucasian ($n = 80$, 37.7%), and Hispanic ($n = 52$, 24.5%); and the disability distributions of the sample were developmental disabilities ($n = 79$, 37.3%), emotional disabilities ($n = 51$, 24.1%), and learning disabilities ($n = 82$, 38.7%).

Instrument

The data collection instrument was developed based on existing instruments (i.e., Everson, Zhang, & Guillory, 2001; National Secondary Transition Technical Assistance Center [NSTTAC], 2006; Powers et al., 2005; TEA, 2007b) that measured compliance and best practices as evident in the transition components of IEP documents. The compilation and modification of the instruments included a thorough review of IDEIA so that the instrument was aligned with the most current reauthorization of IDEIA. Additionally, the literature review (refer to Chapter II) that was conducted based on Kohler's (1993) previous review of substantiated best practices was used as the guide for

designing the questions that measured whether or not substantiated best practices were evident in the IEP documents.

The instrument consisted of three parts: descriptive content, compliance, and practices. The descriptive content portion collected detailed information about the content of the transition components of the IEP document, as well as information regarding student demographics. This part of the instrument was used as a guide to complete the compliance and practices portions of the instrument. The compliance portion consisted of 24 questions that measured five different areas of compliance with IDEIA's transition requirements. These areas included (a) who was invited and contributed to the meeting, (b) timelines, (c) measurable postsecondary goals, (d) annual goals that support the attainment of the postsecondary goals, and (e) appropriate transition services. Most of the compliance questions were dichotomous *Yes* or *No* questions; however, a few of the questions included a *Not Applicable (NA)* response. The questions that had the *NA* response were ones that due to age requirements or other circumstances did not currently apply to the student.

The practices portion of the instrument sought evidence of community/agency collaboration, paid or unpaid work experience, parent/family involvement, employment preparation program participation, general education inclusion, social skills training, daily living skills training, and self-determination training. There were 12 questions in this portion of the instrument. Similar to the compliance portion, most of the practices questions were dichotomous *Yes* or *No* questions, and some of the questions included an *NA* response because certain circumstances did not apply to particular students.

The instrument was piloted on a small sample of IEP documents, resulting in minor changes being made to increase the clarity of the questions. As a check for content validity, the instrument was sent to six leaders in the transition field for comments and suggestions. Three of the experts responded and changes based upon their recommendations were made. These changes were minor and included clarification of the age of which transition services are to be in place, the distinction between a course of study and instruction as transition services, and the inclusion of a question that asked about parent or adult student consent for invitation of agency representatives. The final version of the instrument and its corresponding code book are available in Appendices D and E, respectively.

Design

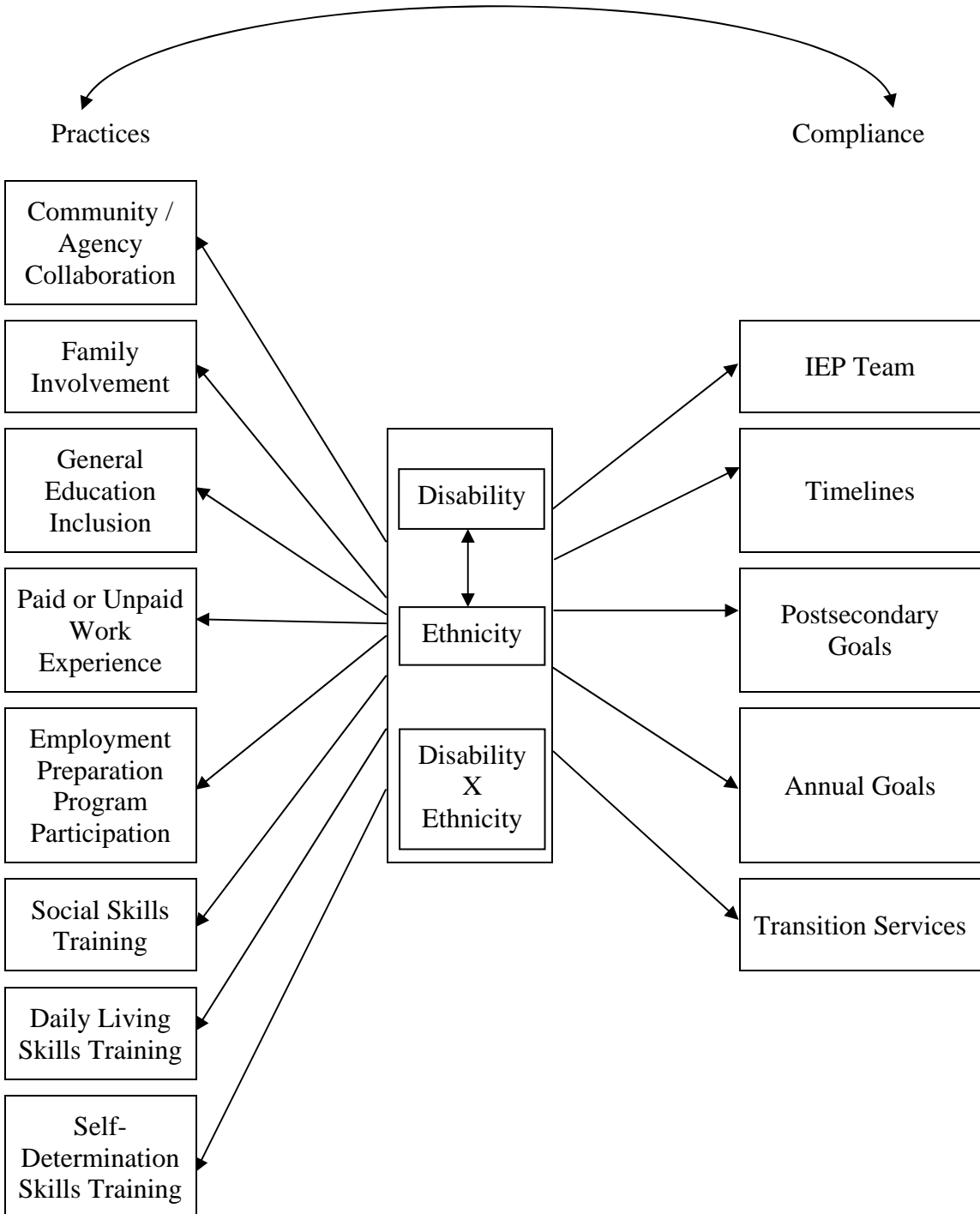
Dependent and Independent Variables

There were three sets of dependent variables in this study. The first set consisted of component compliance variables and included: who was invited and contributed to the meeting (IEP Team); timelines (Timelines); measurable postsecondary goals (Postsecondary Goals); annual goals that support the attainment of the postsecondary goals (Annual Goals); and appropriate transition services (Transition Services). The second set of dependent variables consisted of practice variables. These variables consisted of the substantiated best practices that were identified in Chapter II (i.e., Community-Agency Collaboration, Family Involvement, General Education Inclusion, Paid or Unpaid Work Experience, Employment Preparation Program Participation, Social Skills Training, Daily Living Skills Training, and Self-Determination Skills Training).

The final set dependent variables consisted of a composite compliance variable and a composite practices variable. The independent variables were disability category and ethnicity. Disability had three levels: developmental disabilities, emotional disabilities, and learning disabilities. Ethnicity had three levels: African American, Caucasian, and Hispanic.

To facilitate understanding of the relationships among the component compliance dependent variables, the practices dependent variables, the composite compliance and practices variables, and the independent variables, Figure 2 was created. Figure 2 shows that the composite variables of compliance and transition practices are correlated. The independent variables of disability and ethnicity influence the dependent component compliance variables and practice variables. Additionally, the independent variables are associated.

Figure 2 Graphical Representation of the Research Design



Procedures

Data Collection

The special education directors of the 22 school districts within the Brazos Valley were contacted via letter, fax, and phone call in order to seek approval for conducting the study using the 2007 - 2008 IEP documents from their students. A sample of the correspondence used during this phase is included in Appendix C. Individual meetings with the directors were also held if requested. Although the study was deemed to be exempt from Federal requirements for human subjects' research by the Institutional Review Board of Texas A&M University, all of the districts required that the research be approved by the district's research committee. After permission to conduct the study was granted by the districts, the researcher and another doctoral student traveled to the districts' offices to collect the IEP documents. With the assistance of the special education staff, the 2007-2008 annual IEP documents of the selected students were copied. To ensure anonymity, all of the IEP documents from each district were assigned a unique identification number. The district identification numbers were entered into an electronic file that was kept separately from the electronic file that contained the data collected from the IEP documents (i.e., the data collection instrument). All personally identifying information on the copied IEP documents were blackened onsite with a Sharpie Flip Chart marker, and the marked copies were copied again to ensure that the marked out information could not be viewed when held up to a light source. The first copies of the IEP documents were shredded onsite, and the marked copies of the IEP

documents were securely retained by the researcher for data collection using the instrument.

Utilizing the data collection instrument and its corresponding code book (Appendices D and E), the IEP documents were perused in order to first respond to each of the questions in the descriptive content portion of the data collection instrument. Next, the compliance and practices portions of the data collection instrument were completed by referring to the responses obtained in the descriptive content portion. To ensure that the data were collected reliably, the researcher trained another special education doctoral student to use the data collection instrument, and the IEP documents were jointly processed until the level of agreement between the primary researcher and the fellow doctoral student reached 86%. The researcher processed 162 IEP documents and the assisting doctoral student processed 50 IEP documents. After all of the IEP documents were processed, the researcher reviewed all of the IEP documents to ensure that rating maturity did not change how the data were recorded on the data collection instruments. Finally, the researcher entered the raw data from the instruments into a Statistical Package for the Social Sciences (SPSS) spreadsheet, using the data collection's code book. In an effort to reduce errors, the researcher double-checked the accuracy of transferring the data to the spreadsheet.

Data Scoring

The code book was designed to facilitate the scoring of the variables, and can be found in Appendix E. The code book shows the numerical codes that were input into SPSS for each of the instrument's questions. The arrow symbol (i.e., →) was used on the

code sheet when a coding transformation was necessary to facilitate the analyses following the initial descriptive analysis of the instrument's questions. For example, question C1 (i.e., If the student is age 15 or older, are transition services in place?) was initially coded using 0 = *NA*, 1 = *Yes*, and 2 = *No*. Later, the *NA* responses were transformed into *Yes* responses and the *No* responses were re-coded as zeros. These changes were done for two reasons. First, if a student was not old enough to require having transition services and thus did not have transition services in place, the student was still compliant. Second, by re-coding *No*'s into 0's, the computing of compliance component variables was simplified. That is, a *No* response was not counted during subsequent computations.

The component compliance dependent variables were measured in two ways. First, a percentage score was computed by tallying all of the corresponding *Yes* responses and dividing that number by the total number of questions that contributed to the variable (refer to Table 4 to see how the instrument's questions were grouped into the component compliance variables). For questions that had *NA* as a response, the *NA* was transformed into either a *Yes*, *No*, or *Missing Data* response depending upon the nature of the response. For example, if a question did not pertain to a student due to the student's age, then the *NA* was transformed into a *Yes*. However, if the *NA* did not apply to a student because a compliance piece was missing (i.e., there were not any annual goals present), then the *NA* was transformed into a *No*. *Missing Data* coding was used when there was absolutely no information provided (i.e., the Invitation to ARD Meeting page of the IEP document was missing, so there was no way to determine who was invited to the

meeting). Second, the component compliance variables were scored in a dichotomous manner: either full compliance (i.e., 100%) or not full compliance. The practices variables were measured similarly as the component compliance variables. Percentages were computed, and then dichotomous scores were assigned indicating whether or not at least one of the indicators of the transition practice was evident in the IEP document.

Table 4

Component Compliance and Practices Variables and Their Corresponding Questions

Component Variables	Corresponding Instrument Questions
Compliance	
IEP Team	C7, C8, C24
Timelines	C1, C2, C3, C4, C5, C6
Postsecondary Goals	C9, C10, C11, C12, C13, C14
Annual Goals	C15, C16, C17, C18
Transition Services	C19, C20, C21, C22, C23
Practices	
Community-Agency Collaboration	P3, P4
Collaboration	
Family Involvement	P1, P2
General Education Inclusion	PD7, PD8, PD14
Paid or Unpaid Work	P5
Experience	
Employment Preparation	P6
Social Skills Training	P7
Daily Living Skills Training	P9
Self-Determination Training	P8

The composite, or overall, compliance variable was measured by totaling the number of variables that were 100% compliant. Therefore, the highest score that could be obtained was 5. The composite practices variable was measured in the same way, and the highest score that could be obtained was 8.

Analyses

The study consisted of three types of analyses. The first type of analysis was descriptive, and was used to describe the dependent and independent variables. The second type of analysis utilized multiple logistic regression analyses to determine if there were any differences among the levels of each of the independent variables on the dependent variables. The third type of analysis was a Spearman's rho that was used to examine the relationship between the composite compliance and practices variables. Table 5 presents in more detail the research questions and the corresponding variables and analyses that were used to answer the questions.

Summary

Chapter III detailed information regarding the population and subjects for the study. The sampling scheme was detailed. Information regarding how the instrument was developed and used was provided. Finally, the procedures for conducting the study were presented as well as the listing of the types of analyses used to answer the research questions.

Table 5
Research Questions and Corresponding Analyses and Variables

Question	Variables	Analyses
1. To what extent do the transition components of the IEP documents reflect compliance with the transition requirements of IDEIA?	Dependent IEP Team, Timelines, Postsecondary Goals, Annual Goals, Transition Services	Descriptive statistics
1a. What effects do a student's disability category and ethnicity have on the extent to which the transition components of the IEP documents are compliant with the transition requirements of IDEIA?	Dependent IEP Team, Timelines, Postsecondary Goals, Annual Goals, Transition Services Independent Disability, Ethnicity	Descriptive statistics Multiple Logistic regression
2. To what extent do the transition components of the IEP documents provide evidence of substantiated best practices in transition?	Dependent Community / Agency Collaboration, Parent / Family Involvement, General Education Inclusion, Paid or Unpaid Work Experience, Employment Preparation Program Participation, Social Skills Training, Daily Living Skills Training, Self-Determination Skills Training	Descriptive statistics
2a. What effects do a student's disability category and ethnicity have on the extent to which the transition components of the IEP documents provide evidence of substantiated best practices in transition planning?	Dependent Community / Agency Collaboration, Parent / Family Involvement, General Education Inclusion, Paid or Unpaid Work Experience, Employment Preparation Program Participation, Social Skills Training, Daily Living Skills Training, Self-Determination Skills Training Independent Disability, Ethnicity	Descriptive statistics Multiple Logistic Regression
3. What is the relationship between compliance and substantiated best practices in transition?	Dependent Compliance Composite Independent Practices Composite	Spearman's rho correlation

CHAPTER IV

RESULTS

This study examined the level of compliance with IDEIA's transition requirements and the presence of best practices in transition planning as evidenced in the IEP documents of secondary students with disabilities. As detailed in Chapter III, there were three primary research questions and two secondary research questions. The chapter begins by presenting descriptive information about the sample and the IEP documents. Lastly, the chapter presents the results of the analyses used to answer each of the questions.

Descriptive Information

Sample

The sample for the study consisted of 212 students (139 males, 65.6%; 73 females, 34.4%) with the following primary disabilities: developmental disabilities ($n = 79$, 37.3%), emotional disabilities ($n = 51$, 24.1%), and learning disabilities ($n = 82$, 38.7%). Thirty percent ($n = 63$) of the sample had a secondary disability, and 6% ($n = 13$) had a tertiary disability. The most common secondary and tertiary disabilities were speech impairments. The ethnic distribution of the sample included African American ($n = 80$, 37.7%), Caucasian ($n = 80$, 37.7%), and Hispanic ($n = 52$, 24.5%), and the age distribution ranged from 14 to 21 years ($M = 16.13$, $SD = 1.43$). Students were educated in a variety of instructional settings, as shown in Table 6.

Table 6
Instructional Settings for the Sample

Instructional Setting	Frequency	Percentage
Instructional setting not indicated	2	0.9%
Vocational adjustment class/program (VAC)	3	1.4%
State school for persons with mental retardation	1	0.5%
Mainstream	43	20.3%
Resource room/services, less than 21%	34	16%
Resource room/services, at least 21% & less than 50%	30	14.2%
Self-contained, mild/moderate/severe, regular campus, at least 50% & no more than 60%	23	10.8%
Self-contained, mild/moderate/severe, regular campus, more than 60%	58	27.4%
Residential care and treatment facility, mainstream	1	0.5%
Residential care and treatment facility, self-contained, mild/moderate/severe, regular campus more than 60%	4	1.9%
Residential care and treatment facility, separate campus	12	5.7%
Off home campus, separate campus	1	0.5%

Note. The terminology used is from the Texas Education Agency (2008); $n = 212$.

Graduation Types and Options

All Texas high school graduates receive the same diploma; the transcript is the document that differentiates students by accomplishments, achievements, and coursework (Texas Administrative Code [TAC], n.d.). A student's coursework is guided by his or her graduation type. There are three graduation types: minimum, recommended, and advanced. The default graduation type is the minimum graduation plan. Students who complete the requirements for the recommended graduation plan receive a recognized designation on their transcripts. Students who complete the requirements for advanced graduation plan receive recognized and distinguished designations on their transcripts. Over 63% ($n = 134$) of the students in this study were on the minimum graduation plan,

approximately 18% ($n = 37$) of the students were on the recommended graduation plan, and none of the students were on the advanced graduation plan. The remaining 19% ($n = 41$) of the students' IEP documents did not indicate the students' type of graduation plan.

In addition to completing the coursework for a specified graduation plan type, students must meet the testing requirements for graduation in order to receive a diploma. For students who receive special education aides or services, there are three graduation options (TAC, n.d.) that school districts can use to ensure that students meet the testing requirements for graduation. Option B requires students to complete at least the minimum curriculum and credit requirements (i.e., the minimum graduation plan type) and to have satisfactory performance on exit level assessments. Option C requires students to complete their specific IEP requirements and one of the following conditions: (a) demonstrated full time employment and sufficient self-help skills to enable the student to maintain employment without direct or ongoing education support from the school; (b) demonstrated mastery of specific employability skills and self-help skills that do not require direct, ongoing support from the school; or (c) provision of access to services that are not the legal responsibility of the school district or employment, or employment or educational options that the students has been prepared. Option D is for students who no longer meet the age eligibility requirements and who have completed the requirements of their IEP documents. Table 7 shows the graduation options and the numbers of students' IEP documents that indicated each of the options. The most frequently anticipated graduation option was Option B. This graduation option is consistent with the general education curriculum.

Table 7
Graduation Options as Indicated by Students' IEP Documents

Graduation Option	Frequency	Percentage
Not specified	96	45.3%
Option B	49	23.1%
Option C		
Full time employment + self-help skills to maintain employment	1	0.5%
Mastery of employability skills + self-help skills	27	12.7%
Access to services that are not the legal responsibility of the LEA	3	1.4%
Option D	36	17%

Note. $n = 212$.

IEP Meeting Invitation, Attendance, and Contribution

The meetings that the IEP documents were associated with spanned the period beginning with September, 2007, and ending with September, 2008. A total of 165 (78%) of the transition portions of the IEP documents were completed during the students' annual IEP meetings. A variety of individuals was invited to and participated in the students' IEP meetings that discussed transition (see Table 8). Individuals in attendance at over 90% of the IEP meetings included the student, a general education teacher, a special education teacher, an administrator, and an assessment professional. Table 8 also shows the contribution to the IEP meetings during which transition was addressed. Contribution is distinguished from attendance because an invitee who may not have been able to attend the actual meeting could have provided information prior to the meeting or contributed via telephone call.

Table 8
Invitation and Contribution to IEP Meetings That Addressed Transition

Individual	Invited		Contributed	
	Frequency	Percentage	Frequency	Percentage
Student	197	92.9%	197	92.9%
Parent/Guardian	206	97.2%	154	72.6%
General Education Teacher	205	96.7%	202	95.3%
Special Education Teacher	207	97.6%	210	99.1%
Local Education Agency Rep.	205	96.7%	211	99.5%
Transition Specialist	30	14.2%	28	13.2%
Autism Specialist	3	1.4%	12	5.7%
Assessment Personnel	205	96.7%	191	90.1%
Counselor	82	38.7%	29	13.7%
Career and Technology Educator (including VAC teacher)	147	71%	141	66.5%
Other School Personnel	51	24.1%	76	35.8%
Community or Agency Rep.	16	7.5%	15	7.1%

Note. $n = 212$.

Postsecondary Goals

The postsecondary transition goals are one of the most important parts of the students' IEP documents (deFur, 2003; Halpern, 1994). Students are required to have postsecondary goals that address education and/or training, employment, and independent living when applicable. However, 14.6% ($n = 31$) of the IEP documents did not include measurable education/training postsecondary goals. The types of education/training postsecondary goals that the IEP documents did have included on-the-job training ($n = 34$, 16%), technical school ($n = 32$, 15.1%), community college ($n = 58$, 27.4%), university ($n = 7$, 3.3%), and other ($n = 50$, 23.6%). Education/training postsecondary goals that were classified as *other* included a hodge-podge of situations that often did not relate to postsecondary education or training. Thus, these goals were really not

education/training postsecondary goals even though the school district had specified them as education/training postsecondary goals.

Regarding employment postsecondary goals, 18.9% ($n = 40$) of the IEP documents did not include any measurable employment goals. Competitive employment was the goal for half ($n = 106$) of the students, supported employment was the goal for 10% ($n = 21$) of the students, and sheltered employment was the goal for 3% ($n = 6$) of the students. Approximately 7% ($n = 15$) of the postsecondary employment goals specified full or part time employment. Similar to the education/training postsecondary goals that did not relate to postsecondary education or training, 18% ($n = 39$) of the students had employment postsecondary goals that were not related to postsecondary employment. The data collection instrument categorized the employment postsecondary goals into the 16 career clusters specified by the Office of Vocational and Adult Education (2009). Table 9 shows the career clusters and the number of employment postsecondary goals that were categorized into each of the career clusters. Of the 60 employment goals that did indicate a career, the most common career clusters were health science ($n = 12$, 20%) and agriculture, food, and natural resources ($n = 11$, 18.3%). The majority of the employment postsecondary goals did not indicate a career ($n = 112$, 52.8%) or did not have an employment postsecondary goal ($n = 40$, 18.9%).

Table 9
Employment Postsecondary Goals and Career Clusters

Career Cluster	Frequency	Percentage
Agriculture, Food, and Natural Resources	11	18.3%
Architecture and Construction	3	5%
Business, Management, and Administration	1	1.7%
Health Science	12	20%
Human Services	1	1.7%
Law, Public Safety, and Corrections	6	10%
Arts, Audio-Video Technology, and Communication	3	5%
Education and Training	3	5%
Government and Public Administration	1	1.7%
Hospitality and Tourism	4	6.7%
Information Technology	3	5%
Manufacturing	1	1.7%
Marketing, Sales, and Service	4	6.7%
Science, Technology, Engineering, and Math	1	1.7%
Transportation, Distribution, and Logistics	6	10%

Note. $n = 60$.

As noted previously, students are only required to have postsecondary independent living goals when needed. Yet, 77.4% ($n = 164$) of the IEP documents did have measurable independent living goals. There were four types of independent living goals: daily living ($n = 147$, 69.3%), community living ($n = 26$, 12.3%), self-care ($n = 14$, 6.6%), and other ($n = 8$, 3.8%).

Action Plan Steps

All of the districts used *Special Education Manager* (i.e., a program that provides web- or browser-based IEP forms; GG Consulting, 2008) to facilitate preparing for and running their IEP meetings. One of the forms included in *Special Education Manager* is

the *Individual Transition Plan-Action Plan*. This form lists the action steps that need to be taken in order for a student to meet his or her postsecondary transition goals. One hundred forty-six (68.9%) of the IEP documents included this form and its action steps. Including action steps in the transition planning portions of the IEP document is not a requirement of IDEIA; however, action steps can be useful. The number of action steps in these IEP documents ranged from 5 to 23 ($M = 15.36$, $SD = 6.12$); with 78.1% of the action steps assigned to the student, 65.5% assigned to school district personnel, 54.3% assigned to the family, and 15.5% assigned to community agencies. The percentages do not equal 100% because action steps were often assigned to multiple individuals.

Annual Goals

Information about the students' annual goals was also gathered. The total number of annual goals in an IEP document ranged from 0 to 50 ($M = 5.73$, $SD = 7.01$). The percentages of the annual goals that were measurable were also computed ($M = 50.59\%$, $SD = 44.03\%$). Eighty-one (38.2%) of the IEP documents did not have any annual goals that were measurable; 65 (30.7%) of the IEP documents had 100% of their annual goals measurable.

Transition Services

Finally, information about which transition services were addressed in the IEP documents was obtained. Transition services that are required to be addressed include instruction, course of study, related services, community experiences, development of employment and other post-school adult living objectives, acquisition of daily living skills, and provision of functional vocational evaluation. Some of the transition services

may not be applicable to some students; however, there should be documentation in the IEP document detailing why a particular transition service is not necessary. Table 10 presents the frequencies and percentages of IEP documents that addressed the transition services.

Table 10
Transition Services Addressed in IEP Documents

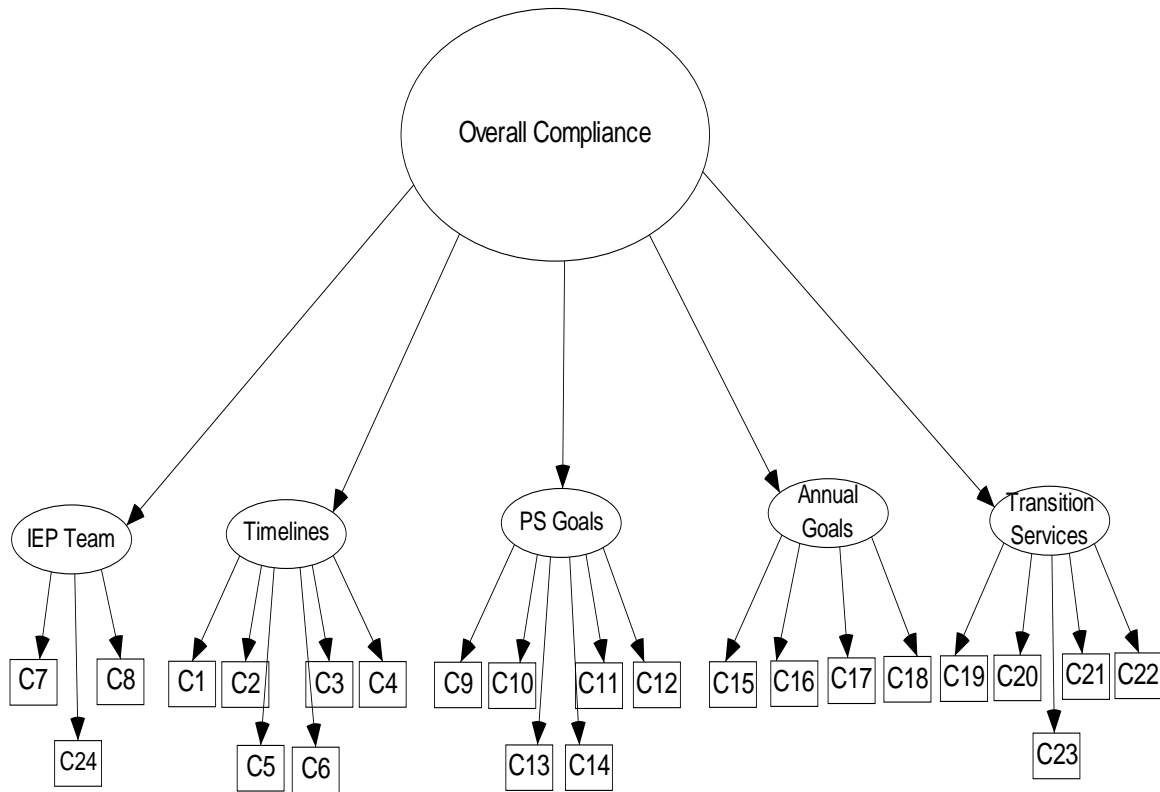
Transition Service	Frequency	Percentage
Instruction	163	76.9%
Course of Study	145	68.4%
Related Services	85	40.1%
Community Experiences	157	74.1%
Development of Employment and Other Post-School Adult Living Objectives	155	73.1%
Acquisition of Daily Living Skills	154	72.6%
Provision of Functional Vocational Evaluation	107	50.5%

Note. $n = 212$.

Compliance with the IDEIA's Transition Requirements

The first research question was, "To what extent do the transition components of the IEP documents reflect compliance with the transition requirements of IDEIA?" This question was answered in three stages because of the relationships among the instrument's compliance questions, the component variables, and overall compliance (refer to Figure 3 for a graphical representation of these relationships).

Figure 3 Relationships among the Compliance Variables



Compliance Questions

At the most basic level, frequencies and percentages were computed for all 24 compliance questions (see Table 11). Recall that several of these 24 compliance questions also had *NA* responses. If a question was not applicable to a student due to the student's age, then the student was assumed to be in compliance and the *NA* was transformed into a *Yes* response (Finn & Kohler, 2009). The code book (Appendix E) details all of the transformations of the *NA* responses. The percentage of IEP documents that were compliant with each of the individual compliance questions ranged from 30.7% to 99.5%. The question with the lowest frequency and percentage of *Yes* responses was the question regarding having measurable annual goals. An annual goal was determined to be measurable if the goal included a timeline for completion and criteria for mastery. The questions with the highest frequencies and percentages were the questions that queried whether or not a summary of performance and its respectful parts were present.

Table 11
Compliance Question Responses

Compliance Question	Yes		No	
	Frequency	Percentage	Frequency	Percentage
C1. If the student is age 15 or older, are transition services in place?	190	89.6%	22	10.4%
C2. If the student is 16 years or older, does it appear that the transition services been updated at least yearly?	197	92.9%	15	7.1%
C3. Is there any indication that the parents have been advised that upon age of majority rights transfer to the student?	197	92.9%	15	7.1%
C4. Is a summary of performance included?	211	99.5%	1	0.5%
C5. If this is the dismissal meeting, does the summary of performance include BOTH a summary of academic achievement and functional performance?	211	99.5%	1	0.5%
C6. If this is the dismissal meeting, does the summary of performance include recommendations on how to assist the child in meeting PS goals?	209	98.6%	3	1.4%
C7. Were ALL of the required individuals invited to the meeting?	182	85.8%	14	6.6%
C8. To the extent appropriate, did the parents or the student who has reached the age of majority consent to the invitation of a representative from an outside agency?	199	93.9%	8	3.8%
C9. Is the education/training PS goal measurable?	124	58.5%	88	41.5%
C10. Is there evidence that the education/training PS goal was based upon at least one age appropriate transition assessment?	179	84.4%	1	0.5%
C11. Is the employment PS goal measurable?	111	52.4%	60	28.3%
C12. Is there evidence that the employment PS goal was based upon at least one age appropriate transition assessment?	170	80.2%	2	0.9%
C13. Is the independent living PS goal measurable?	164	77.4%	48	22.6%
C14. Is the independent living PS goal based upon age appropriate transition assessments?	211	99.5%	1	0.5%
C15. Are 100% of the annual goals measurable?	65	30.7%	147	69.3%

Table 11
Continued

Compliance Question	Yes	No	Yes	No
	Frequency	Percentage	Frequency	Percentage
C16. Is there at least one annual goal that supports the child's education/training PS goal?	159	75%	26	12.3
C17. Is there at least one annual goal that supports the student's employment PS goal?	150	70.8%	28	13.2%
C18. Is there at least one annual goal that supports the child's independent living PS goal, if appropriate?	141	66.5%	30	14.2%
C19. Are 100% of the required transition services addressed?	81	38.2%	131	61.8%
C20. Are the transition services aligned with the child's education/training PS goal?	162	76.4%	50	23.6%
C21. Are the transition services aligned with the child's employment PS goal?	152	71.7%	60	28.3%
C22. Are the transition services aligned with the child's independent living PS goal?	138	65.1%	74	34.9%
C23. Is there evidence that the transition services were based on the child's needs, strengths, preferences, or interests?	170	80.2%	42	19.8%
C24. Did ALL of the required individuals attend or contribute to the meeting?	130	64.7%	71	35.3%

Note. The *n*'s for the questions vary due to missing data.

Component Compliance Variables

The next level of interpretation of the extent to which the IEP documents were compliant with IDEIA's transition requirements was generated by grouping the 24 compliance questions into different aspects of compliance (i.e., the five component variables of compliance that were previously identified by the researcher). These component variables of compliance were based upon knowledge of IDEIA and included: whether the appropriate individuals were invited and contributed to the IEP meeting (IEP Team), whether timelines regarding implementation of transition services were met (Timelines), whether the postsecondary goals were present and measurable (Postsecondary Goals), whether the annual goals were measurable and supportive of the postsecondary goals (Annual Goals), and whether the different components of transition services were addressed (Transition Services).

Table 12 shows the descriptive statistics for the component variables of compliance. The mean level of compliance for each of the component variables ranged from 69% to 88%. The component variables of compliance, ordered from the highest to the lowest levels of compliance, were Timelines, Postsecondary Goals, IEP Team, Annual Goals, and Transition Services. The table also shows the percentage of IEP documents that were fully compliant (i.e., 100%) on each of the component compliance variables. The mean level of compliance and the percentage of full compliance were computed because both percentages provided information regarding how close the IEP documents were to reaching full compliance.

Table 12

Descriptive Statistics for the Component Variables of Compliance

Variables	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Full Compliance
IEP Team	196	84.52%	21.71	471.51	56.60%
Timelines	201	88.14%	12.54	157.31	41.51%
Post Secondary Goals	170	84.80%	19.77	390.66	44.81%
Annual Goals	167	70.36%	31.96	1021.26	22.64%
Transition Services	201	68.86%	32.61	1063.18	27.36%

Overall Compliance

The final way of viewing the extent to which the IEP documents reflected compliance with the transition requirements of IDEIA was to compute an overall compliance score for each of the students' IEP documents in the sample. This was done by summing the number of 100% compliant component compliance variables for each case. Thus, the range of possible scores was 0 through 5, with 5 being the most compliant. There were 201 cases included in this analysis. The 11 cases that were omitted were omitted because the students were not required to have transition services in place due to a young age (i.e., 14 years). The mean score was 2.03 with a standard deviation of 1.238.

Effects of Disability Category and Ethnicity on Compliance

The next research question was an extension of the first question. It asked, "What effects do a student's disability category and ethnicity have on the extent to which the transition components of the IEP documents are compliant with the transition requirements of IDEIA?" To answer this question, a series of multiple logistic regression

analyses were used. Although the dependent variables could have been considered interval and a multivariate analysis of variance (MANOVA) could have been conducted, the decision to treat the data as ordinal was made because some of the assumptions of MANOVA (i.e., multivariate normality and homogeneity of covariance matrices) were not met. Therefore, the dependent variables were transformed into bivariate nominal scores: fully compliant or not fully compliant. The data were not analyzed as ordinal with more than two outcomes (e.g., poor, average, full compliance) because there were not enough cases in each cell to conduct multinomial regressions.

The independent variables were ethnicity and disability for each of the multiple logistic regression analyses. Because there can only be one outcome variable when using regression, five multiple logistic regressions were conducted (i.e., one regression for each of the five component compliance dependent variables). For all of the regressions, Caucasian students with a developmental disability were arbitrarily labeled as the reference group. The p values show whether the estimated probabilities were statistically different from the reference group's predicted probability. The multiple logistic regression tables and corresponding predicted probability tables for the variables that did have statistically significant results are presented within the text. Appendix F contains the multiple logistic regression tables and predicted probability tables for the component compliance variables that did not have statistically significant results. To further facilitate interpretation of the results from the multiple logistic regressions, predicted probabilities that a randomly selected IEP document would be fully compliant on a particular

component compliance variable, for each of the various ethnicity and disability combinations, were computed using the equation

$$\hat{\pi}_{ij} = \frac{e^{\beta}_{Ref} \cdot e^{\beta}_i \cdot e^{\beta}_j}{1 + e^{\beta}_{Ref} \cdot e^{\beta}_i \cdot e^{\beta}_j}$$

where $\hat{\pi}_{ij}$ is the estimated probability of full compliance for a group, given its ethnicity and disability category; e^{β}_{Ref} refers to the exponentiated Beta weight of the reference group in the logistic regression; and e^{β}_i and e^{β}_j refer to the exponentiated Beta weights of different ethnic and disability groups in that same logistic regression equation.

There are two ways to interpret the predicted probability tables. First, the predicted probabilities for each of the disability and ethnicity combinations within each of the component compliance variables can be studied to determine if there were any ethnicities and/or disabilities that seemed to influence whether or not a selected IEP document would be compliant. In other words, the tables help one to determine if having a specific ethnicity or disability influences a student's predicted probability of having an IEP document in full compliance with the five component compliance variables. Taken together, these predicted probabilities ranged from 8.7% (Annual Goals, Hispanic/Emotional Disability) to 80.2% (IEP Team, Caucasian/Emotional Disability). Secondly, the tables show the predicted probabilities of the ethnicities and disabilities that were different than the reference group's predicted probabilities.

Component Compliance Variables

For the component variable, IEP Team, the probability of selecting IEP documents from African American students, irrespective of disability category, that were fully compliant was statistically significantly ($p = .001$) lower than the probabilities of selecting IEP documents from students with other ethnicities (refer to Tables 13 and 14). So, regarding IEP Team compliance, African American students would be the most likely to have IEP documents that are not fully compliant. Table 14 shows the predicted probabilities of randomly selecting an IEP document with evidence of meeting the compliance requirements for participation in the transition process ranged from 39.8% (African American/Learning Disability) to 80.2% (Caucasian/ Emotional Disability).

Table 13
Multiple Logistic Regression Results for IEP Team Full Compliance

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.001	-1.168 (.357)	.155	.311	.625
Hispanic	.180	-.542 (.405)	.263	.582	1.285
Disability					
Emotional	.575	.227 (.404)	.568	1.254	2.768
Learning	.230	-.419 (.349)	.332	.658	1.303
Caucasian + Developmental (baseline)	< .001	1.171 (.330)		3.224	

Note. $R^2 = .700$ (Hosmer & Lemeshow), .069 (Cox & Snell), .094 (Nagelkerke). Model $\chi^2 (4) = 14.02, p < .007$.

Table 14
Predicted Probabilities for IEP Team Full Compliance

	African American	Hispanic	Caucasian
Developmental	50.1%*	65.2%	76.3%
Emotional	55.7%*	70.2%	80.2%
Learning	39.8%*	55.2%	68.1%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Regarding Timelines and Post Secondary Goals, there were not any statistically significant differences among the predicted probabilities. This indicates that ethnicity or disability category do not seem to influence the probability of randomly selecting a fully compliant, regarding Timelines or Post Secondary goals, IEP document. The predicted probabilities of randomly selecting an IEP document that were fully compliant regarding timelines ranged from 29.3% to 54.1%, and the predicted probabilities of selecting an IEP document that were fully compliant regarding postsecondary goals ranged from 43.8% to 66.4%.

Regarding Annual Goals, statistically significant p values were obtained for Hispanic students ($p = .043$) and students with emotional disabilities ($p = .034$). The p value for students with learning disabilities was .051. Although the alpha level was set at .05, there essentially is not a difference between a p value of .05 and .051 (Rosnow & Rosenthal, 1989), so this result was considered statistically significant also. Table 15 shows that ethnicity (i.e., Hispanic) and disability (i.e., emotional disability and learning disability) are influencing variables when it comes to randomly selecting IEP documents that are fully compliant regarding Annual Goals. In this case, being Hispanic, having an

emotional disability, or having a learning disability decreases the probability that a randomly selected IEP document would be fully compliant regarding Annual Goals. Students who are both Hispanic and who have an emotional disability have the lowest predicted probability (8.7%) of having a compliant IEP document regarding Annual Goals (see Table 16).

Table 15
Multiple Logistic Regression Results for Annual Goals Full Compliance

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.895	.051 (.386)	.494	1.052	2.242
Hispanic	.043	-1.059 (.524)	.124	.347	.968
Disability					
Emotional	.034	-1.062 (.500)	.130	.346	.922
Learning	.051	-.771 (.394)	.213	.463	1.002
Caucasian + Developmental	.465	-.236 (.322)		.790	

Note. $R^2 = .845$ (Hosmer & Lemeshow), $.065$ (Cox & Snell), $.093$ (Nagelkerke). Model $\chi^2(4) = 11.24$, $p < .024$.

Table 16
Predicted Probabilities for Annual Goals Full Compliance

	African American	Hispanic	Caucasian
Developmental	45.4%	21.5%*	44.1%
Emotional	22.3%*	8.7%*	21.5%*
Learning	27.8%	11.3%*	26.8%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$. $p = .051$ for the Learning Disability group.

For the component compliance variable of Transition Services, there was a statistically significant p value (.005) obtained for students with emotional disabilities. As presented in Tables 17 and 18, only the emotional disability group's predicted probabilities were statistically significantly different than the reference group's predicted probabilities. Thus, students who had emotional disabilities were the least likely to have IEP documents that were compliant with regards to having addressed all of the transition services.

Table 17
Multiple Logistic Regression Results for Transition Services Full Compliance

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.851	-.069 (.366)	.456	.934	1.912
Hispanic	.973	-.014 (.414)	.439	.986	2.218
Disability					
Emotional	.005	-1.325 (.473)	.105	.266	.671
Learning	.190	-.454 (.347)	.322	.635	1.253
Caucasian + Developmental	.154	-.434 (.304)		.648	

Note. $R^2 = .727$ (Hosmer & Lemeshow), .045 (Cox & Snell), .064 (Nagelkerke). Model $\chi^2(4) = 9.17, p < .057$.

Table 18
Predicted Probabilities for Transition Services Full Compliance

	African American	Hispanic	Caucasian
Developmental	37.7%	39%	39.3%
Emotional	13.9%*	14.5%*	14.7%*
Learning	27.8%	28.9%	29.2%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Evidence of Best Practices in Transition

The next research question was, “To what extent do the transition components of the IEP documents provide evidence of substantiated best practices in transition?” The eight transition practices that the review of the literature revealed included community-agency collaboration, family involvement, general education inclusion, paid or unpaid work experience, employment preparation, social skills training, daily living skills training, and self-determination skills training. Each of these practices was deemed a dependent variable for purposes of answering the second research question. Question 2 was answered in a similar manner as Question 1 in that the analyses were conducted in three phases.

Transition Practices Questions

The data collection instrument had 12 questions that gathered data regarding the transition practices. Table 19 presents the percentages of IEP documents that provided evidence of each of the practices for each of the questions. The question with the lowest percentage of *Yes* responses (i.e., 11.3%) was the question regarding the contribution that community-agency representatives made to the transition portion of the IEP meeting. The question with the highest percentage of *Yes* responses (i.e., 91.5%) was the question about whether the student had appropriate daily living skills or was receiving training in daily living skills.

Table 19
Frequencies and Percentages of Yes/No Responses to Practices Questions

Practice Question	Yes		No or NA	
	Frequency	Percentage	Frequency	Percentage
PD7. Is the student mainstreamed?	44	20.8%	168	79.2%
PD8. State standardized testing supportive of general education?	67	31.6%	145	68.4%
P1. Does the IEP documentation indicate any accommodation(s) to parent/family to support their involvement at the IEP meeting?	42	19.8%	170	80.2%
P2. Is there any indication that the parent/guardian contributed to the development of the transition components of the IEP document?	138	65.1%	74	34.9%
P3. Is there any indication that agency representatives contributed to the development of the transition components?	24	11.3%	188	88.7%
P4. Did the school/district provide any community agency information?	107	50.5%	105	49.5%
PD14. Is the student's graduation option Option B?	49	23.1%	163	76.9%
P5. Has the student engaged in previous paid or unpaid work experience OR is there any indication that the student will experience any paid or unpaid work experience?	85	40.1%	127	59.9%
P6. Has the student participated in any employment preparation programming, or are there plans for the student to participate?	162	76.4%	50	23.6%
P7. Is there any indication (annual goals, or transition services) that the student has received/is receiving social skills training OR that the student has appropriate social skills?	164	77.4%	48	22.6%
P8. Is there any indication (annual goals or transition services) that the student has received/is receiving instruction/training on self-determination OR that the student has appropriate self-determination skills?	55	25.9%	157	74.1%
P9. Is there any indication (PS goals, annual goals, or transition services) that the student has received/is receiving functional, daily living skills training OR that the student has appropriate functional, daily living skills?	194	91.5%	18	8.5%

Transition Practices Variables

To facilitate understanding and subsequent analysis, the 12 practices questions were consolidated into the eight practices variables: Community-Agency Collaboration, Family Involvement, General Education Inclusion, Paid or Unpaid Work Experience, Employment Preparation Participation, Social Skills Training, Daily Living Skills Training, and Self-Determination Training (refer to Figure 4 for a graphical representation of the relationships among the practice variables and analysis levels). Because the practice variables were measured in a manner that sought to determine whether or not the IEP document provided evidence of the practices, for the practice variables that consisted of more than one of the 12 questions from the instrument, a score of 1 was given if at least one of the questions provided evidence of the practice. So for example, the variable, Community-Agency Collaboration, consisted of two questions. One question asked if the school district provided any community-agency information to the family, and the other question asked if any representatives from any community agencies contributed to the transition portion of the IEP meeting. If either of the questions yielded an affirmative answer, then that student's IEP document was deemed to show evidence of Community-Agency Collaboration. Table 20 provides the frequencies and percentages of IEP documents that showed evidence of the eight transition practices. The transition practice with the least amount of evidence was Self-Determination Training ($n = 55, 25.9\%$); and the practice with the most evidence was Daily Living Skills Training ($n = 194, 91.5\%$).

Figure 4 Relationships among the Practices Variables

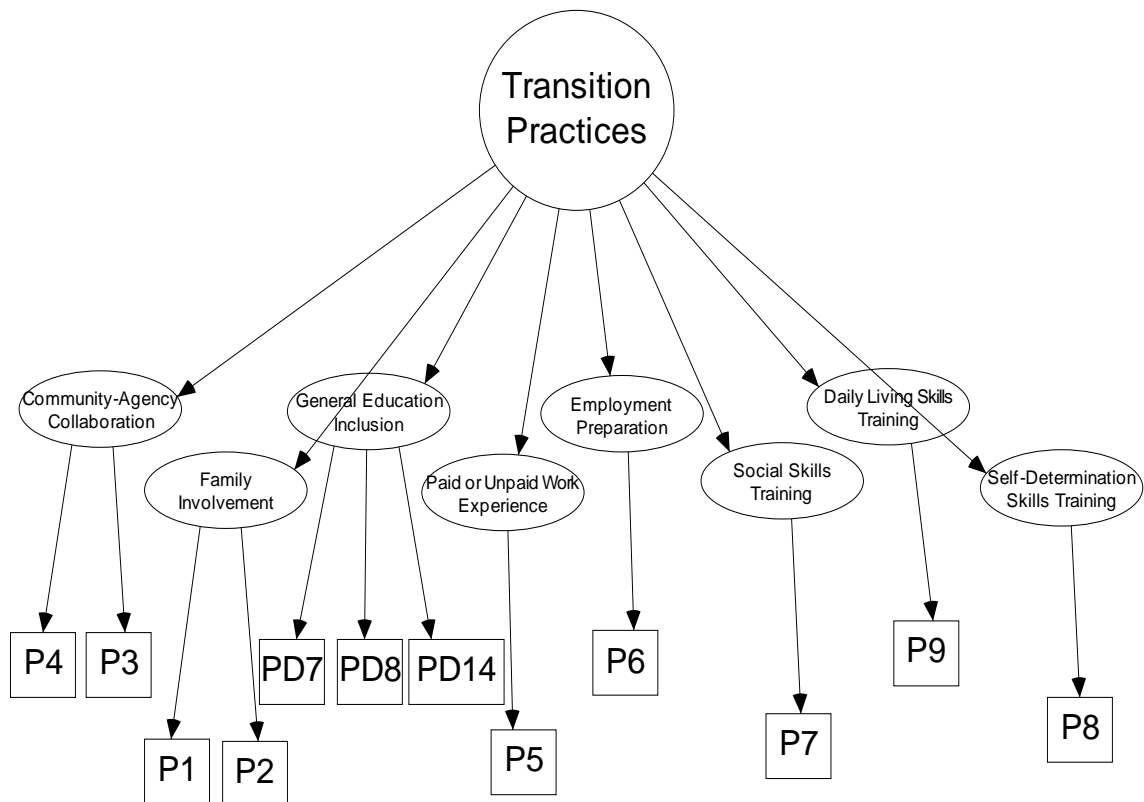


Table 20
Descriptive Statistics for the Practice Variables

Variables	Evidence of Practice	
	Frequency	Percentage
Community-Agency Collaboration	126	59.4%
Family Involvement	152	71.7%
General Education Inclusion	98	46.2%
Paid or Unpaid Work Experience	85	40.1%
Employment Preparation Participation	162	76.4%
Social Skills Training	164	77.4%
Daily Living Skills Training	194	91.5%
Self-Determination Training	55	25.9%

Note. $n = 212$.

Overall Transition Practices

Finally, overall transition practices scores for each of the cases were computed by summing the eight practices that were evidenced in the IEP documents. The range of possible scores was 0 - 8, with 0 indicating that there was no evidence the practices in the IEP document, and 8 indicating that evidence of all the practices was found in the IEP document. The overall level of practices as evidenced in the IEP documents was 4.89 ($n = 212$, $SD = 1.569$).

Effects of Disability Category and Ethnicity on Transition Planning Practices

The next research question was, “What effects do a student’s disability category and ethnicity have on the extent to which the transition components of the IEP documents provide evidence of substantiated best practices in transition planning?” To answer this question, a series of multiple logistic regression analyses were conducted. Similar to the multiple logistic regression analyses for compliance, the independent variables were ethnicity and disability category. The dependent variables were the 8 transition planning practices. For all of the regression analyses, Caucasian and Developmental Disability was the reference group. The p values show whether the estimated probabilities were statistically different from the reference probabilities (i.e., Caucasian and Developmental Disability groups). To facilitate interpretation of the results from the multiple logistic regressions, predicted probabilities and odds ratios that a randomly selected IEP document would provide evidence of a particular transition practice, for each of the various ethnicity and disability category combinations, were computed. Only the

regression and predicted probability tables that show statistically significant results are presented in the text. The remainder of the regression and predicted probability tables for the practices are in Appendix G. The predicted probabilities of obtaining an IEP document that had evidence of a transition practice ranged from 12.1% (Self-Determination Skills Training, African American/Learning Disability) to 96.6% (Daily Living Skills Training, Caucasian/Developmental Disability).

Component Transition Practices Variables

Students with emotional disabilities were the only group that a statistically significant p value (.0001) was obtained for having IEP documents that provided evidence of Community-Agency Collaboration (see Tables 21 and 22). In other words, students with emotional disabilities were statistically significantly least likely to have IEP documents that provided evidence of Community-Agency Collaboration as compared to the other ethnicity and disability groups. One can also see that there were several statistically significant different p values and corresponding predicted probabilities regarding evidence of family involvement (see Tables 23 and 24). One ethnicity (i.e., African American, $p = .003$) and two disabilities (i.e., emotional disability, $p = .02$; learning disability, $p = .00004$) were statistically significantly different than the reference group. This indicates that students who were African American were less likely to have evidence of Family Involvement in the IEP documents than students who were Caucasian or Hispanic. Similarly, the predicted probabilities of selecting IEP documents that showed evidence of Family Involvement were statistically significantly lower for students with emotional disabilities and learning disabilities as compared to students with

developmental disabilities. The group that was least likely to have IEP documents that provided evidence of Family Involvement was students who were African American and who had learning disabilities.

Table 21
Multiple Logistic Regression Results for Evidence of Community-agency Collaboration Practice

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.164	.468 (.336)	.826	1.597	3.088
Hispanic	.108	.620 (.385)	.874	1.859	3.954
Disability					
Emotional	.0001	-1.503 (.389)	.104	.222	.476
Learning	.110	-.546 (.342)	.296	.579	1.132
Caucasian + Developmental	.030	.653 (.301)		1.920	

Note. $R^2 = .995$ (Hosmer & Lemeshow), .086 (Cox & Snell), .116 (Nagelkerke). Model $\chi^2 (4) = 19.03, p < .001$.

Table 22
Predicted Probabilities for Evidence of Community-agency Collaboration Practice

	African American	Hispanic	Caucasian
Developmental	75.4%	78.1%	65.8%
Emotional	40.5%*	44.2%*	29.9%*
Learning	64%	67.4%	52.6%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Table 23

Multiple Logistic Regression Results for Evidence of Family Involvement Practice

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.003	-1.129 (.376)	.155	.323	.675
Hispanic	.276	.534 (.490)	.652	1.705	4.455
Disability					
Emotional	.020	-1.087 (.469)	.134	.337	.845
Learning	.00004	-1.750 (.427)	.075	.174	.402
Caucasian + Developmental	.000	2.370 (.427)		10.699	

Note. $R^2 = .315$ (Hosmer & Lemeshow), .153 (Cox & Snell), .219 (Nagelkerke). Model $\chi^2(4) = 35.08, p < .001$.

Table 24

Predicted Probabilities for Evidence of Family Involvement Practice

	African American	Hispanic	Caucasian
Developmental	77.6%*	94.8%	91.5%
Emotional	53.8%*	86%*	78.3%*
Learning	37.6%*	76%*	65.1%*

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

In contrast, students who had emotional ($p = .00009$) or learning disabilities ($p = .000000001$) were the most likely to have IEP documents that provided evidence of General Education Inclusion (see Tables 25 and 26). The probabilities for African American students ($p = .035$) were statistically significantly lower than Caucasian or Hispanic students when evidence of Employment Preparation was sought (see Tables 27 and 28). Also, students with emotional ($p = .001$) and learning disabilities ($p = .001$) were less likely than students with developmental disabilities to have IEP documents that

provided evidence of Employment Preparation. Some of the lowest predicted probabilities were for evidence of Self-Determination in the IEP documents (see Tables 29 and 30). For students who had learning disabilities ($p = .001$), they were even more likely to not have IEP documents that provided evidence of self-determination skills.

Table 25
Multiple Logistic Regression Results for Evidence of General Education Inclusion Practice

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.343	-.337 (.356)	.355	.714	1.433
Hispanic	.192	-.530 (.406)	.266	.589	1.350
Disability					
Emotional	.00009	1.583 (.405)	2.202	4.870	10.771
Learning	.000000001	2.269 (.378)	4.610	9.667	20.271
Caucasian + Developmental	.000	-1.218 (.335)		.296	

Note. $R^2 = .638$ (Hosmer & Lemeshow), .191 (Cox & Snell), .255 (Nagelkerke). Model $\chi^2(4) = 44.82$, $p < .001$.

Table 26
Predicted Probabilities for Evidence of General Education Inclusion Practice

	African American	Hispanic	Caucasian
Developmental	17.4%	14.8%	22.8%
Emotional	50.7%*	45.9%*	59%*
Learning	67.1%*	62.8%*	74.1%*

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Table 27

Multiple Logistic Regression Results for Evidence of Employment Preparation Practice

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.035	-.844 (.401)	.196	.430	.944
Hispanic	.364	-.421 (.464)	.265	.657	1.629
Disability					
Emotional	.001	-1.614 (.500)	.075	.199	.531
Learning	.001	-1.574 (.466)	.083	.207	.516
Caucasian + Developmental	.000	2.786 (.480)		16.222	

Note. $R^2 = .946$ (Hosmer & Lemeshow), .097 (Cox & Snell), .145 (Nagelkerke). Model $\chi^2(4) = 21.56, p < .001$.

Table 28

Predicted Probabilities for Evidence of Employment Preparation Practice

	African American	Hispanic	Caucasian
Developmental	87.5%*	91.4%	94.2%
Emotional	58.1%*	40.1%*	76.3%*
Learning	59.1%*	68.8%*	77.1%*

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Table 29

Multiple Logistic Regression Results for Evidence of Self-determination Skills Practice

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.848	-.071 (.369)	.452	.932	1.919
Hispanic	.772	-.124 (.428)	.382	.883	2.045
Disability					
Emotional	.899	.048 (.379)	.500	1.049	2.204
Learning	.001	-1.313 (.413)	.120	.269	.604
Caucasian + Developmental	.050	-.601 (.307)		.548	

Note. $R^2 = .861$ (Hosmer & Lemeshow), .065 (Cox & Snell), .096 (Nagelkerke). Model $\chi^2(4) = 14.31, p < .006$.

Table 30

Predicted Probabilities for Evidence of Self-determination Skills Practice

	African American	Hispanic	Caucasian
Developmental	33.8%	32.6%	35.4%
Emotional	34.9%	33.7%	36.5%
Learning	12.1%*	11.5%*	12.8%*

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Regarding Paid or Unpaid Work Experience, Social Skills Training, and Daily Living Skills Training; there were not any statistically significant different predicted probabilities. This means that ethnicity or disability category did not seem to influence whether or not a randomly selected IEP document provided evidence of these practices. However, the predicted probabilities for Paid or Unpaid Work Experience were lower than the predicted probabilities for Social Skills Training and Daily Living Skills Training, as can be observed in Appendix G.

Relationship between Compliance and Best Practices

The final question that this study addressed asked, “What is the relationship between compliance and substantiated best practices in transition?” Answering this question required conducting a Spearman’s rho correlation between the Overall Compliance and Overall Transition Practices variables. Spearman’s rho was used because the level of scale of these two variables was ordinal (Field, 2005). A statistically significant ($p < .001$) moderate correlation of $r = .429$ was found. This result seems to indicate that there is a positive relationship between the level of compliance and the level of best practices evident in the students’ IEP documents. In other words, as the level of overall compliance increases, so too does the level of best practices evident in the IEP documents.

Summary

The results chapter examined the level of compliance with IDEIA’s transition requirements and the presence of best practices in transition planning as evidenced in the IEP documents of secondary students with disabilities. Three primary research questions

and two secondary research questions were addressed using results from different types of statistical analyses. The first type of analyses conducted was descriptive and was used to present information about the sample. Next, a series of multiple logistic regression analyses were utilized to answer the questions regarding the influence that ethnicity and disability had on the probability of randomly selecting an IEP document that was compliant on the component compliance variables. Using the obtained weights from the regressions, predicted probabilities of randomly selecting IEP documents with certain characteristics (i.e., component compliance variables) were computed. Multiple logistic regression analyses were also used to determine the influence that ethnicity and disability category had on whether or not there was evidence of best practices in the IEP documents. Again, predicted probabilities were computed. Finally, a Spearman's rho was conducted to determine if there was a correlation between overall compliance and evidence of practices in the IEP documents.

CHAPTER V

SUMMARY AND DISCUSSION

The final chapter of this study begins by restating the research problem and reviewing the methodology used to address the research questions. Next, a summary of the key findings that answered the research questions follows. The discussion section of the chapter uses the lifespan theory of development to interpret of the findings. Recommendations based upon the results are suggested, and the unique aspects of the study are presented. Limitations and ideas for future research are discussed. The chapter ends with the conclusions from the study.

Overview of the Study

The purposes of this study were (a) to determine the extent to which the transition components of IEP documents were compliant with the transition requirements of the most recent authorization of IDEIA, (b) to determine the extent to which the transition components of the IEP documents provided evidence of substantiated best practices in transition planning, (c) to determine the effects that disability category and ethnicity had on compliance and practices regarding transition planning as evidenced in the transition components of the IEP documents, and (d) to determine the relationship between overall compliance and best practices as evident in the transition components of the IEP documents. The sample for the study included 212 secondary students who had as a primary disability either a developmental disability (i.e., autism or intellectual disability), an emotional disorder, or a learning disability; and who were African American,

Caucasian, or Hispanic. Several types of analyses were conducted including descriptive, multiple logistic regression, and Spearman's rho correlation.

Summary of the Results

Compliance

Compliance as an overall construct was measured by summing the presence of full compliance of the five components of compliance (i.e., IEP Team, Timelines, Postsecondary Goals, Annual Goals, and Transition Services) that were evident in the IEP documentation. Using this method, the mean level of full (i.e., 100%) and overall compliance was 2.03 ($SD = 1.238$, $range = 0-5$). More specific findings from each of the five components of compliance are presented below:

1. IEP Team

- a. The core members of the IEP team were invited to over 96%, attended over 90%, and contributed to over 91% of the IEP meetings that addressed transition.
- b. Fifty-seven percent of the IEP documents showed evidence of inviting all of the core IEP team members, seeking parent or adult student consent to invite agency representatives if warranted, and ensuring the contribution of absent IEP members.
- c. Career and technology educators were invited to nearly three-fourths of the IEP meetings and they contributed to the meetings over 66% of the time.

2. Timelines

- a. Forty-two percent of the IEP documents met all of the required timelines regarding having transition services in place when the student is 15 years of age, ensuring that the transition services are updated annually, advising the parent and student that upon the age of majority rights transfer to the students, and providing a summary of performance at the student's dismissal meeting.

3. Postsecondary Goals

- a. Forty-five percent of the IEP documents had all of the student's postsecondary goals (i.e., education/training, employment, and independent living if needed) written in a measurable manner.
- b. Of the three types of postsecondary goals, independent living goals were the goals that were most often measurable (i.e., 77% were measurable, compared to 59% of the education/training goals and 52% of the employment goals).

4. Annual Goals

- a. The number of annual goals ranged from 0 to 50 ($M = 5.73$, $SD = 7.01$).
- b. Thirty-eight percent of the IEP documents did not have any annual goals that were measurable, and 69% of the IEP documents had one or more annual goals that were not measurable. Almost 31% of the IEP documents had 100% of their annual goals measurable.

- c. Some of the IEP documents did not have any annual goals that supported students' education/training postsecondary goals (12%), employment postsecondary goals (13%), and independent living goals (14%).

5. Transition Services

- a. Only 27% of the IEP documents addressed all of the required transition services (i.e., instruction, course of study, related services, community experience, and employment and adult living objectives), linked the transition services to the postsecondary goals, and provided evidence that the transition services were based on the student's needs, strengths, preferences, and interests.
- b. There were many IEP documents that did not have transition services that directly supported the students' education/training postsecondary goals ($n = 50$, 23.6%), employment postsecondary goals ($n = 60$, 28.3%), or independent living postsecondary goals ($n = 74$, 34.9%).
- c. Over 80% of the IEP documents indicated that the transition services were based on the student's needs, strengths, preferences, or interests.

Best Practices

There were eight transition practices (i.e., community-agency collaboration, family involvement, general education inclusion, paid or unpaid work experience, employment preparation program, social skills training, daily living skills training, and self-determination skills training) identified as substantiated, and the mean level of these practices as evidenced in the IEP documents was 4.89 ($SD = 1.569$, $range = 1 - 8$). More specific findings pertaining to the eight substantiated transition practices are presented below:

1. Community and Agency Collaboration

- a. Fifty-nine percent of the IEP documents had evidence of community-agency collaboration in the form of either agency representatives contributing to the development of the transition components of the IEP document or local education agencies providing community and agency information to the student and parent.
- b. Community agency representatives were the least likely group of individuals to participate in the IEP meetings of the students in this study; however, the same number of community-agency representatives who were invited also contributed to the IEP meetings.

2. Family Involvement

- a. Evidence of family involvement was apparent in 72% of the IEP documents.

3. General Education Inclusion

- a. Forty-six percent of the IEP documents had evidence of general education inclusion in the form of either students being educated in a mainstream instructional setting, taking state standardized tests that are consistent with general education, or having the graduation option B (i.e., completing the minimum curriculum and satisfactory performance on exit level assessments).
- b. Approximately half of the IEP documents did not indicate a student's graduation option.
- c. Approximately 80% of the students' IEP documents indicated the students' graduation types (i.e., graduation plans).
- d. Only 37 of 65 students who had education/training postsecondary goals were taking the coursework required for the recommended graduation plan that is required for entry into postsecondary educational institutions.

4. Paid or Unpaid Work Experience

- a. Forty percent of the students had engaged in paid or unpaid work experience.

5. Employment Preparation Program
 - a. Over three-fourths (76%) of the students' IEP documents indicated that the students had participated or were planning to participate in employment preparation courses such as Career and Technical Education.
6. Social Skills Training
 - a. Adequate social skills or needed social skills training was evidenced in the annual goals, postsecondary goals, and transition services of 77% of the students' IEP documents.
7. Daily Living Skills Training
 - a. Ninety-two percent of the students either had appropriate, functional daily living skills or were receiving training in daily living skills development.
8. Self-Determination Skills Training
 - a. Evidence of self-determination skills or self-determination training was apparent in 30% of the IEP documents.

Relationship between Overall Compliance and Overall Best Practices

1. A moderate correlation of $r = .429$ was found regarding the relationship between the levels of overall compliance and overall best practices.

Disability Category and Ethnicity

A student's disability category and ethnicity were found to be influencing characteristics for increasing or decreasing the probability of an IEP document being compliant and having evidence of best practices. Statistically significant relationships are listed below. The reference group for these analyses was students who were Caucasian and had a Developmental Disability:

1. Emotional Disability
 - a. Having an emotional disability was a predictor for not having an IEP document that was compliant with IDEIA regarding annual goals and transition services.
 - b. Having an emotional disability was a predictor for not finding evidence of community-agency collaboration, family involvement, employment preparation program participation, and daily living skills.
 - c. Having an emotional disability was a predictor of being educated in a general education setting.
2. Learning Disability
 - a. Having a learning disability was a predictor for not having measurable annual goals that supported postsecondary goals.

- b. Having a learning disability was a predictor for having an IEP document that did not provide evidence of family involvement, employment preparation program participation, and self-determination.
 - c. Having a learning disability was a predictor for being included in the general education curriculum.
3. African American
- a. Being African American was a predictor for having an IEP document that was compliant regarding the IEP team and annual goals.
 - b. Being African American was a predictor for having an IEP document that did not provide evidence of family involvement or employment preparation program participation.
4. Hispanic
- a. Being Hispanic was a predictor for having an IEP document that was not compliant regarding annual goals.

Discussion

Support for the Lifespan Theory of Development

This study used the lifespan theory of development as a framework explaining transition outcomes in employment, independent living, and relationships. The lifespan theory asserts that development is lifelong, multidimensional, and plastic (Berk, 2007). Thus, it recognizes that individuals change physically, cognitively, and emotionally/socially throughout the lifespan, and that individuals are able to adapt or

change based upon the events that occur. The theory also posits that development is influenced by multiple, interacting forces such as age-graded influences, history-graded influences, and non-normative influences. Therefore, all adolescents experience the physical changes associated with puberty, but the adolescent with a non-normative influence (e.g., disability) will have additional factors that contribute towards development. History-graded influences such as the transition movement and legislation such as NCLB and IDEIA also contribute to the transition planning practices for the student. The results from this study support the application of the lifespan theory to transition planning which ultimately leads to transition outcomes. Using this framework, the major findings of the study will be discussed, as well as the relationship of the study to previous research.

Age-graded Influences

All secondary students, whether formally or informally, plan for the transition to the postsecondary world. Students who do not have a disability and an educational need for special education services plan for transition by determining the appropriate course of study needed to achieve his or her postsecondary goals. Guidance and advice is provided to the student in a general manner, and specialized advice is only provided upon request. However, adolescent students with disabilities need more supports such as individualized, specialized transition planning in order to increase effective transitions (Greene, 2003; Kohler, 1993).

History-graded Influences

History-graded influences that are pertinent to this study include the transition movement and related educational legislation. The transition movement in special education began during the 1980's (Halpern, 1991; Will, 1984), and has undergone changes in conceptualization through the years. With each re-authorization of IDEA since 1990, legislators have mandated and further elaborated the transition compliance requirements. Concurrently, researchers have examined the level of compliance with each authorization of IDEA and have studied practices that lead to improved postschool outcomes. This study adds to the literature by providing information about compliance with IDEIA (2004) and best practices in transition planning as evidenced in the IEP document.

Compliance

In this study, full compliance was found in less than half of the IEP documents. Although this finding cannot be directly compared to previous studies on transition compliance because other studies did not conceptualize overall compliance in the same manner as this study (i.e., overall compliance consisted of full compliance on the five components), some of the previous studies did provide generic statements regarding overall compliance with transition mandates. Tillman and Ford (2001) found that the IEP documents they reviewed were not fully compliant, and other researchers (Blankenship, 2004; Everson, Zhang, & Guillory, 2001; Grigal et al., 1997; Shearin, Roessler, & Schriener, 1999; Steele, Konrad, & Test, 2005) indicated that the IEP documents they reviewed were generally compliant with the transition components of IDEA.

Being generally compliant with IDEIA is not the goal; being fully compliant is. Full compliance should be the foundation; but in this study and others' (e.g., Blankenship, 2004 Everson, Zhang, & Guillory, 2001), it appears that full compliance is an unattained goal. Surely, compliance with IDEIA does not guarantee that a student will successfully transition from high school to the postsecondary realm, but it does set minimum standards that the local education agencies were not achieving. It is clear that educators need additional training to be more aware of the specifics of IDEIA so that they can ensure students' IEP documents are in compliance.

In addition to examining compliance with IDEIA (2004) holistically, this study segmented compliance into five components: IEP Team, Timelines, Postsecondary Goals, Annual Goals, and Transition Services. This was done because compliance is a multi-faceted construct that necessitates a more detailed view to facilitate understanding. Each of the compliance components and the major findings associated with the components are discussed.

IEP team. Regarding the IEP team and its role in transition planning, IDEIA (2004) requires local education agencies to invite the core IEP team members, seek consent to invite agency representatives if warranted, and ensure the contribution of absent IEP team members. The core IEP team is to consist of the student, the parent, at least one general education teacher, at least one special education teacher, a representative of the local educational agency (e.g., school administrator), an individual who can interpret evaluation results, and anyone else who has expertise regarding the student. The adult student or the parent and the school district may agree that one or more

of the IEP team members may be excused from attendance at the actual meeting if written input into the development of the IEP is provided prior to the meeting (IDEIA, 2004).

Only 57% of the IEP documents in this study included documentation of invitation of the required core IEP team members, evidence of consent for inviting agency representatives, and contribution of the required IEP team members. Initial reaction to this finding is that it is lower than previous studies have shown. However, studies (e.g., Grigal et al., 1997; Powers et al., 2005) that have investigated compliance regarding the IEP team only tallied individual attendance at the meetings. This study did not only tally attendance, it tallied contribution to the IEP meeting. Attendance at the IEP meeting signifies a contribution, but attendance is not the only way to contribute to an IEP meeting. This study also factored in invitation to the meeting and whether or not the local education agency sought the consent of the adult student or family when agency representatives needed to be invited.

The student and his or her parents are the most important members of the IEP team, as it is their lives that will be most affected by the outcomes of the transition from school to the postsecondary world (Kim & Turnbull, 2004; Turner, 2001). Because of this tenet, IDEIA requires the invitation and contribution of both the student and parent. The local education agencies in this study invited students to 92.9% ($n = 197$) of the IEP meetings that addressed transition; parents were invited to 97.2% ($n = 206$) of the meetings. This is an area in which the local education agencies were doing well, as the optimal level would be 100% invitation. Interestingly, the same number of students who

were invited also contributed to the IEP meetings, but parents only contributed to 72.6% ($n = 154$) of the meetings. This level of parent participation is lower than the 90% participation rate that the National Longitudinal Transition Study -2 found (Newman, 2004), and is a red flag indicating that the school districts in this study need to do a better job of encouraging parental participation or contribution in the IEP meeting that discusses transition. Parents have related to researchers numerous ways for educators to promote parental participation during IEP meetings; including honestly communicating with parents about transition, collaborating with parents to facilitate the reaching of goals, connecting families to other families and community professionals who can help with the transition process, caring about the student and the family, and celebrating students' strengths and achievements (deFur, Todd-Allen, & Getzel, 2001).

In addition to the core group of required IEP team members, there are other individuals that may be a part of the student's IEP team when transition is discussed. A notable finding was that career and technology educators were invited to nearly three-fourths of the IEP meetings and that they contributed to the meetings over 66% of the time. Career and technology educators are only required to be invited when they have some expertise that can be utilized during the meeting, and previous studies have not reported the invitation and contribution rates for career and technology educators at IEP meetings that discussed transition. The finding that many of the IEP teams included career and technology educators shows that the local education agencies in this study recognized the importance of employment preparation courses and the knowledge that these educators possess, especially when it comes to assisting a student in reaching his or

her postsecondary goals. Participating in employment preparation programs such as career and technology courses is linked to better postschool outcomes (e.g., Baer et al., 2003 and Colley & Jamison, 1998), so inviting career and technology educators to the IEP meeting is a movement towards the student enrolling in career and technology courses.

Timelines. Legal compliance often includes timelines for the implementation or completion of specific activities. IDEIA (2004) is no exception. The timelines pertaining to transition include (a) having transition services in place when the student is 15 years of age, (b) ensuring that the transition services are updated annually, (c) advising the parent and the student that upon the age of majority rights transfer to the student, and (d) providing a summary of performance at the student's dismissal IEP meeting. It is unacceptable that only 41.5% of the IEP documents were fully compliant when it came to meeting all of the timelines set in IDEIA because obtaining full compliance in this component of compliance is merely a matter of adhering to the well-specified timelines. By not keeping current with the timeline requirements, local education agencies are not providing their students the time needed to plan and meet their postsecondary goals. To remedy this type of administrative oversight, local education agencies need to make better use of the policies and procedures that are already in place to keep current with meeting timelines.

Postsecondary goals. One of the most important parts of the IEP document pertaining to transition is the listing of the student's measurable postsecondary transition goals (deFur, 2003; Halpern, 1994). Students are required to have postsecondary goals

that address education and/or training, employment, and independent living when applicable. This study utilized the standards set by O'Leary (2008) to determine if the postsecondary goals were measurable. Thus, in order for a postsecondary transition goal to be considered measurable, it had to be an outcome that will occur after leaving high school and it had indicate what the student will do. A measurable postsecondary transition goal is not a process statement (i.e., it is not a statement of what the student *plans* to do; it is a statement of what the student *will* do). Overall, only 44.8% of the IEP documents had all of the student's postsecondary goals (i.e., education/training, employment, and independent living if needed) written in a measurable manner. This finding is far from what is expected because of the importance of the student's postsecondary goals. If a goal is not written in a measurable manner, then how can a local education agency determine if the student has met that goal? A closer look at this finding shows that just over half of the IEP documents contained measurable education/training ($n = 124$, 58.5%) and employment ($n = 111$, 52.4%) postsecondary goals. In contrast, 77.4% ($n = 164$) of the IEP documents had measurable independent living postsecondary goals, even though this type of goal was optional unless the student required an independent living goal. It seems ironic that the goals that are required to be addressed by IDEIA are not as well-written as the goals that are only required when a student has a deficit in independent living skills. Clearly, training is needed to help special educators write measurable, postsecondary goals.

Annual goals. Typically, IEP documents have a few annual goals, each of which has several short-term objectives. The IEP documents in this study varied in the number of annual goals. Some ($n = 24$, 11.3%) of the IEP documents did not have any annual goals, while other IEP documents had up to 50 annual goals! It can be assumed that the individuals charged with writing the annual goals and objectives were confused about the differences between goals and objectives. Plus, a large portion of the IEP documents did not have all of their annual goals written in a measurable fashion. In fact, 69.3% ($n = 147$) of the IEP documents had one or more annual goals that were not measurable. It seemed that the individuals writing the goals did not understand the importance or role of the annual goal, because many of the annual goals were omitted or incomplete.

Having measurable annual goals is important because school districts and states are required to report data regarding Indicator 13, i.e., the “percent of youth aged 16 and above with an IEP that includes coordinated, measurable, annual goals and transition services that will reasonably enable the student to meet the post-secondary goals.” (20 USC 1416(a)(3)(B) Although districts and states can be Indicator 13 compliant by only having one measurable annual goal that reasonably supports the student being able to attain his or her post-secondary goals, it should be the goal of the school districts to make all annual goals measurable. If the annual goals are not measurable, how can districts indicate that the student is or is not making progress towards his or her goals?

Along with the issue of measurability, Indicator 13 also requires that at least one annual goal supports the student's postsecondary transition goals. There seems to be a lot of subjectivity in this aspect of Indicator 13 because one can argue that almost any annual goal could be supportive of a student's postsecondary goals. For this study, IEP documents that had annual goals that in any way could be supportive of a student reaching his or her postsecondary goals, those annual goals were deemed supportive of the postsecondary goals. Yet, there were some IEP documents that did not have any annual goals that supported the students' education/training postsecondary goals ($n = 26$, 12.3%), employment postsecondary goals ($n = 28$, 13.2%), and independent living postsecondary goals ($n = 30$, 14.2%). The absence of annual goals that support postsecondary goals is concerning because it seems that the value of the student's postsecondary goals is underestimated. Planning a student's educational pathway and annual goals cannot occur successfully unless the student's postsecondary goals are used as the target (deFur, 2003; Greene, 2003; Halpern, 1994; Wehman, 2006b). This is another area in which educators need training.

Transition services. Transition services include instruction, course of study, related services, community experience, and employment and adult living objectives that facilitate the student's reaching of his or her postsecondary goals. It should be noted that not every transition service will be required for every student to reach his or her postsecondary goals. However, IDEIA (2004) does require that every transition service be addressed, even if it is determined that the transition service is not necessary for the student to reach his or her postsecondary goals. In that situation, the school district should

indicate that the transition service was considered but that it was not deemed necessary due to supporting evidence.

Indicator 13 also requires that the transition services be aligned with the student's postsecondary goals. Yet, there were many IEP documents that did not have transition services that directly supported the students' education/training postsecondary goals ($n = 50$, 23.6%), employment postsecondary goals ($n = 60$, 28.3%), or independent living postsecondary goals ($n = 74$, 34.9%). Again, the value of the postsecondary goal in transition planning seemed to be underestimated. Additionally, a student's transition services are to be based on the student's needs, strengths, preferences, or interests. Over 80% of the IEP documents reviewed in this study indicated that the transition services were based on the student's needs, strengths, preferences, or interests. At surface level, this finding is positive. However, the IEP documents did not give specific examples of these needs, strengths, et cetera. What the IEP documents did provide was a checkmark indicating that the transition services were based upon the needs, strengths, preferences, or interests. This seems to be an example of districts following the letter of the law, but not following the spirit of the law. On the other hand, a student's needs et cetera may have been addressed during the IEP meeting and the transition services may have actually been based on these needs, strengths, preferences, or interests, but the IEP document did not elaborate.

In summary, only 27.4% of the IEP documents addressed all of the required transition services, linked the transition services to the postsecondary goals, and provided evidence that the transition services were based on the student's needs, strengths, preferences, and interests. This finding is very disappointing as it shows that transition services are not being utilized to their full potential. Educators need to understand the importance of transition services and how the remainder of the IEP should be linked to the transition services.

Best Practices

The transition movement has progressed via the work of families, educators, and researchers. There were eight transition practices identified as substantiated by reviewing transition research, and evidence of these practices was sought in the IEP documents. The mean level of these practices as evidenced in the IEP documents was 4.89 ($SD = 1.569$, $range = 1 - 8$). This means that an average of almost five out of eight practices were evident in the IEP documents. Ideally there would be evidence of all eight of the practices, but because the practices are not required by IDEIA (2004) it is not surprising that only about half of the practices were found in the IEP documents. Although this overall view of the level of transition best practices in the IEP documents is beneficial, a more detailed discussion regarding the eight practices follows.

Community-agency collaboration. For many students with disabilities, it is necessary to enlist the assistance of the community and its agencies in order for the student to have an optimal postsecondary outcome (Benz, Yovanoff, & Doren, 1997; Heal et al., 1990). A problem that many students, families, and educators have regarding

community agencies is a lack of understanding about what is available and how to obtain services (Brooke, Green, Revell, & Wehman, 2006). Because adult services are eligibility-based as opposed to entitlement-based like special education services, families rely on educators to foster the bridge from special education services to adult services in the community. The results from this study showed that 59% of the IEP documents had evidence of community-agency collaboration in the form of either agency representatives contributing to the development of the transition components of the IEP document or local education agencies providing community and agency information to the student and parent. This finding seems to indicate that educators are not knowledgeable about community and agency programs. As a result, students and families may not receive the services that can aid in the achievement of their postsecondary goals.

One way for local education agencies to involve community agencies in the transition process is to invite them to participate in a student's IEP meetings. Unfortunately, community agency representatives were the least likely group of individuals that participated in the IEP meetings of the students in this study. Yet, what is interesting is that the number of community-agency representatives who were invited and who contributed to the IEP meetings was essentially equal. In other words, if a community agency representative was invited to the IEP meeting, then the representative made sure to contribute to the meeting either by attending or providing information. Although the numbers were low regarding the invitations and contributions of community agency representatives, it is a positive finding that when they are invited to the meetings, they contribute.

Family involvement. Family involvement has long been considered a best practice in transition planning (e.g., Grigal & Neubert, 2004; Kohler, 1996), and there is much research supporting the benefits of family involvement (Lindstrom & Benz, 2002; Morningstar, Turnbull, & Turnbull, 1995; Sample, 1998; Schalock et al., 1986). This study found evidence of family involvement in 71.7% of the IEP documents. Family involvement did not necessarily equal attendance at the IEP meeting, as there are other ways of being involved in the student's transition planning. However, the percentage rate for family involvement was lower than expected based upon the considerable amount of literature promoting family involvement. There are many reasons for sub-optimal levels of family involvement at the IEP meetings of secondary students including work-related issues that prohibit attending the meetings, communication barriers, lack of parent understanding of transition, and poor relationships between families and educators (deFur, Todd-Allen, & Getzel, 2001; Landmark, Zhang, & Montoya, 2007; Morningstar, Turnbull, & Turnbull, 1995; Schuster, Timmons, & Moloney, 2003). However, it should be noted that parents are involved in different ways that are not always apparent in the IEP documentation. For example, researchers (Geenen, Powers, & Vasquez, 2001; Geenen, Powers, Vasquez, & Bersani, 2003; Landmark, Zhang, & Montoya, 2007) have noted that minority parents participate the transition process by providing their children with home support such as teaching about family values and culture.

General education inclusion. General education inclusion in the IEP documents was manifested by at least one of the following conditions: (a) being educated in a mainstream instructional setting, (b) taking state standardized tests that are consistent with general education, or (c) having graduation option B indicated (refer to Table 31 for descriptions of the graduation options). Based upon this standard, 46% of the IEP documents had evidence of general education inclusion. IDEIA (2004) does not require students to be educated in a mainstream setting; but it does require students to be educated in the least restrictive environment, which could be a mainstream environment.

Additionally, most higher education institutions require that students have a regular diploma and satisfactory performance on state standardized tests (i.e., Option B) in order to gain admittance. All students in Texas receive a regular diploma, but differences in graduation options and plans are indicated on the diplomas. It was notable that only 49 IEP documents indicated that the respective students were expected to graduate using Option B; yet, 65 students had education/training postsecondary goals of attending a community college or university. There is a discrepancy between the number of students with postsecondary education goals of receiving higher education and the number of students who plan to graduate with the appropriate graduation option needed for higher education, indicating that there is a disconnect between a student's postsecondary goals and the remainder of the student's education.

Regarding Option C and its three options for graduation, there is an issue regarding what is meant by employability skills and self-help skills. The state does not specify what the skills are or how mastery of these skills is proven. Of the three options under Option C, the mastery of employability and self-help skills was the most frequently indicated option. It may be that this option was chosen by default. In other words, if a student is not able to meet the requirements for Option B and it is not appropriate for the student to continue his or her secondary education until he or she no longer meets the age eligibility, then Option B is the last choice. Under Option B, a choice must be made regarding why the student is eligible for graduation. If the student does not have full time employment or if the student has access to services that are not the legal responsibility of the school district, then the mastery of employability and self-help skills is the choice left by default. Yet, in the IEP documentation in this study, there frequently was not any indication in the IEP documents that supported the assertion that a student had mastered employability and self-help skills. This issue is important because local education agencies who use Option C with the mastery of employability and self-help skills are indicating that the students exiting high school are able to be employed and live independently. However, there is much data (e.g., Blackorby & Wagner, 1996; NOD, 2004) available that shows adults who have disabilities are not employed or living independently at the same rates as individuals without disabilities. If schools are producing graduates who have disabilities and who possess employability and self-help skills, then why are the employment and independent living rates so low for this group of individuals?

Table 31
Texas Graduation Options

Graduation Option	Description
Option B	Completion of minimum curriculum and credit requirements and satisfactory performance on exit level assessments
Option C	<p>Completion of IEP requirements and one of the following conditions:</p> <ul style="list-style-type: none"> • Full-time employment and sufficient self-help skills to enable student to maintain employment without direct or ongoing educational support from the local education agency • Demonstrated mastery of specific employability skills and self-help skills which do not require direct ongoing educational support of the local education agency • Access to services that are not within the legal responsibility of the local education agency, or employment or educational options for which the students has been prepared by the academic program
Option D	Student no longer meets age eligibility requirements and has completed the requirements of the IEP

Note. This information is from Texas Administrative Code, TAC 89.1070(b).

In addition to graduation options, Texas also has different graduation types. Graduation types are synonymous to graduation plans. Approximately 80% of the students' IEP documents indicated the students' graduation types. This information is important considering the linkage between postsecondary education goals and a student's graduation type and options. Students who have as a postsecondary education goal of going to college will most likely need to take the high school coursework specified in the recommended graduation plan. The finding that so many of the IEP documents did

indicate the students' graduation types is favorable because it shows that students with disabilities are engaging in long-term planning for graduation. However, 65 of these students had education/training postsecondary goals of attending a community college or university; yet, only 37 students were taking the coursework required for the recommended graduation plan. By not ensuring that students are taking the appropriate coursework for their postsecondary goals, local education agencies are not preparing students adequately for postsecondary education.

Paid or unpaid work experience. As indicated in the IEP documentation, only 40.1% ($n = 85$) of the students had engaged in paid or unpaid work experience during high school. This finding is particularly concerning because of the extensive volume of research (e.g., Benz, Lindstorm, & Yovanoff, 2000; Karpur, Clark, Caproni, & Sterner, 2005) that supports the relationship between work experience in high school and postsecondary employment. Reasons for the low rate of work experience may include the separation of academic and vocational education (Washburn-Moses, 2003); the lack of model programs that promote partnerships between schools and employers (Benz & Blalock, 1999); and educator lack of knowledge concerning appropriate models and pedagogical best practices (Targett, 2006).

Employment preparation program. Although local education agencies were not seemingly facilitating work experience, they were including students in employment preparation programs such as Career and Technical Education. In fact, over three-fourths (76.4%, $n = 162$) of the students had participated or were planning to participate in employment preparation programs. This is a positive finding because employment

preparation programs are generally based upon student interest, so it would appear that educators involved in transition planning are using their knowledge of students' interests to plan for the future employment of the students. The finding is also encouraging because of the extensive research (e.g., Gill & Edgar, 1990; Schalock, Holl, Elliott, & Ross, 1992) indicating that participation in employment preparation programs is linked to postsecondary employment.

Social skills training. Possessing adequate social skills has long been recognized as essential to success in employment and the community (Benz, Yovanoff, & Doren, 1997; Campbell et al., 1987; Wehman, 2006b). The schools in this study seemed to understand this, and as such 77% of the IEP documents included either statements that the student had appropriate social skills or was receiving social skills training. Additionally, social skills training was evidenced in annual goals, postsecondary goals, and transition services. The infusion of social skills training into multiple facets of the students' IEP documents is valuable because social skills are best learned in multiple, natural settings (Cronin & Patton, 1993).

Daily living skills training. Students were only required to have daily living skills addressed during their transition planning if they had deficits in daily living skills. Daily living skills training, like the other types of skills training, could be evidenced in annual goals, postsecondary goals, or transition services. Most of the students (92%) either had appropriate functional daily living skills or were receiving training in this domain. Initially, this finding seemed unexpected because daily living skills development is only required when the student has a deficit. It seems ironic that a practice that is specifically

not required unless the student has a deficit, is the practice that is most implemented or documented. However, the high percentage may actually be a reflection of the students' high level of daily skills abilities, rather than a reflection of the implementation of training regarding daily living skills.

Self-determination skills training. The possession of self-determination has been advocated by many experts in the transition field (e.g., Field, Martin, Miller, Ward, & Wehmeyer, 1998). Yet, only 26% of the IEP documents in this study indicated that a student either had self-determination skills or was receiving training in self-determination. This finding was not unexpected because of the lack of educator knowledge and competence regarding teaching self-determination (Agran, Snow, & Swaner, 1999; Grigal, Neubert, Moon, & Graham, 2003; Wehmeyer, Agran, & Hughes, 2000). Additionally, the low level of evidence of self-determination in the IEP documents can be attributed to the fact that IDEIA (2004) does not require self-determination skills training in its transition requirements at this time. Perhaps because IDEIA does not specifically mention self-determination, schools are not documenting self-determination training in the IEP documentation.

Relationship between Compliance and Best Practices

A moderate correlation was found between the overall level of compliance and the overall level of evidence of best practices. This correlation was higher than expected because of the assumption that compliance does not necessarily equal best practices (deFur, 2003). However, some level of correlation is logical because some best practices have been mandated by IDEIA (2004). This finding cannot be compared to other studies' findings because other studies have not measured overall compliance and best practices.

Non-Normative Influences

Disability and ethnicity, which can both be considered non-normative influences, were shown to influence transition planning as evidenced in the IEP documents.

Disability Category

A student's category of disability does seem to influence some of the areas of compliance and evidence of best practices in the IEP document. In particular, statistically significant findings regarding a student's disability category were found for students who had emotional disabilities or learning disabilities. Having an emotional disability decreased the chances that an IEP document was fully compliant in two of the components of compliance: Annual Goals and Transition Services. In other words, students with emotional disabilities are less likely to have an IEP document that is fully compliant regarding Annual Goals that are measurable and that support the student's education/training, employment, and independent living postsecondary goals; and students who had emotional disabilities were less likely to have IEP documents that were fully compliant regarding having all of the areas of the transition services addressed,

having transition services that were aligned with the student's postsecondary goals, and having transition services that were based on the student's needs, strengths, preferences, or interests. Additionally, having an emotional disability decreased the chances of finding evidence of best practices including community-agency collaboration, family involvement, employment preparation, and daily living skills in the IEP documents.

The findings regarding the IEP documents of students with emotional disabilities are disheartening because of the particularly dismal postschool outcomes this group of individuals have (Morningstar & Benitez, 2004; Vander Stroep, Davis, & Collins, 2000). If individuals with emotional disabilities are to have successful postschool outcomes, local education agencies need to ensure that the students' transition planning goes beyond minimal compliance to include best practices in transition. Alternately, there was one potentially positive finding regarding students with emotional disabilities. That is, having an emotional disability increased the chances of being educated in a general education setting. Of course, being educated in the general education setting may be a double-edged sword in that the student with an emotional disability receives the general curriculum, but the student also needs intensive supports regarding transitioning to postsecondary environments (Carter, Lane, Peirson, & Glaeser, 2006).

Having a learning disability decreased the chances of having measurable annual goals that supported postsecondary goals. Regarding substantiated best practices in transition; having a learning disability decreased the chances of finding evidence of self-determination, family involvement, and employment preparation in the IEP document. Educators may inaccurately perceive students with learning disabilities as competent

enough that they will have minimal problems achieving their postsecondary goals; thus, the role of the educator is not as important as it may be for students with other disabilities that are more readily apparent (Getzel, Gugerty, & McManus, 2006). This same faulty perception applies to teaching students with learning disabilities to be self-determined (Getzel, Gugerty, & McManus, 2006). Educators may believe that students with learning disabilities do not need instruction in self-determination, but research shows that students with learning disabilities actually do benefit from self-determination training (Virginia Commonwealth University, 2004). Similarly, students with learning disabilities have a greater chance of being included in the general education curriculum than students with other disabilities. Students who are Caucasian and who have learning disabilities are the most likely to be included in general education courses.

Ethnicity

A student's ethnicity was also found to influence the level of compliance and evidence of best practices in IEP documents. Statistically significant findings regarding ethnicity centered on African American and Hispanic students. In particular, being African American decreased the chances of not being fully compliant regarding the compliance components of the IEP Team and Annual Goals. Being African American also decreased the chances of finding evidence of Family Involvement or Employment Preparation in the IEP document. Being Hispanic decreased the chances of being fully compliant regarding the component compliance area of Annual Goals. Some of these findings confirm other studies' findings. For example, Cameto, Levine, and Wagner

(2004) also found that African American students were less likely to have all of the required participants taking part in the IEP meetings that addressed transition.

Recommendations

Based upon the findings of this study, several recommendations can be made in the following areas: understanding transition, developing and implementing a transition philosophy, using available resources, utilizing natural supports, writing measurable goals, promoting work experience, facilitating self-determination, and paying attention to disability category and ethnicity. Most of the recommendations are not novel. In fact, educators have a wealth of resources to draw from to create compliant IEP documents that include best practices in transition. The problem seems to be a lack of awareness, and the following recommendations should serve as a basis for creating more compliant IEP documents that include evidence of substantiated best practices.

Understand Transition in IDEIA

In order for educators to ensure that IEP documents are compliant regarding transition, the educators need to have an adequate understanding of the law and its intent. This knowledge is taught in teacher preparation programs, but may not be meaningful to the educator until he or she is the teacher of record for a secondary student with a disability. Plus, special education law is frequently updated due to case law and reauthorizations. Local education agencies periodically bring in attorneys to discuss issues of compliance during staff development days, but these trainings typically focus on keeping the local education agency out of due process. Instead of only focusing on preventing due process hearings, local education agencies need to spend time training

their educators to be compliant because it is the best for the student and the local education agency.

Training about IDEIA and the transition process is also needed for the students and their families. These individuals are pivotal in transition planning, and an understanding of the law is necessary so that they can serve as a balance to the educators during the transition planning process. Local education agencies and community organizations need to provide this type of training as a service to the community. If receiving training about transition planning is not desirable or feasible for the family, then the use of an advocate during the transition planning process is advisable.

Develop and Implement a Transition Philosophy

One of the biggest concerns that this study showed was that local education agencies did not seem to give transition planning the utmost attention that it deserved. All of a student's IEP should support the student's postsecondary goals. This means that the postsecondary goals need to be revisited at the beginning of every IEP meeting. If the special education aids and services do not support the postsecondary goals, then further consideration of the value and need for the aids and services needs to be made. IDEIA provides a foundation for transition with its transition requirements. Local education agencies need to go beyond meeting the letter of the law. They need to embrace the spirit of the law. This requires transition planning to be top priority, and it requires the inclusion of substantiated best practices. Developing a transition philosophy begins in teacher preparation programs, but does not end there. All educators who are responsible, or who may potentially be responsible, for students with disabilities need to develop a

transition philosophy. The only way for this to happen is for transition experts and teacher preparation programs to continue to stress the importance of transition, and to keep this issue on the forefronts of educators' minds.

Use Available Resources

Compliance appears to be form-driven (Grigal, Test, Beattie, & Wood, 1997). If a local education agency's IEP management software company does not have forms that are fully compliant, then obviously changes to the forms need to be made. However, educators need to be confident in using the forms as a basis or template for the IEP meeting. Checking off boxes on a form may signify compliance on paper, but educators really need to consider what each of the checkboxes on the forms is for. For example, there are several transition services noted in IDEIA that need to be addressed for all students. There is a Special Education Manager (i.e., the IEP management software that all of the local education agencies used in this study) form that prompts educators to consider each of the transition services. Educators need to be aware that not all students will require every service, but every service should be considered. If the service is not necessary, then the individual completing the IEP forms needs to indicate why the service is not necessary. Finally, educators need to not be constrained by the IEP software that their districts use. An IEP meeting is more than checking off boxes and filling in spaces on a form. Educators need to use the forms as a guide and truly individualize each student's educational plan.

Regarding complying with the time requirements set forth by IDEIA, there is no viable reason that local education agencies are not meeting these timelines. All of the local education agencies that participated in this study utilized Special Education Manager. A list of students who have upcoming requirements that have to be met by specific dates can be generated by Special Education Manager or the Public Education Information Management System (PEIMS) of Texas (TEA, 2009). Educators need to be more cognizant of the timelines and plan accordingly.

There are checklists (e.g., NSTTAC and TEA) that can help local education agencies check for compliance with Indicator 13, which constitutes a large part of the transition requirements. Because of the ease of use of these checklists, a similar checklist could be created to assist local education agencies in checking for compliance in the other areas of compliance. This type of checklist could be used periodically as a compliance check or at the conclusion of every IEP meeting.

Utilize a Student's Natural Supports

IEP teams need to utilize the expertise of a number of individuals. However, sometimes the knowledge the family contributes to the meeting is minimized. Local education agencies need to make more of an effort of obtaining the contributions of families during the transition planning process. Local education agencies may feel that it is beyond their control and responsibility to ensure that a parent or guardian attends the IEP meeting. Attendance really is not the issue. Contribution to the meeting is. Local education agencies must solicit information from the family if they are not able to attend. This can easily be accomplished by providing a questionnaire to the parents or guardians

when sending out the invitation to the IEP meeting. The questionnaire may be brought to the meeting to use as a catalyst for discussion, or may be returned to the school to be used in place of having the parent or guardian in attendance. Additionally, local education agencies can solicit information and consent from parents and guardians via a telephone call or a personal visit.

The community and its agencies can provide a wealth of information during transition. Local education agencies need to rethink how to involve the community members in transition planning. There are esteemed community members who would be pleased to serve as advocates for families. This is especially important for families of diversity. By forging relationships with community members, local education agencies have the opportunity to train them about how special education and adult services function. Research has suggested that African American parents, in particular, seek guidance from their friends, family, and religious leaders (Landmark, Zhang, & Montoya, 2007).

Families and educators need on-going training regarding community agencies. Transitioning from an entitlement program to eligibility-based programs can be confusing. Not all educators need to be knowledgeable regarding the services and eligibility requirements of community agencies; however, all educators do need to be familiar and do need to know where or who to go to for this information. There also needs to be a better system of communicating with agency representatives.

Other educators that are not a part of the core IEP team can make significant contributions. For example, including career and technology educators in the IEP meeting can add to the transition planning for the student by providing expertise in potential vocational domains. If career and technology educators feel that they do not have anything to contribute or do not understand the value of their role, there is training geared towards their needs. For example, the Career Technical Special Populations Training and Resource Education Center (2009) provides a wealth of information including printed materials, resource texts, and online streaming video modules.

Write Measurable Goals

Training that addresses writing measurable postsecondary and annual goals is sorely needed. The standards set by O'Leary (2008) are a good resource for training educators to write measurable postsecondary goals. This type of training would most likely be utilized during inservice trainings. Writing measurable annual goals need to be stressed more in preservice trainings, but also followed up periodically during inservice trainings. Annual goals need to include a timeline for completion and mastery criteria. There needs to be a clear link between a student's annual goals and postsecondary goals.

Promote Student Work Experience

Local education agencies need to promote student work experiences, especially for students who intend to go directly into employment following graduation (Benz, Lindstrom, & Yovanoff, 2000). There are several reasons that local education agencies may not facilitate work experiences such as focusing on academic rather than vocational education, not having the funding for providing transportation to work sites, not having

relationships with the community businesses, and not understanding the youth labor laws. Fortunately, there are solutions to all of these hindrances. Vocational education is appropriate for many students, and as discussed previously, there needs to be alternative educational strands for students. Transportation to work sites can be via public transportation or can be paid for with the use of funds from grants or school-based enterprises. Educators can learn how to market their students to the community, and there are training materials available about work-based learning and how to implement it (e.g., *The Handbook for Implementing a Comprehensive Work-Based Learning Program According to the Fair Labor Standards Act* by the National Center on Secondary Education and Transition, 2005). There are also model programs (e.g., Texas A&M University's Brazos Valley Employment Project [2008] and the University of Wisconsin-Madison's Project Summer [n.d.]) that are designed to provide work experiences to secondary students with disabilities.

Similarly, employability and self-help skills need to be better conceptualized when used for determining a student's graduation option. Noting that a student is ready for graduation because the student possesses employability and self-help skills is not a valid response unless the employability and self-help skills are concretely specified. Therefore, definitions for these skills need to be standardized when used for determining that a student is ready for graduation. Plus, by more clearly defining these terms earlier in a student's education, local education agencies can continually assess the students while the students are receiving real work experiences.

Facilitate Student Self-determination

Perhaps more so than during any other period of development, self-determination is vital during adolescence. Adolescents are bombarded with decisions and choices to be made regarding their futures. Regarding students with disabilities, the concept of self-determination seamlessly integrates with the concept of transition. However, the infusion of self-determination training into classroom instruction has not been integrated very well even though research links self-determination to postschool outcomes (e.g., Benz, Lindstrom, & Yovanoff, 2000). Therefore, current and future educators need to be taught why and how to teach self-determination to students with disabilities. This topic needs to be taught to all preservice special education teachers, no matter their intended grade level for teaching, as self-determination can be developed during different stages of a student's education. There are many self-determination curricula available (e.g., *Steps to Self-Determination*; Hoffman & Field, 2005); however, an educator does not necessarily need to use a curriculum to infuse elements of self-determination into his or her lessons. Self-determination and how it is conceptualized by different cultures also needs to be taught so that Anglo educators are careful to not impose their culture's self-determination views on other cultures (Zhang & Benz, 2006). There needs to be a balance between a child's culture's view of self-determination and the Western view of self-determination.

Pay Particular Attention to Diverse Groups

Due to the findings in this study and others (Carter, Lane, Pierson, & Glaeser, 2006; Cummings, Maddux, & Casey, 2000; Rylance, 1998), local education agencies need to make concerted efforts to ensure that students with emotional or learning disabilities, in particular, are receiving the special education aids and services they need to effectively transition to the postsecondary environment. Also, the needs of students who are African American or Hispanic need to be closely monitored as these ethnicities were found to be predictors of lower compliance and evidence of best practices in the IEP documents that addressed transition. Educators also need to be aware of their biases and assumptions regarding students with particular ethnicities and disabilities because this study and others (Geenen, Powers, Vasquez, & Bersani, 2003) show that ethnicity and disability category influence compliance and provision of substantiated best practices in the transition planning process. Only by being aware of one's biases and assumptions can one make a concerted effort to not interject bias into what one does.

Uniqueness of the Study

This study was unique in several ways. First, it investigated compliance as specified in the 2004 reauthorization of IDEIA. To date, previous studies have not reported the level of compliance with IDEIA (2004). This study has added to the transition literature by investigating compliance with IDEIA. Second, the entire IEP document was reviewed. Other studies have only examined the transition portions of students' IEP documents. By holistically reviewing the entire IEP document, a more complete picture of the transition process during the IEP meeting was able to be obtained.

Third, the study delved deeper into compliance as a construct by segmenting overall compliance into five interrelated components: IEP team, timelines, postsecondary goals, annual goals, and transition services. This allowed compliance to be investigated at an overall level and at a more detailed level. Fourth, substantiated best practices were also measured at two levels: overall and by the eight individual practices. By measuring compliance and practices at the overall or general level, the relationship between compliance and best practices was able to be investigated statistically. Until this study, there has not been any research that statistically showed the relationship between the levels of overall compliance and best practices in the IEP document.

Limitations of the Study

Sample

As with many research endeavors in the social sciences, a balance must be struck between what is most empirically sound and what can be realistically achieved. This study was no exception, and there were several limitations. First, the sample was not a truly representative sample of the targeted population of secondary students in the region. Not all of the school districts agreed to participate in the study. Although reasons for non-participation were not provided, having the data from the other districts may have changed the results of the study. The sample obtained was purposeful and proportionate in that students were selected based upon the school district they attended, their ethnicity, and their disability category. The sample was obtained in a manner so that there were large enough sets of students in each of the disability and ethnicity categories. However, the Hispanic population was not as large as the other ethnicity populations, so the sample

drawn for that category was not as large. Another limitation that was related to the sample was that students with emotional disabilities were primarily served in residential settings. Residential settings included psychiatric treatment centers and state schools (i.e., institutions) which are served by public school districts. Some of the findings may have been affected because there may be differences in the students who are served in residential settings compared to other students with emotional disabilities who are not served in residential settings.

Data Collection

The instrument was reviewed by transition experts for content validity, but there were still questions on it that required one to use subjectivity. The decision to convert *NA* responses to *Yes* responses for most of the compliance questions also could have influenced the findings. The summary of performance questions, in particular, had some of the highest percentages of *Yes* responses. However, the percentages were inflated due to the decision to convert *NA* responses to *Yes* responses. The questions with the highest frequencies and percentages were the questions that queried whether or not a summary of performance and its respectful parts were present. It may not be a totally valid assumption that the IEP documents were exceptionally compliant on this aspect because most of the students were not required to have a summary of performance, but because of the decision to treat *NA*'s as *Yes*'s, the results may have been inflated. However, all of the frequencies and percentages provide the reader with a feel for how well the IEP documents were compliant.

Another possible limitation could be that evidence of compliance and best practices may have been influenced by the IEP software and respective forms used by the school districts. All of the districts used the same IEP software. This meant that the forms used in the IEP documents were similar across the districts. This actually helped with the reliability and consistency of the data collection, but the level of which the districts completed and customized the forms varied. For example, the form that addressed the transition services consisted listed and provided checkboxes for each of the required areas of transition services that needed to be addressed. There was also space for comments for each of the transition services. When the districts did not put a checkmark in the checkbox, then it was assumed that the particular transition service was not addressed. This decision was made for consistency. This also meant that perhaps a transition service was actually addressed during the IEP meeting, but the individual responsible for completing the form did not remember to check the checkbox indicating that the transition service was addressed. The study only gathered data from the IEP documents, so transition practices may have occurred that were not evidenced in the IEP documents. However regarding compliance, the IEP document is a legal document, and should have addressed all of the aspects of compliance that IDEIA lays out.

Future Research

The results of this study indicated that disability category and ethnicity can predict compliance and best practices in IEP documents. Other studies that have investigated compliance and practices in the IEP document primarily used descriptive statistics. More studies, such as this one, using more sophisticated statistical analyses are needed to further add to the evidence. In order for this to occur, sample sizes have to be large enough for comparisons to be made among the sub-groups (i.e., disabilities and ethnicities). Further studies are needed to determine why there are differences in compliance and best practices based upon disability category or ethnicity. These studies could be qualitative in design, or use a mixed methodology.

This study used archival data in the form of students' IEP documents to address the research questions. As such, some information may not have been readily apparent in the IEP documents. Thus, studies that directly observe the entire IEP process to search for compliance and evidence of transition best practices would be reasonable and would provide more information than can be found from only looking at archival documents. Another way to obtain information would be to utilize surveys about the planning process that students, educators, and parents undergo before, during, and following the IEP meetings that address transition. Finally, longitudinal studies that examine the relationship among compliance, practices, and postsecondary outcomes are needed.

Conclusion

The catalyst for this study was the idea (deFur, 2003) that an IEP document could be compliant regarding IDEIA's (2004) transition mandates, but still not incorporate substantiated best practices in transition planning. There is extensive data (e.g., Wagner, Newman, Cameto, Garza, & Levine, 2005) reporting the dismal postsecondary outcomes individuals with disabilities experience. Legislators have seemingly responded to the poor outcomes by holding local education agencies more accountable for their educational programs. In doing so, educational laws now provide minimum standards for transition planning. The limitation with minimal levels of compliance is that they are intended to be the bare minimum of what local education agencies are required to do but instead end up being, in actuality, the highest standard. As this study and previous studies (Steele, Konrad, & Test, 2005; Williams & O'Leary, 2001) show, even the bare minimum in transition standards has not been achieved.

Because of the recognition by transition leaders that more than compliance is needed in order for individuals with disabilities to effectively transition into postsecondary environments, best practices in transition have been espoused. Most of the transition practices promoted by transition leaders have been validated through the research literature for many years. Yet, as this study shows, IEP documents do not provide much evidence of the practices being utilized during transition planning. This does not necessarily mean that the identified best practices are not being used. However, when the emphasis is on compliance rather than what necessary for the student to achieve

his or her postsecondary goals, it is not surprising that local education agencies focus on meeting the letter of the law as opposed to the spirit of the law.

An encouraging finding from this study was that a higher level of compliance was related to a higher level of best practices as evidenced in the IEP documents. But, the levels of compliance and evidence of best practices in the IEP documents still are not at acceptable levels, especially for certain sub-groups. There is an abundance of literature showing that culturally diverse individuals have some of the worst postsecondary outcomes. So, too, is there literature that shows poorer postschool outcomes for individuals with particular disabilities such as emotional disabilities. The results from this study add to the literature that identifies African American and Hispanic students and students with emotional or learning disabilities as not receiving adequate transition planning.

When considering the results of this study in the context of the lifespan theory of development, the multiple influences (i.e., age-graded, history-graded, and non-normative) interact to effect the transition planning and ultimately, the postschool outcomes. This study does not condemn students who are African American, Hispanic, or who have emotional or learning disabilities. Instead, it highlights the facts that these students have additional influences on their development and transition planning. These influences are not negative; however, the way that local education agencies interact with these influences seemingly is. Essentially, the goal should be to ensure that individualized transition planning is the foundation of a secondary student's IEP. Without this

fundamental philosophy, students with disabilities will not be able to meet their postsecondary goals.

REFERENCES

- Agran, M., Snow, K., & Swaner, J. (1999). Teacher perceptions of self-determination: Benefits, characteristics, and strategies. *Education and Training in Mental Retardation and Developmental Disabilities, 34*, 293-301.
- Baer, R. M., Flexer, R.W., Beck, S., Amstutz, N., Hoffman, L., Brothers, J., Stelzer, D., & Zechman, C. (2003). A collaborative followup study on transition service utilization and post-school outcomes. *Career Development for Exceptional Individuals, 26*(1), 7-25.
- Benz, M. R., & Blalock, G. (1999). Community transition teams: Enhancing student involvement in transition through community transition teams. *Journal for Vocational Special Needs Education, 21*(3), 4-12.
- Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529.
- Benz, M. R., Yovanoff, P., & Doren, B. (1997). School-to-work components that predict postschool success for students with and without disabilities. *Exceptional Children, 63*(2), 151-164.
- Berk, L. E. (2007). *Development through the lifespan* (4th ed.). Boston: Allyn and Bacon.
- Blackorby, J. & Wagner, M. (1996). Longitudinal postschool outcomes of youth with disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children, 62*, 399-413.

- Blankenship, K. E. (2004). Looking for success: Transition planning for students with visual impairments in the state of Iowa (Doctoral dissertation, Vanderbilt University, 2004). Retrieved February 25, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3155795).
- Brazos Valley Employment Project. (2008). *Welcome*. Retrieved October 20, 2009, from Texas A&M University, Center on Disability and Development website: <http://bvep.tamu.edu/>
- Brolin, D. E. & Loyd, R. J. (2004). *Career development and transition services*. Upper Saddle River, NJ: Pearson Education.
- Brooke, V., Green, J. H., Revell, W. G., & Wehman, P. (2006). Transition planning in the community. In P. Wehman (Ed.), *Life beyond the classroom* (pp. 97-129). Baltimore: Paul H. Brookes Publishing.
- Cameto, R., Levine, P., & Wagner, M. (2004). *Transition planning for students with disabilities executive summary: A special topic report from the National Longitudinal Transition Study 2*. Menlo Park, CA: SRI International.
- Campbell, P., Hensel, J. W., Hudson, P., Schwartz, S. E., & Sealander, K. (1987). The successfully employed worker with a handicap: Employee/employer perceptions of job performance. *Career Development for Exceptional Individuals*, 10, 85-93.
- Career and Technical Special Populations Training and Resource Education Center. (2009). *Home page*. Retrieved October 20, 2009, from <http://ctsp.tamu.edu/index.php>
- Career Education Incentive Act of 1977, PL 95-207, 20 U.S.C. §§ 2601 *et seq.* (1977).

- Carter, E. W., Lane, K. L., Pierson, M. R., & Glaeser, B. (2006). Self-determination skills and opportunities of transition-age youth with emotional disturbance and learning disabilities. *Exceptional Children, 72*, 333-346.
- Colley, D. A., & Jamison, D. (1998). Post school results for youth with disabilities: Key indicators and policy implications. *Career Development for Exceptional Individuals, 21*(2), 145-160.
- Crites, S. A., & Dunn, C. (2004). Teaching social problem solving to individuals with mental retardation. *Education and Training in Developmental Disabilities, 39*(4), 301-309.
- Cronin, M. S., & Patton, J. R. (1993). *Life skills across the curriculum for youths with special needs*. Austin, TX: Pro-Ed.
- Cummings, R., Maddux, C. D., & Casey, J. (2000, Sept.). Individualized transition planning for students with learning disabilities. *The Career Development Quarterly, 49*(1), 60-73.
- deFur, S. H. (2003). IEP transition planning—From compliance to quality. *Exceptionality, 11*(2), 115-128.
- deFur, S., Getzel, E. E., & Kregel, J. (1994). Individual transition plans: A work in progress. *Journal of Vocational Rehabilitation, 4*, 139-145.
- deFur, S. H., Todd-Allen, M., & Getzel, E. E. (2001). Parent participation in the transition planning process. *Career Development for Exceptional Individuals, 24*, 19-36.

- Denkyirah, A. M. (2003). Characteristics of transition planning within the individualized education program: Implications for meeting the requirements within the individuals with disabilities education act of 1997 (PL105-17). (Doctoral dissertation, Southern Illinois University at Carbondale, 2003). Retrieved February 25, 2008 from ProQuest Digital Dissertations database. (Publication No. AAT 3105692).
- Education of the Handicapped Act Amendments of 1983, PL 98-199, 20 U.S.C. §§ 1400 *et seq.* (1983).
- Edwards, J. P., Kinneldorf, M., & Bradley, C. (1988). *Final report of the Portland State University secondary school to work transition projects emphasizing transition to work and leisure roles*. Portland, OR: Portland State University.
- Everson, J. M., Zhang, D., & Guillory, J. D. (2001). A statewide investigation of individualized transition plans in Louisiana. *Career Development for Exceptional Individuals, 24*(1), 37-49.
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Field, S., Hoffman, A., & Posch, M. (1997). Self-determination during adolescence: A developmental perspective. *Remedial and Special Education, 18*(5), 285-293.
- Field, S., Martin, J., Miller, R., Ward, M., & Wehmeyer, M. (1998). Self-determination in career and transition programming: A position statement of the Council for Exceptional Children. *Career Development for Exceptional Individuals, 21*(2), 113-128.

- Finn, J. E., & Kohler, P. D. (2009). A compliance evaluation of the Transition Outcomes project. *Career Development for Exceptional Individuals*, 32(1), 17-29.
- Fourqurean, J. M., Meisgeier, C., Swank, P. R., & Williams, R. E. (1991). Correlates of postsecondary employment outcomes for young adults with learning disabilities. *Journal of Learning Disabilities*, 24, 400-405.
- GG Consulting. (2008). *Special Education Manager*. Retrieved June 26, 2009 from <http://www.ggconsulting.com/products/sem.html>
- Geenen, S., Powers, L. E., & Vasquez, A. L. (2001). Multicultural aspects of parent involvement in transition planning. *Exceptional Children*, 67, 265–282.
- Geenen, S., Powers, L., Vasquez, A. L., & Bersani, H. (2003). Understanding and promoting the transition of minority adolescents. *Career Development for Exceptional Individuals*, 26, 27–46.
- Gerber, P. J., Ginsberg, R. & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities*, 25(8), 475-487.
- Getzel, E. E., & deFur, S. (1997). Transition planning for students with significant disabilities: Implications for student-centered planning. *Focus on Autism and Other Developmental Disabilities*, 12(1), 39-49.
- Getzel, E. E., Gugerty, J. J., & McManus, S. (2006). Applications for youth with learning disabilities. In P. Wehman (Ed.), *Life beyond the classroom: Transition strategies for young people with disabilities* (4th ed., pp.475-504). Baltimore: Paul H. Brookes.

- Gill, D., & Edgar, E. (1990). Outcomes of a vocational program designed for students with mild disabilities: The Pierce County Vocational/Special Education Cooperative. *Journal for Vocational Special Needs Education, 12*(3), 17-22.
- Greene, G. (2003). Best practices in transition. In G. Greene & C. A. Kochhar-Bryant (Eds.), *Pathways to successful transition for youth with disabilities* (pp.154-196). Upper Saddle River, NJ: Pearson Education, Inc.
- Greene, G., & Albright, L. (1995). "Best practices" in transition services: Do they exist? *Career Development for Exceptional Individuals, 18*(1), 1-2.
- Grigal, M., & Neubert, D. A. (2004). Parents' in-school values and post-school expectations for transition-aged youth with disabilities. *Career Development for Exceptional Individuals, 27*, 65–85.
- Grigal, M., Neubert, D. A., Moon, M. S., & Graham, S. (2003). Self-determination for students with disabilities: Views of parents and teachers. *Exceptional Children, 70*, 97-112.
- Grigal, M., Test, D. W., Beattie, J., & Wood, W. M. (1997). An evaluation of transition components of individualized education programs. *Exceptional Children, 63*(3), 357-373.
- Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education*. (Vols. 1 & 2) New York: Appleton.
- Halpern, A. S. (1985). Transition: A look at the foundations. *Exceptional Children, 51*, 479-486.

- Halpern, A. S. (1991). Transition: Old wine in new bottles. *Exceptional Children, 58*(3), 202-212.
- Halpern, A. S. (1994). The transition of youth with disabilities to adult life: A position statement of the Division on Career Development and Transition, the Council for Exceptional Children. *Career Development for Exceptional Individuals, 17*(2), 115-124.
- Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985a). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.
- Hasazi, S. B., Gordon, L. R., Roe, C. A., Finck, K., Hull, M., & Salembier, G. (1985b). A statewide follow-up on post high school employment and residential status of students labeled, "Mentally retarded". *Education and Training of the Mentally Retarded, 20*(4), 222-234.
- Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*(3), 243-255.
- Heal, L. W., Gonzalez, P., Rusch, F. R., Copher, J. I., & DeStefano, L. (1990). A comparison of successful and unsuccessful placements of youths with mental handicaps into competitive employment. *Exceptionality, 1*, 181-195.
- Heal, L. W., Rubin, S. S., & Rusch, F. R. (1998). Residential independence of former special education high school students: A second look. *Research in Developmental Disabilities, 19*(1), 1-26.

- Hoffman, A., & Field, S. (2005). *Steps to self-determination: A curriculum to help adolescents learn to achieve their goals* (2nd ed.). Austin, TX: Pro-Ed.
- Hudson, P. J., Schwartz, S. E., Sealander, K. A., Campbell, P., & Hensel, J. W. (1988). Successfully employed adults with handicaps. *Career Development for Exceptional Individuals, 11*, 7-14.
- Individuals with Disabilities Education Act (IDEA) of 1990, PL 101-476, 20 U.S.C. § 1400 *et seq.* (1990).
- Individuals with Disabilities Education Improvement Act (IDEIA) of 2004, PL 108-446, 20 U.S.C. § 1400 *et seq.* (2004).
- Karpur, A., Clark, H. B., Caproni, P., & Sterner, H. (2005). Transition to adult roles for students with emotional/behavioral disturbances: A follow-up study of student exiters from Steps-to-Success. *Career Development of Exceptional Individuals, 28*(1), 36-46.
- Kim, K., & Turnbull, A. (2004). Transition to adulthood for students with severe intellectual disabilities: Shifting toward person-family interdependent planning. *Research and Practice for Persons with Severe Disabilities, 29*, 53-57.
- Kochhar-Bryant, C. A. (2003). Introduction to transition. In G. Greene & C. A. Kochhar-Bryant (Eds.), *Pathways to successful transition for youth with disabilities* (pp.2-32). Upper Saddle River, NJ: Pearson Education.
- Kochhar-Bryant, C. A., Shaw, S., & Izzo, M. (2007). *What every teacher should know about transition and IDEA 2004*. Boston: Pearson Education.

- Kohler, P. D. (1993). Best practices in transition: substantiated or implied? *Career Development for Exceptional Individuals, 16*(2), 107-121.
- Kohler, P. D. (1996). *A taxonomy for transition programming: Linking research and practice*. Urbana-Champaign, IL: Transition Research Institute.
- Landmark, L. J., Zhang, D. D., & Montoya, L. (2007). Culturally diverse parents' experiences in their children's transition: Knowledge and involvement. *Career Development for Exceptional Individuals, 30*(2), 68-79.
- Lawson, S., & Everson, J. (1993). *A national review of statements of transition services for students who are deaf-blind*. Sands Point, NY: Helen Keller National Center/Technical Assistance Center.
- Lindstrom, L. E., & Benz, M. R. (2002). Phases of career development: Case studies of young women with learning disabilities. *Exceptional Children, 69*(1), 67-82.
- Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404.
- Morningstar, M. E., & Benitez, D. (2004). *Critical issues facing youths with emotional and behavioral disorders during the transition to adulthood*. Arlington, VA: Council for Children with Behavioral Disorders.
- Morningstar, M. E., Turnbull, A. P., & Turnbull, H. R. (1995). What do students with disabilities tell us about the importance of family involvement in the transition from school to adult life? *Exceptional Children, 62*, 249-260.

- National Center on Secondary Education and Transition (NCSET). (2005). *Essential tools: Handbook for implementing a comprehensive work-based learning program according to the Fair Labor Standards Act* (3rd ed.). Minneapolis: University of Minnesota; College of Education and Human Development.
- National Center on Secondary Education and Transition (NCSET). (2007). *Key provision on transition IDEA 1997 compared to H. R. 1350 (IDEA 2004)*. Retrieved April 17, 2008 from <http://ncset.org/publications/related/ideatransition.asp>
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Retrieved March 26, 2008, from <http://www.ed.gov/pubs/NatAtRisk/index.html>
- National Organization on Disability (NOD). (2004, June 25). *Landmark disability survey finds pervasive disadvantages*. Retrieved September 5, 2007, from the National Organization on Disability website: <http://www.nod.org>
- National Secondary Transition Technical Assistance Center (NSTTAC). (2007). *Indicator 13 checklist*. Charlotte, NC: NSTTAC.
- Newman, L. (2004). Executive summary. *Family involvement in the educational development of youth with disabilities: A special topic report from the National Longitudinal Transition Study-2*. Menlo Park, CA: SRI International.
- No Child Left Behind Act (NCLB) of 2001. PL 107-110, 20 U.S.C. § 6301 *et seq.* (2001).

- Office of Special Education Programs. (2007). OSEP Part B and C State Monitoring and Formula Grants. Retrieved February 27, 2008 from <http://www.ed.gov/policy/speced/guid/idea/monitor/index.html>
- Office Vocational and Adult Education. (2009). OVAE Fact Sheets. Retrieved June 25, 2009 from <http://www.ed.gov/rschstat/eval/sectech/factsheet/index.html>
- O'Leary, E. (2008, April). *Developing and writing measurable post secondary goals*. Presentation at the annual meeting of the Texas Educational Diagnosticians' Association, Waco, TX.
- O'Leary, E., Lehman, M., & Doty, D. (2001). Transition requirement checklist. *Transition Requirements*. National Transition Network Institute on Community Integration. Minneapolis: University of Minnesota.
- Powers, K. M., Gil-Kashiwabara, E., Geenen, S. J., Powers, L. E., Balandran, J., & Palmer, C. (2005). Mandates and effective transition planning practices reflected in IEP documents. *Career Development for Exceptional Individuals*, 28(1), 47-59.
- Pressley, M., & McCormick, C. B. (2007). *Child and adolescent development for educators*. New York: Guilford Press.
- Project Summer. (n.d.). *The Project Summer website*. Retrieved October 20, 2009, from http://www.projectsummer.info/Project_Summer/Welcome.html
- Rabren, K., Dunn, C., & Chambers, D. (2002). Predictors of post-high school employment among young adults with disabilities. *Career Development for Exceptional Individuals*, 25(1), 25-40.

- Rosnow, R. L., & Rosenthal, R. (1989). Statistical procedures and the justification of knowledge in psychological science. *American Psychologist*, *44*, 1276-1284.
- Rylance, B. J. (1998). Predictors of high school graduation or dropping out for youths with severe emotional disturbances. *Behavior Disorders*, *23*, 5-17.
- Sample, P. L. (1998). Postschool outcomes for students with significant emotional disturbance following best-practice transition services. *Behavioral Disorders*, *23*(4), 231-242.
- Schalock, R. L., Holl, C., Elliott, B., & Ross, I. (1992). A longitudinal follow-up of graduates from a rural special education program. *Learning Disability Quarterly*, *15*, 29-38.
- Schalock, R. L., Wolzen, B., Ross, I., Elliott, B., Weberl, G., & Peterson, K. (1986). Postsecondary community placement of handicapped students: A five-year follow-up. *Learning Disability Quarterly*, *9*, 295-303.
- Schuster, J. L., Timmons, J. C., & Moloney, M. (2003). Barriers to successful transition for young adults who receive SSI and their families. *Career Development of Exceptional Individuals*, *26*, 47-66.
- Scuccimarra, D. J., & Speece, D. L. (1990). Employment outcomes and social integration of students with mild handicaps: The quality of life two years after school. *Journal of Learning Disabilities*, *23*, 213-219.
- Shearin, A., Roessler, R., & Schriener, K. (1999). Evaluating the transition component in IEP documents of secondary students with disabilities. *Rural Special Education Quarterly*, *18*(2), 22-35.

- Sitlington, P. L., Frank, A. R., & Cooper, L. (1989). *Iowa statewide follow-up study: Adult adjustment of individuals with learning disabilities one year after leaving school*. Des Moines, IA: Iowa Department of Education.
- Sitlington, P. L., & Neubert, D. A. (2004). Preparing youth with emotional and behavioral disorders for transition to adult life: Can this be done under No Child Left Behind and Individuals with Disabilities Education Act priorities? *Behavior Disorders, 29*(3), 279-288.
- Steele, R. B., Konrad, M., & Test, D. W. (2005). An evaluation of IEP transition components and post-school outcomes in two states. *Journal for Vocational Special Needs Education, 27*(2), 4-18.
- Targett, P. M. (2006). Finding jobs for young people with disabilities. In P. Wehman (Ed.), *Life beyond the classroom: Transition strategies for young people with disabilities* (4th ed., pp.255-283). Baltimore: Paul H. Brookes.
- Test, D. W., Aspel, N. P., & Everson, J. M. (2006). *Transition methods for youth with disabilities*. Upper Saddle River, NJ: Pearson Education.
- Texas Education Agency (TEA). (2006a). *Special education student demographics from October 2006* [Data file]. Available from the Texas Education Agency website, <http://www.tea.state.tx.us/>
- Texas Education Agency (TEA). (2006b). State Performance Plan. Retrieved September 20, 2008, from <http://ritter.tea.state.tx.us/special.ed/spp/>

- Texas Education Agency (TEA). (2007a). Chapter 89. Adaptations for special populations. Retrieved November 9, 2009, from <http://ritter.tea.state.tx.us/rules/tac/chapter089/ch089aa.html#division2>
- Texas Education Agency (TEA). (2007b). *Data collection for state performance plan: Checklist for measurement of indicator 13*. Austin, TX: TEA Statewide High School Transition Network.
- Texas Education Agency (TEA). (2008). Special education in Texas: Graduation guidance. Retrieved February 25, 2008 from <http://ritter.tea.state.tx.us/special.ed/guidance/graduation.html>
- Texas Education Agency (TEA). (2009). PEIMS-Public education information management system. Retrieved August 28, 2009, from <http://ritter.tea.state.tx.us/peims/>
- Texas State Data Center. (2000). Proportion of the population in each race/ethnicity group in 1990 and 2000 for the state of Texas and counties in Texas. Retrieved July 7, 2008, from http://txsdc.utsa.edu/data/census/2000/redistrict/pl94-171/desctab/re_tab4.txt
- Thompson, J. R., Fulk, B. M., & Piercy, S. W. (2000). Do individualized transition plans match the postschool projections of students with learning disabilities and their parents? *Career Development for Exceptional Individuals*, 23, 3-25.
- Tillmann, J. D., & Ford, L. (2001, April). *Analysis of transition services of individualized education programs for high school students with special needs*. Paper presented

- at the annual meeting of the National Association of School Psychologists,
Washington, DC.
- Turner, L. (2001). Family involvement. In R. W. Flexer, T. J. Simmons, P. Luft, & R. M. Baer (Eds.), *Transition planning for secondary students with disabilities* (386-414). Upper Saddle River, NJ: Merrill Prentice Hall.
- U. S. Department of Health and Human Services. (2007). Activities of daily living. Retrieved September 5, 2008, from <http://www.cdc.gov/nchs/datawh/nchsdefs/ADL.htm>
- Vander Stroep, A., Davis, M., & Collins, D. (2000). Transition: A time of developmental and institutional clashes. In H. B. Clark & M. Davis (Eds.), *Transition to adulthood: A resource for assisting young people with emotional and behavioral disabilities* (3-28). Baltimore: Brookes.
- Virginia Commonwealth University. (2004). *Self-determination skills needed for college students with disabilities: Summary of state-wide focus group results*. Richmond: Virginia Commonwealth University, Rehabilitation Research and Training Center on Workplace Supports.
- Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). *After high school: A first look at the postschool experiences of youth with disabilities: A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.
- Washburn-Moses, L. (2003). What every special educator should know about high-stakes testing. *Teaching Exceptional children*, 35(4), 12-15.

- Wehman, P. (2006a). Applications for youth with emotional and behavior disorders. In P. Wehman (Ed.), *Life beyond the classroom: Transition strategies for young people with disabilities* (4th ed., pp.505-534). Baltimore: Paul H. Brookes Publishing.
- Wehman, P. (2006b). Transition: The bridge from youth to adulthood. In P. Wehman (Ed.), *Life beyond the classroom: Transition strategies for young people with disabilities* (4th ed., pp.3-40). Baltimore: Paul H. Brookes Publishing.
- Wehmeyer, M. L. (1992). Self-determination and the education of students with mental retardation. *Education and training in mental retardation and developmental disabilities*, 27, 302-314.
- Wehmeyer, M. L., Agran, M., & Hughes, C. (2000). A national survey of teachers' promotion of self-determination and student-directed learning. *Journal of Special Education*, 34, 58-68.
- Wehmeyer, M. L., Gragoudas, S., & Shogren, K. A. (2006). Self-determination, student involvement, and leadership development. In P. Wehman (Ed.), *Life beyond the classroom: Transition strategies for young people with disabilities* (4th ed., pp.41-69). Baltimore: Paul H. Brookes Publishing.
- Will, M. (1984). *OSERS programming for the transition of youth with disabilities: Bridges from school to working life*. Washington, DC: US Department of Education.
- Williams, J. M., & O'Leary, E. (2001). What we've learned and where we go from here. *Career Development for Exceptional Individuals*, 24, 51-71.

Wise, W. E., & Matthews, C. L. (1987). *A study of the relationship of education and transition factors to the job status of mildly and moderately handicapped students*. (Report No. 95-01/87/06/04). Dover: Delaware State Department of Public Instruction.

Zhang, D., & Benz, M. R. (2006). Enhancing self-determination of culturally diverse students with disabilities: Current status and future directions. *Focus on Exceptional Children*, 38, 1-12.

Supplemental Sources Consulted

American Association on Intellectual and Developmental Disabilities. (2007, July 5).

Definition of mental retardation. Retrieved December 28, 2007 from [http://](http://www.aaidd.org/Policies/faq_mental_retardation.shtml)

www.aaidd.org/Policies/faq_mental_retardation.shtml

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorder* (4th ed.). Washington, DC: Author.

Jones, P. R. (1981). *A practical guide to federal special education law: Understanding and implementing PL 94-142*. New York: Holt, Rinehart, and Winston.

O'Leary, E. (2006). *Individuals with Disabilities Education Improvement Act of 2004: Transition requirements and Indicator 13 checklist*. Retrieved November 26, 2008, from www.cuttingedj.net

Texas Education Agency (TEA). (2003, July). *Shared services arrangement procedures*. Austin: Division of IDEA Coordination, TEA.

U. S. Department of Education, Office of Special Education Programs, Data analysis

System. (2003). OMB# 1820-0043: *Children with disabilities receiving special education under part B of the Individuals with Disabilities Education Act.*

APPENDIX A

Office of Special Education Programs' Monitoring Priorities and Corresponding Indicators

Monitoring Priority	Performance or Compliance Indicators	
Free Appropriate Public Education in the Least Restrictive Environment	Indicator 1	Percent of youth with IEP documents graduating from high school with a regular diploma compared to percent of all youth in the State graduating with a regular diploma.
	Indicator 2	Percent of youth with IEP documents dropping out of high school compared to the percent of all youth in the State dropping out of high school.
	Indicator 3	Participation and performance of children with disabilities on statewide assessments: A. Percent of districts meeting the State's adequate yearly progress objectives for progress for disability subgroup. B. Participation rate for children with IEP documents in a regular assessment with no accommodations; regular assessment with accommodations; alternate assessment against grade level standards; alternate assessment against alternate achievement standards. C. Proficiency rate for children with IEP documents against grade level standards and alternate achievement standards.
	Indicator 4	Rates of suspension and expulsion: A. Percent of districts identified by the State as having a significant discrepancy in the rates of suspensions and expulsions of children with disabilities for greater than 10 days in a school year; and B. Percent of districts identified by the State as having a significant discrepancy in the rates of suspensions and expulsions of greater than 10 days in a school year of children with disabilities by race and ethnicity.
	Indicator 5	Percent of children with IEP documents aged 6 through 21: A. Removed from regular class less than 21% of the day;

		B. Removed from regular class greater than 60% of the day; or C. Served in public or private separate schools, residential placements, or homebound or hospital placements.
	Indicator 6	Percent of preschool children with IEP documents who received special education and related services in settings with typically developing peers (e.g., early childhood settings, home, and part-time early childhood/part-time early childhood special education settings).
	Indicator 7	Percent of preschool children with IEP documents who demonstrate improved: A. Positive social-emotional skills (including social relationships); B. Acquisition and use of knowledge and skills (including early language/communication and early literacy); and C. Use of appropriate behaviors to meet their needs.
	Indicator 8	Percent of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities.
Disproportionality	Indicator 9	Percent of districts with disproportionate representation of racial and ethnic groups in special education and related services that is the result of inappropriate identification.
	Indicator 10	Percent of districts with disproportionate representation of racial and ethnic groups in specific disability categories that is the result of inappropriate identification.
Child Find	Indicator 11	Percent of children with parental consent to evaluate, who were evaluated and eligibility determined within 60 days (or State established timeline).
Effective Transition	Indicator 12	Percent of children referred by Part C prior to age 3, who are found eligible for Part B, and who have an IEP developed and implemented by their third birthdays.
	Indicator 13	Percent of youth aged 16 and above with an IEP that includes coordinated, measurable, annual IEP goals and transition services that will reasonably enable the student to meet the post-secondary goals.
	Indicator 14	Percent of youth who had IEP documents, are no longer in secondary school and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school.
General Supervision	Indicator	General supervision system (including monitoring, complaints, hearings, etc.)

15	identifies and corrects noncompliance as soon as possible but in no case later than one year from identification.
Indicator 16	Percent of signed written complaints with reports issued that were resolved within 60-day timeline or a timeline extended for exceptional circumstances with respect to a particular complaint.
Indicator 17	Percent of fully adjudicated due process hearing requests that were fully adjudicated within the 45-day timeline or a timeline that is properly extended by the hearing officer at the request of either party.
Indicator 18	Percent of hearing requests that went to resolution sessions that were resolved through resolution session settlement agreements.
Indicator 19	Percent of mediations held that resulted in mediation agreements.
Indicator 20	State reported data (618 and State Performance Plan and Annual Performance Report) are timely and accurate.

Note. From the U.S. Department of Education's Office of Special Education Programs (2003).

APPENDIX B

Transition Requirements throughout the History of IDEA

Amendments to EHA (aka IDEA 1990, PL 101-476)	IDEA 1997 (PL 105-17)	IDEIA 2004 (PL 108-446)
PURPOSES		
<p>To amend the Education of the Handicapped Act* to revise and extend the programs established in parts C through G of such Act, and for other purposes</p> <p>* EHA of 1975: To assure that all handicapped children have available to them a free appropriate public education which emphasizes special education and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents or guardians are protected, to assist States and localities to provide for the education of all handicapped children, and to assess and assure the effectiveness of efforts to educate handicapped children</p>	<p>To ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for employment and independent living</p>	<p>To ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living</p>
IEP TEAM PARTICIPANTS		

		<p>Cfr 300.321</p> <p>The public agency must invite a child with a disability to attend the child’s IEP Team meeting if a purpose of the meeting will be the consideration of the postsecondary goals for the child and the transition services needed to assist the child in reaching those goals under § 300.320(b).</p> <p>(2) If the child does not attend the IEP Team meeting, the public agency must take other steps to ensure that the child’s preferences and interests are considered.</p> <p>(3) To the extent appropriate, with the consent of the parents or a child who has reached the age of majority, in implementing the requirements of paragraph (b)(1) of this section, the public agency must invite a representative of any participating agency that is likely to be responsible for providing or paying for transition services.</p>
<p>TRANSITION SERVICES</p>		
<p>The term “transition services” means a coordinated set of activities for a</p>	<p>The term “transition services” means a coordinated set of activities for a student</p>	<p>The term “transition services” means a coordinated set of activities for a <u>child</u></p>

student, designed within an outcome-oriented process, which promotes movement from school to post-school activities; including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation.

a statement of the needed transition services for students beginning no later than age 16 and annually thereafter (and, when determined appropriate for the individual, beginning at age 14 or younger), including, when appropriate, a

with disability that is designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; **is** based upon the individual student's needs, taking into account the student's preferences and interests; and **includes** instruction, **related services**, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation.

beginning at age 14, and updated annually, a statement of the transition service needs of the child under the applicable components of the child's IEP that focuses on the child's courses of study (such as participation in advanced-placement

with a disability that is designed to be **within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's** movement from school to post-school activities, including post-secondary education, vocational **education**, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; is based on the individual child's needs, taking into account the **child's strengths**, preferences, and interests; and includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation.

beginning not later than the first IEP to be in effect when the child is 16, and updated annually thereafter—appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, and, where appropriate,

<p>statement of the interagency responsibilities or linkages (or both) before the student leaves the school setting," and (2) by inserting after subparagraph (F) (as so redesignated) the following: "In the case where a participating agency, other than the educational agency, fails to provide agreed upon services, the educational agency shall reconvene the IEP team to identify alternative strategies to meet the transition objectives.</p>	<p>courses or a vocational education program); beginning at age 16 (or younger, if determined appropriate by the IEP Team), a statement of needed transition services for the child, including, when appropriate, a statement of the interagency responsibilities or any needed linkages;</p>	<p><u>independent living skills; the transition services (including courses of study) needed to assist the child in reaching those goals;</u></p>
<p>SUMMARY OF PERFORMANCE</p>		
		<p><u>For a child whose eligibility terminates due to graduation from secondary school with a regular diploma, or due to exceeding the age eligibility for a free appropriate public education under State law, a local education agency shall provide the child with a summary of the child's academic achievement and functional performance, which shall include recommendations on how to assist the child in meeting the child's postsecondary goals.</u></p>
<p>AGE OF MAJORITY</p>		

	<p>and beginning at least one year before the child reaches the age of majority under State law, a statement that the child has been informed of his or her rights under this title, if any, that will transfer to the child on reaching the age of majority</p>	<p>and beginning <u>not later than</u> 1 year before the child reaches the age of majority under State law, a statement that the child has been informed of the child's rights under this title, if any, that will transfer to the child on reaching the age of majority</p>
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Note. From IDEA (1990), NSTTAC (2007), and Jones (1981).

APPENDIX C

Sample Letter of Request for Conducting Research

Date

XXXXX

XXXXX

XXXXX

Dear XXXXX,

As a special education colleague, I am requesting your assistance with collecting data for my dissertation study. The study is a “document review,” meaning that the IEP/ARD documents will be the subjects of the study—not the students or the school districts. Data will be collected from the IEP/ARD documents of secondary students in the XXXXX regarding the level of compliance with the transition components of the Individuals with Disabilities Education Improvement Act of 2004 (including Indicator 13) and the level of incorporation of substantiated best practices in transition planning. Because I know that you are very busy, the purpose of this letter is to give you a little information about my dissertation and how we can help each other. Some questions that you may already have are addressed below.

1. What do you need from me and the XXXXX?

I need access to the IEP/ARD documents of secondary students who have as a primary disability autism, emotional disorder, learning disorder, or mental retardation. I can work with you and the XXXXX. to ensure that this study is conducted in a manner that is minimally invasive and free of cost.

2. What about the Family Educational Rights and Privacy Act (FERPA)?

This study has been designed to ensure that the rights of students and districts are not compromised. I will be glad to discuss with you how the study can be conducted without violating FERPA. Additionally, Texas A&M University’s Office of Research Compliance has approved this study, meaning that the study’s procedures are in compliance with the laws and regulations governing human subject research.

3. How will the data be used?

All data collected will be presented in an aggregate manner. The purpose of the study is to determine the current state of transition planning in the Brazos Valley.

4. How will this study benefit the district?

As you know, districts must submit data on Indicator 13 as required on the State Performance Plan. To assist you, I can provide you with a summary of my findings regarding the districts you serve. This can be used to enhance transition planning practices so that transition planning is optimal and equitable for all students.

Thank you in advance for your help. I will contact you no later than August 1, 2008, to further discuss my request. However, if you would like to contact me sooner, please do.

Sincerely,

Leena Jo Landmark, M.Ed.
979-458-0403 / Landmark72@tamu.edu

APPENDIX D

Data Collection Instrument

Reviewer's Initials: _____

Date Reviewed _____/_____/_____

<p>General information: The data collection instrument consists of three categories of questions: descriptive, compliance with IDEIA, and substantiated best practices. Descriptive questions are shaded and enumerated using the letter <i>D</i>. The compliance questions are enumerated using the letter <i>C</i>, and the substantiated best practices questions are enumerated using the letter <i>P</i>.</p> <p>Instructions: Using the IEP document as the source of information, answer all of the descriptive questions first. Then, using the answers to the descriptive questions, answer the compliance and practices questions.</p>	
D1	Study ID: _____ (Assigned by reviewer; first 3 digits are student number; last 2 digits are school number)
D2	Most Current IEP Date: _____/_____/_____ Most Current IEP that contained transition information: _____/_____/_____
D3	Ethnicity: <input type="checkbox"/> African American <input type="checkbox"/> Hispanic <input type="checkbox"/> White
D4	Disability: (Mark 1 for primary disability, 2 for secondary, and 3 for tertiary.) <input type="checkbox"/> AU <input type="checkbox"/> ED <input type="checkbox"/> ID <input type="checkbox"/> LD <input type="checkbox"/> Deaf-Blind <input type="checkbox"/> Deaf <input type="checkbox"/> Hearing Imp. <input type="checkbox"/> Multiple <input type="checkbox"/> OI <input type="checkbox"/> OHI <input type="checkbox"/> SI <input type="checkbox"/> TBI <input type="checkbox"/> VI
D5	Age at Most Current Transition IEP Date: _____ (or DOB) _____/_____/_____
C1	If the student is age 15 or older, are transition services in place? <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No
C2	If the student is 16 years or older, does it appear that the transition services been updated at least yearly? <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can not determine
C3	Is there any indication that the parents have been advised that upon age of majority rights transfer to the student? (Must be advised by the time child is 17 years) <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Marked "not appropriate due to cognitive functioning"
C4	Is a summary of performance included? <input type="checkbox"/> N/A if this is not a dismissal meeting <input type="checkbox"/> Yes <input type="checkbox"/> No
D6	What components of the summary of performance are present? (Mark all that apply.) <input type="checkbox"/> N/A <input type="checkbox"/> No summary of performance <input type="checkbox"/> Summary of academic achievement <input type="checkbox"/> Summary of functional performance <input type="checkbox"/> Recommendation(s) on how to assist the child in meeting PS goals
C5	If this is the dismissal meeting, does the summary of performance include BOTH a summary of academic achievement and functional performance? <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No
C6	If this is the dismissal meeting, does the summary of performance include recommendations on how to assist the child in meeting postsecondary (PS) goals? <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No
D7	Instructional Setting Code: <input type="checkbox"/> 08 VAC <input type="checkbox"/> 30 State school, MR <input type="checkbox"/> 40 Mainstream <input type="checkbox"/> 41 Resource, < 21% <input type="checkbox"/> 42 Resource, at least 21% & <50% <input type="checkbox"/> 43 Self-contained, at least 50% & no more than 60% <input type="checkbox"/> 44 Self-contained, more than 60% <input type="checkbox"/> 81 RCT, mainstream <input type="checkbox"/> 85 RCT, self-contained, more than 60% <input type="checkbox"/> 86 RCT, separate campus <input type="checkbox"/> 96 Off home campus, separate campus <input type="checkbox"/> Other: _____

PD7	Is the student mainstreamed? <input type="checkbox"/> no <input type="checkbox"/> yes
D8	State standardized testing (current year): Reading: <input type="checkbox"/> N/A <input type="checkbox"/> TAKS <input type="checkbox"/> TAKS-Accommodated <input type="checkbox"/> TAKS-Modified <input type="checkbox"/> TAKS-Alternate English L/A: <input type="checkbox"/> N/A <input type="checkbox"/> TAKS <input type="checkbox"/> TAKS-Accommodated <input type="checkbox"/> TAKS-Modified <input type="checkbox"/> TAKS-Alternate Writing: <input type="checkbox"/> N/A <input type="checkbox"/> TAKS <input type="checkbox"/> TAKS-Accommodated <input type="checkbox"/> TAKS-Modified <input type="checkbox"/> TAKS-Alternate Math: <input type="checkbox"/> N/A <input type="checkbox"/> TAKS <input type="checkbox"/> TAKS-Accommodated <input type="checkbox"/> TAKS-Modified <input type="checkbox"/> TAKS-Alternate Science: <input type="checkbox"/> N/A <input type="checkbox"/> TAKS <input type="checkbox"/> TAKS-Accommodated <input type="checkbox"/> TAKS-Modified <input type="checkbox"/> TAKS-Alternate Social Studies: <input type="checkbox"/> N/A <input type="checkbox"/> TAKS <input type="checkbox"/> TAKS-Accommodated <input type="checkbox"/> TAKS-Modified <input type="checkbox"/> TAKS-Alternate
PD8	State standardized testing supportive of general education? <input type="checkbox"/> NA <input type="checkbox"/> yes: TAKS or accommodated <input type="checkbox"/> no: modified or alternate
D9	Who was INVITED to the IEP meeting that addressed transition? (Mark all that apply.) <input type="checkbox"/> Student (Assume the student was invited if the student attended the meeting.) <input type="checkbox"/> Parent/guardian <input type="checkbox"/> General education teacher(s) <input type="checkbox"/> Special education teacher(s) <input type="checkbox"/> Administrator(s) <input type="checkbox"/> Transition specialist <input type="checkbox"/> Autism specialist <input type="checkbox"/> Assessment personnel <input type="checkbox"/> School counselor <input type="checkbox"/> CTE teacher(s) <input type="checkbox"/> VAC teacher <input type="checkbox"/> Other school district staff: _____ <input type="checkbox"/> Agency staff: _____
D10	Are there transition services that are likely to be provided or paid for by outside agencies within the upcoming year? <input type="checkbox"/> Yes <input type="checkbox"/> No
C7	Were ALL of the required individuals (i.e., student, parent, general education teacher, special education teacher, administrator, and agency representative—if answer to D10 is Yes) invited to the meeting? <input type="checkbox"/> Yes <input type="checkbox"/> No
C8	To the extent appropriate (i.e., if answer to D10 is Yes), did the parents or the student who has reached the age of majority consent to the invitation of a representative from an outside agency? <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No
D11	Who contributed (e.g., via attendance, phone call, previous meeting, written input) to the IEP meeting that addressed transition? (Mark all that apply, but note that the assignment of an individual to an action step is NOT considered a contribution by itself because an individual could be assigned to do something by other individuals.) <input type="checkbox"/> Student <input type="checkbox"/> Parent/guardian <input type="checkbox"/> General education teacher(s) <input type="checkbox"/> Special education teacher(s) <input type="checkbox"/> Administrator(s) <input type="checkbox"/> Transition specialist <input type="checkbox"/> Autism specialist <input type="checkbox"/> Assessment personnel <input type="checkbox"/> School counselor <input type="checkbox"/> CTE teacher(s) <input type="checkbox"/> VAC teacher <input type="checkbox"/> Other school district staff: _____ <input type="checkbox"/> Agency staff: _____
C24	Did ALL of the required individuals (i.e., student, parent, general education teacher, special education teacher, administrator, and agency representative—if answer to D10 is Yes) attend or contribute to the meeting? <input type="checkbox"/> Yes <input type="checkbox"/> No
P1	Does the IEP documentation indicate any accommodation(s) to parent/family to support their involvement at the IEP meeting (e.g., translator, schedule, etc.)? (Only mark No if there is an indication that the parent/family needed and accommodation but did not receive the accommodation.) <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No

P2	Is there any indication that the parent/guardian contributed to the development of the transition components of the IEP document? (Only mark <i>Yes</i> if <i>Parent/guardian</i> was marked on D11.) <input type="checkbox"/> Yes <input type="checkbox"/> No
P3	Is there any indication that agency representatives contributed to the development of the transition components? (Only mark <i>Yes</i> if an agency representative was marked on D11.) <input type="checkbox"/> Yes <input type="checkbox"/> No
P4	Did the school/district provide any community agency information? <input type="checkbox"/> Yes <input type="checkbox"/> No
D12	What percentage of the action steps are assigned to the: (# of action steps assigned) / (total # of action steps) student _____ / _____ = _____ % parent/guardian _____ / _____ = _____ % agency representative(s) _____ / _____ = _____ % school district staff _____ / _____ = _____ %
D13	What is the student's (projected) graduation type? <input type="checkbox"/> Distinguished achievement (17, 20, 23, 26, 29) <input type="checkbox"/> Recommended plan (15, 19, 22, 25, 28) <input type="checkbox"/> Minimum plan (04, 05, 06, 07, 13, 18, 21, 24, 27) <input type="checkbox"/> Not specified
D14	What is the student's (projected) graduation option? <input type="checkbox"/> Option B: Completion of minimum curriculum and credit requirements and satisfactory performance on exit level assessments Option C: Completion IEP requirements and one of the following conditions: <input type="checkbox"/> FT employment and sufficient self-help skills to enable student to maintain employment without direct or ongoing educational support from LEA <input type="checkbox"/> Demonstrated mastery of specific employability skills and self-help skills which do not require direct ongoing educational support of the LEA <input type="checkbox"/> Access to services that are not within the legal responsibility of the LEA, or employment or educational options for which the student has been prepared by the academic program <input type="checkbox"/> Option D: Student no longer meets age eligibility requirements and has completed the requirements of the IEP <input type="checkbox"/> Not specified
PD14	Is the student's graduation option Option B? <input type="checkbox"/> not specified <input type="checkbox"/> yes <input type="checkbox"/> no
D15	What type of <u>education/training</u> PS goal does the student have? (If more than one education/training goal, only use the first goal.) <input type="checkbox"/> No education/training goal <input type="checkbox"/> On-the-job training <input type="checkbox"/> Technical school <input type="checkbox"/> Community college <input type="checkbox"/> University <input type="checkbox"/> Other: _____
C9	Is the education/training PS goal measurable (i.e., occurs after graduation AND is an outcome, not a process)? <input type="checkbox"/> N/A: education/training PS goal is not present <input type="checkbox"/> Yes <input type="checkbox"/> No

D16	<p>Is there evidence that the <u>education/training</u> PS goal was based on an age-appropriate transition assessment? (Mark all that apply.) <input type="checkbox"/> N/A: education/training PS goal is not present <input type="checkbox"/> No Yes, please specify: <input type="checkbox"/> Interest inventories <input type="checkbox"/> Formal or informal interviews with student/parent <input type="checkbox"/> Other evaluation data <input type="checkbox"/> Teacher information <input type="checkbox"/> IEP documentation (i.e., IEP notes only that the goal was based on transition assessment but does not specify type of assessment)</p>																		
C10	<p>Is there evidence that the education/training PS goal was based upon at least one age appropriate transition assessment? <input type="checkbox"/> N/A: education/training PS goal is not present <input type="checkbox"/> Yes <input type="checkbox"/> No</p>																		
D17	<p>What type of <u>employment</u> PS goal does the student have? (If more than one employment goal, only use the first goal. Mark all that apply.) <input type="checkbox"/> No employment goal <input type="checkbox"/> Full time <input type="checkbox"/> Part time <input type="checkbox"/> Competitive <input type="checkbox"/> Supported <input type="checkbox"/> Sheltered <input type="checkbox"/> Other: _____</p>																		
C11	<p>Is the employment PS goal measurable (i.e., occurs after graduation AND is an outcome, not a process)? <input type="checkbox"/> N/A: employment PS goal is not present <input type="checkbox"/> Yes <input type="checkbox"/> No</p>																		
D18	<p>Is there evidence that the <u>employment</u> PS goal was based on an age-appropriate transition assessment? (Mark all that apply.) <input type="checkbox"/> N/A: employment PS goal is not present <input type="checkbox"/> No Yes, please specify: <input type="checkbox"/> Interest inventories <input type="checkbox"/> Formal or informal interviews with student/parent <input type="checkbox"/> Other evaluation data <input type="checkbox"/> Teacher information <input type="checkbox"/> IEP documentation (i.e., IEP notes goal was based on transition assessment but does not specify type of assessment)</p>																		
C12	<p>Is there evidence that the employment PS goal was based upon at least one age appropriate transition assessment? <input type="checkbox"/> N/A: employment PS goal is not present <input type="checkbox"/> Yes <input type="checkbox"/> No</p>																		
D19	<p>Employment PS goal career cluster:</p> <table border="0"> <tr> <td><input type="checkbox"/> N/A, because no employment goal</td> <td><input type="checkbox"/> Arts, AV technology, & communication</td> </tr> <tr> <td><input type="checkbox"/> N/A, because career not indicated</td> <td><input type="checkbox"/> Education & training</td> </tr> <tr> <td><input type="checkbox"/> Agriculture, food, & natural resources</td> <td><input type="checkbox"/> Government & public administration</td> </tr> <tr> <td><input type="checkbox"/> Architecture & construction</td> <td><input type="checkbox"/> Hospitality & tourism</td> </tr> <tr> <td><input type="checkbox"/> Business, management, & administration</td> <td><input type="checkbox"/> Information technology</td> </tr> <tr> <td><input type="checkbox"/> Finance</td> <td><input type="checkbox"/> Manufacturing</td> </tr> <tr> <td><input type="checkbox"/> Health science</td> <td><input type="checkbox"/> Marketing, sales, & service</td> </tr> <tr> <td><input type="checkbox"/> Human services</td> <td><input type="checkbox"/> Science, technology, engineering, & math</td> </tr> <tr> <td><input type="checkbox"/> Law, public safety, corrections, & security</td> <td><input type="checkbox"/> Transportation, distribution, & logistics</td> </tr> </table>	<input type="checkbox"/> N/A, because no employment goal	<input type="checkbox"/> Arts, AV technology, & communication	<input type="checkbox"/> N/A, because career not indicated	<input type="checkbox"/> Education & training	<input type="checkbox"/> Agriculture, food, & natural resources	<input type="checkbox"/> Government & public administration	<input type="checkbox"/> Architecture & construction	<input type="checkbox"/> Hospitality & tourism	<input type="checkbox"/> Business, management, & administration	<input type="checkbox"/> Information technology	<input type="checkbox"/> Finance	<input type="checkbox"/> Manufacturing	<input type="checkbox"/> Health science	<input type="checkbox"/> Marketing, sales, & service	<input type="checkbox"/> Human services	<input type="checkbox"/> Science, technology, engineering, & math	<input type="checkbox"/> Law, public safety, corrections, & security	<input type="checkbox"/> Transportation, distribution, & logistics
<input type="checkbox"/> N/A, because no employment goal	<input type="checkbox"/> Arts, AV technology, & communication																		
<input type="checkbox"/> N/A, because career not indicated	<input type="checkbox"/> Education & training																		
<input type="checkbox"/> Agriculture, food, & natural resources	<input type="checkbox"/> Government & public administration																		
<input type="checkbox"/> Architecture & construction	<input type="checkbox"/> Hospitality & tourism																		
<input type="checkbox"/> Business, management, & administration	<input type="checkbox"/> Information technology																		
<input type="checkbox"/> Finance	<input type="checkbox"/> Manufacturing																		
<input type="checkbox"/> Health science	<input type="checkbox"/> Marketing, sales, & service																		
<input type="checkbox"/> Human services	<input type="checkbox"/> Science, technology, engineering, & math																		
<input type="checkbox"/> Law, public safety, corrections, & security	<input type="checkbox"/> Transportation, distribution, & logistics																		
D20	<p>Does the IEP document describe student's previous or current work experience? No, please categorize: <input type="checkbox"/> Not described or mentioned <input type="checkbox"/> Indicates student has no experience Yes, please categorize: <input type="checkbox"/> Paid employment <input type="checkbox"/> Unpaid/volunteer experience <input type="checkbox"/> Unknown</p>																		
P5	<p>Has the student engaged in previous paid or unpaid work experience OR is there any indication that the student will experience any paid or unpaid work experience? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>																		

D21	<p>Is there any indication that the student has participated in any employment preparation program(s)? <input type="checkbox"/> No Yes, please categorize: (Mark all that apply.) <input type="checkbox"/> CTE classes <input type="checkbox"/> Community based instruction <input type="checkbox"/> Work based learning <input type="checkbox"/> Cooperative classes <input type="checkbox"/> LIFE Skills class <input type="checkbox"/> Other: _____</p>
P6	<p>Has the student participated in any employment preparation programming, or are there plans for the student to participate? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
D22	<p>What type of independent living PS goal does the student have? (If more than one independent living goal, only use the first goal; Mark all that apply.) <input type="checkbox"/> No independent living goal <input type="checkbox"/> Community living (e.g., transportation, recreation) <input type="checkbox"/> Daily living (e.g., cooking) <input type="checkbox"/> Self-care (e.g., sexuality, hygiene) <input type="checkbox"/> Other: _____</p>
C13	<p>Is the independent living PS goal measurable (i.e., occurs after graduation AND is an outcome, not a process)? <input type="checkbox"/> N/A: independent living PS goal is not present <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
D23	<p>Is there evidence that the independent living goal was based on an age-appropriate transition assessment? (Mark all that apply.) <input type="checkbox"/> N/A: independent living PS goal is not present <input type="checkbox"/> No Yes, please specify: <input type="checkbox"/> Interest inventories <input type="checkbox"/> Formal or informal interviews with student or parent <input type="checkbox"/> Other evaluation data <input type="checkbox"/> Teacher information <input type="checkbox"/> IEP documentation (i.e., IEP notes only that the goal was based on transition assessment but does not specify type of assessment)</p>
C14	<p>Is the independent living PS goal based upon age appropriate transition assessments? <input type="checkbox"/> N/A: independent living PS goal is not present <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
D24	<p>What percentage of the annual IEP goals (NOT OBJECTIVES) is measurable (i.e., includes a timeline for completion and mastery criteria)? (# of annual IEP goals that are measurable) / (total # of annual IEP goals) = _____ / _____ = _____ %</p>
C15	<p>Are 100% of the annual goals measurable? <input type="checkbox"/> N/A: no annual goals present <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
D25	<p>How many annual goals reasonably enable (support) the child to meet the: education/training PS goal? _____ <input type="checkbox"/> N/A employment PS goal? _____ <input type="checkbox"/> N/A independent living PS goal? _____ <input type="checkbox"/> N/A (Note: One annual goal can be used to meet more than one postsecondary goal.)</p>
C16	<p>Is there at least one annual goal that supports the child's education/training PS goal? <input type="checkbox"/> N/A: no annual goal(s) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: no postsecondary goal(s)</p>
C17	<p>Is there at least one annual goal that supports the student's employment PS goal? <input type="checkbox"/> N/A: no annual goal(s) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: no postsecondary goal(s)</p>
C18	<p>Is there at least one annual goal that supports the child's independent living PS goal, if appropriate? <input type="checkbox"/> N/A: no annual goal(s) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: no postsecondary goal(s)</p>

D26	Are there transition services that address social skills? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: student has appropriate social skills
D27	Are there annual goals or objectives that address social skills? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: student has appropriate social skills
P7	Is there any indication (annual goals, or transition services) that the student has received/is receiving social skills training OR that the student has appropriate social skills? <input type="checkbox"/> Yes <input type="checkbox"/> No
D28	Are there transition services that address self-determination? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: student has appropriate self-determination skills
D29	Are there annual goals or objectives that address self-determination? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: student has appropriate self-determination skills
P8	Is there any indication (annual goals or transition services) that the student has received/is receiving instruction/training on self-determination (e.g., how to request services/accommodations, etc.) OR that the student has appropriate self-determination skills? <input type="checkbox"/> Yes <input type="checkbox"/> No
D30	Are there transition services that address functional, daily living skills? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: student has appropriate daily living skills
D31	Are there annual goals or objectives that address functional, daily living skills? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A: student has appropriate daily living skills
P9	Is there any indication (PS goals, annual goals, or transition services) that the student has received/is receiving functional, daily living skills training OR that the student has appropriate functional, daily living skills? <input type="checkbox"/> Yes <input type="checkbox"/> No
D32	Which transition services are addressed? (Mark all that apply.) <input type="checkbox"/> Instruction <input type="checkbox"/> Course of study (Mark this if the graduation type is indicated.) <input type="checkbox"/> Related service(s) <input type="checkbox"/> Community experience(s) <input type="checkbox"/> Development of employment & other post-school adult living objectives <input type="checkbox"/> Acquisition of daily living skills, when appropriate <input type="checkbox"/> Provision of a functional vocational evaluation, when appropriate
C19	Are 100% of the required transition services (i.e., instruction, course of study, related services, community experience, employment & adult living objectives) addressed? (Note: Some students may not need all of the transition services, but they will still be compliant on this aspect if the documentation indicates that the services are not needed and why. In this study, the graduation type indicates the course of study.) <input type="checkbox"/> Yes <input type="checkbox"/> No
C20	Are the transition services aligned with the child's education/training PS goal? <input type="checkbox"/> N/A: no transition services OR no PS goal <input type="checkbox"/> Yes <input type="checkbox"/> No
C21	Are the transition services aligned with the child's employment PS goal? <input type="checkbox"/> N/A: no transition services OR no PS goal <input type="checkbox"/> Yes <input type="checkbox"/> No

C22	Are the transition services aligned with the child's independent living PS goal? <input type="checkbox"/> N/A: no transition services OR no PS goal <input type="checkbox"/> Yes <input type="checkbox"/> No
D33	Is there any indication that the child's needs, strengths, preferences, and interests were discussed or captured in the IEP documentation? <input type="checkbox"/> Yes <input type="checkbox"/> No
C23	Is there evidence that the transition services were based on the child's needs, strengths, preferences, or interests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA: no transition services
D34	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female

References

- Everson, J. M., Zhang, D., & Guillory, J. D. (2001). A statewide investigation of individualized transition plans in Louisiana. *Career Development for Exceptional Individuals, 24*(24), 37-49.
- Individuals with Disabilities Education Improvement Act of 2004, PL 108-446, 20 U.S.C. §§ 1400 *et seq.* (2004).
- Kohler, P. D. (1993). Best practices in transition: Substantiated or implied? *Career Development for Exceptional Individuals, 16*(2), 107-121.
- National Secondary Transition Technical Assistance Center. (2007). *Indicator 13 checklist*. Charlotte, NC: NSTTAC.
- Office Vocational and Adult Education. (2009). Retrieved June 25, 2009 from <http://www.ed.gov/rschstat/eval/sectech/factsheet/index.html>
- O'Leary, E. (2006). *Individuals with Disabilities Education Improvement Act of 2004: Transition requirements and Indicator 13 checklist*. Retrieved November 26, 2008 from www.cuttingedj.net
- Powers, K. M., Gil-Kashiwabara, E., Geenen, S. J., Powers, L. E., Balandran, J., & Palmer, C. (2005). Mandates and effective transition planning practices reflected in IEPs. *Career Development for Exceptional Individuals, 28*(1), 47-59.
- Texas Education Agency. (2004). *Revised minimum standards for the academic achievement record*. Austin, TX: TEA.
- Texas Education Agency. (2007b). *Data collection for state performance plan: Checklist for measurement of indicator 13*. Austin, TX: TEA Statewide High School Transition Network.

APPENDIX E

Code Book

Description of Variable	SPSS Name & Label	Coding Instructions
ID number	D1 ID	3 digit assigned identification number
District	D1a District	District number
IEP Date	D2IEP IEP Date	mm/dd/yy
ITP Date	D2ITP ITP Date	mm/dd/yy
Ethnicity	D3 Ethnicity	1=African American 2=Hispanic 3=White
Primary disability	D4Dis1 Disability 1	1=AU 2=ED 3=ID 4=LD
Secondary disability	D4Dis2 Disability 2	1=AU 2=ED 3=ID 4=LD 5=deaf-blind 6=deaf 7=hearing impairment 8=multiple 9=OI 10=SI 11=TBI 12=VI 13=NA 14=OHI

Tertiary disability	D4Dis3 Disability 3	1=AU 2=ED 3=ID 4=LD 5=deaf-blind 6=deaf 7=hearing impairment 8=multiple 9=OI 10=SI 11=TBI 12=VI 13=NA 14=OHI
Birthdate	D5DOB Birthdate	mm/dd/yy
Age	D5Age Age	Age in years
If the student is age 15 or older, are transition services in place?	C1 Trans Services?	0→1=NA* 1=yes 2→0=no
If the student is 16 years or older, does it appear that the transition services have been updated at least yearly?	C2 Trans Updated?	0→1=NA 1=yes 2=no 3→2= cannot determine
Is there any indication that the parents have been advised that upon age of majority rights transfer to the student?	C3 Age Major Trans?	0→1=NA 1=yes 2=no 3→2= marked "not appropriate due to cognitive functioning"
Is a summary of performance included?	C4 SOP Included?	0→1=NA 1=yes 2=no

Summary of performance components that are present	D6 SOP Parts	0=NA 1=no summary of performance 2=summary of academic achievement ONLY 3=summary of functional performance ONLY 4=recommendation(s) on how to assist the child in meeting PS goals ONLY 5=summary of academic achievement + summary of functional performance 6= summary of academic achievement = recommendation(s) on how to assist the child in meeting PS goals 7=summary of functional performance + recommendation(s) on how to assist the child in meeting PS goals 8=summary of academic achievement + summary of functional performance + recommendation(s) on how to assist the child in meeting PS goals
If this is the dismissal meeting, does the summary of performance include BOTH a summary of academic achievement and functional performance?	C5 SOP Academic + Functional?	0→1=NA 1=yes 2=no
If this is the dismissal meeting, does the summary of performance include recommendations on how to assist the child in meeting postsecondary (PS) goals?	C6 SOP Recommendations?	0→1=NA 1=yes 2=no

Instructional setting code	D7 Instructional Setting Code	0=other 8=VAC 30=state school for MR 40=mainstream 41=resource, < 21% 42=resource, at least 21% & < 50% 43=self-contained, at least 50% & no more than 60% 44=self-contained, more than 60% 81=RCT, mainstream 85=RCT, self-contained, regular campus more than 60% 86=RCT, separate campus 96=off home campus, separate campus
Mainstreamed?	PD7 Mainstream	0=no 1=yes (instructional setting code of 40)
TAKS reading	D8Rdg TAKS Reading	Only use first year's data 0=NA 1=TAKS 2=Accommodated 3=Modified 4=Alternative
TAKS English/LA	D8Eng TAKS English	Only use first year's data 0=NA 1=TAKS 2=Accommodated 3=Modified 4=Alternative
TAKS writing	D8Wrt TAKS Writing	Only use first year's data 0=NA 1=TAKS 2=Accommodated 3=Modified 4=Alternative
TAKS math	D8Math TAKS Math	Only use first year's data 0=NA 1=TAKS 2=Accommodated 3=Modified 4=Alternative

TAKS science	D8Sci TAKS Science	Only use first year's data 0=NA 1=TAKS 2=Accommodated 3=Modified 4=Alternative
TAKS social studies	D8SS TAKS Social Studies	Only use first year's data 0=NA 1=TAKS 2=Accommodated 3=Modified 4=Alternative
State standardized testing supports general education?	PD8Gen2 GenTAKS?	0→1=NA 1=yes: TAKS or accommodated 2→0=no: modified or alternate
Student invited?	D9Stu Student Invited?	1=yes 2=no
Parent/guardian invited?	D9Par Parent Invited?	1=yes 2=no
General ed teacher invited?	D9Gen Gen Ed Invited?	1=yes 2=no
Sped teacher invited?	D9Sped Sped Invited?	1=yes 2=no
Administrator invited?	D9Admin Admin Invited?	1=yes 2=no
Transition specialist invited?	D9Trans Transition Specialist Invited?	1=yes 2=no
Autism specialist invited?	D9AU AU Specialist Invited?	1=yes 2=no
Assessment invited?	D9Assess Assess Invited?	1=yes 2=no
Counselor invited?	D9Coun Counselor Invited?	1=yes 2=no
CTE teacher invited?	D9CTE CTE Invited?	1=yes 2=no
VAC invited?	D9VAC VAC Invited?	1=yes 2=no
Other school personnel invited?	D9OthSch Other School Person Invited?	1=yes 2=no

Agency personnel invited?	D9Agc Agency Person Invited?	1=yes 2=no
Are there transition services that are likely to be provided or paid for by outside agencies within the upcoming year?	D10 Trans Services by Agency?	0=NA 1=yes 2=no
Were ALL of the required individuals invited to the meeting?	C7 Required All Invited?	1=yes 2=no
To the extent appropriate, did the parents or the student who has reached the age of majority consent to the invitation of a representative from an outside agency?	C8 Parents Consent to Agency Invite?	0→1=NA 1=yes 2=no
Student attend?	D11Stu Student Attend?	1=yes, 2=no
Parent/guardian attend?	D11Par Parent Attend?	1=yes, 2=no
General ed teacher attend?	D11Gen Gen Ed Attend?	1=yes, 2=no
Sped teacher attend?	D11Sped Sped Attend?	1=yes, 2=no
Administrator attend?	D11Admin Admin Attend?	1=yes, 2=no
Transition specialist attend?	D11Trans Transition Specialist Attend?	1=yes, 2=no
AU specialist attend?	D11AU AU Specialist Attend?	1=yes, 2=no
Counselor attend?	D11Coun Counselor Attend?	1=yes, 2=no
CTE teacher attend?	D11CTE CTE Attend?	1=yes, 2=no
VAC attend?	D11VAC VAC Attend?	1=yes, 2=no
Other school personnel attend?	D11OthSch Other School Person Attend?	1=yes, 2=no

Agency personnel attend?	D11Agc Agency Person Attend?	1=yes, 2=no
Did ALL of the required individuals (i.e., student, parent, general education teacher, special education teacher, administrator, and agency representative—if answer to D10 is Yes) attend or contribute to the meeting?	C24 AllAttend	1=yes, 2=no
Does the IEP documentation indicate any accommodation(s) to parent/family to support their involvement at the IEP meeting?	P1 Prac Family Accomm?	0→1=NA 1=yes 2→0=no
Is there any indication that the parent/guardian contributed to the development of the transition components of the IEP document?	P2 Prac Family Contrib?	0→1=NA 1=yes 2→0=no
Is there any indication that agency representatives contributed to the development of the transition components?	P3 Prac Agency Contrib?	0→1=NA 1=yes 2→0=no
Did the school/district provide any community agency information?	P4 Prac Agency Info?	0→1=NA 1=yes 2→0=no
What is the total number of action steps?	D12 Total # ActionStps	
Percentage of action steps assigned to STUDENT	D12Stu Percent of Action Steps Student	
Percentage of action steps assigned to PARENT	D12Par Percent of Action Steps Parent	
Percentage of action steps assigned to AGENCY	D12Agc Percent of Action Steps Agency	

Percentage of action steps assigned to SCHOOL	D12Sch Percent of Action Steps School	
What is the student's graduation type?	D13 Graduation Type?	0=not specified 1= minimum 2=recommended 3=distinguished
What is the student's graduation option?	D14 Graduation Option?	0=not specified 1=option B 2=option C: FT employment . . . 3=option C:demonstrated mastery . . . 4=option C:access to services that are . . . 5=option D
Is the student's graduation option Option B?	PD14 GraduationOpB	0→1=not specified 1=yes 2→0=no
What type of education/training PS goal does the student have?	D15 Edu/Train PS Goal Type?	0=no goal 1=on the job training 2=technical school 3=community college 4=university 5=other
Is the education/training PS goal measurable?	C9 Edu/Train PS Goal Measurable?	0→2=NA 1=yes 2=no
Is there evidence that the education/training PS goal was based on an age-appropriate transition assessment?	D16 Trans Assess? Edu	0=NA, 1=yes, 2=no
Edu/Training PS: interest inventories?	D16Like Interest Invent? Edu	0=NA, 1=yes, 2=no
Edu/Training PS: formal/informal interview with student/parent?	D16Inter Interview? Edu	0=NA, 1=yes, 2=no
Edu/Training PS: other eval. data?	D16Other Other? Edu	0=NA, 1=yes, 2=no
Edu/Training PS: teacher information?	D16Teac Teacher Info? Edu	0=NA, 1=yes, 2=no

Edu/Training PS: IEP documentation?	D16IEP IEP docu Edu	0=NA, 1=yes, 2=no
Is there evidence that the education/training PS goal was based upon at least one age appropriate transition assessment?	C10 Edu PS Assess?	0→missing data=NA 1=yes 2=no
Emp PS goal?	D17 Emp PS goal?	1=yes, 2=no
FT Emp PS goal?	D17FT FT Emp PS goal?	0=NA, 1=yes, 2=no
PT Emp PS goal?	D17PT PT Emp PS goal?	0=NA, 1=yes, 2=no
Comp Emp PS goal?	D17Comp Comp Emp PS goal?	0=NA, 1=yes, 2=no
Supp Emp PS goal?	D17Sup Supp Emp PS goal?	0=NA, 1=yes, 2=no
Sheltered Emp PS goal?	D17Shelt Sheltered Emp PS goal?	0=NA, 1=yes, 2=no
Other Emp PS goal?	D17Other Other Emp PS goal?	0=NA, 1=yes, 2=no
Emp PS measurable?	C11 Emp PS measurable?	0→missing data=NA 1=yes 2=no
Is there evidence that the employment PS goal was based on an age-appropriate transition assessment?	D18 Trans Assess? Emp	0=NA, 1=yes, 2=no
Emp PS: interest inventories?	D18Like Interest Invent? Emp	0=NA, 1=yes, 2=no
Emp PS: formal/informal interview with student/parent?	D18Inter Interview? Emp	0=NA, 1=yes, 2=no
Emp PS: other eval. data?	D18Other Other? Emp	0=NA, 1=yes, 2=no
Emp PS: teacher information?	D18Teac Teacher Info? Emp	0=NA, 1=yes, 2=no

Emp PS: IEP documentation?	D18 IEP IEP docu? Emp	0=NA, 1=yes, 2=no
Is there evidence that the employment PS goal was based upon at least one age appropriate transition assessment?	C12 Emp PS Assess?	0→missing data=NA 1=yes 2=no
Career cluster?	D19 Career Cluster	0=NA no employment goal 1=NA bc no career indicated 2=agriculture, food, & natural resources 3=architecture & construction 4=business, management, & administration 5=finance 6=health science 7=human services 8=law, public safety, corrections 9=arts, AV tech, & communication 10=education & training 11=government & public administration 12=hospitality & tourism 13=information technology 14=manufacturing 15=marketing, sales, & service 16=science, tech, engineering, math 17=transportation, distribution, & logistics
Does the IEP document describe student's previous or current work experience?	D20 Work experience?	0=not described 1=indicates student has no experience 2=paid employment 3=unpaid/volunteer 4=unknown

Has the student engaged in previous paid or unpaid work experience or is there any indication that the student will experience any paid or unpaid work experience?	P5 Work?	1=yes 2→0=no
Is there any indication that the student has participated in any employment preparation program(s)?	D21 Employ Prep?	1=yes, 2=no
Participated in CTE?	D21CTE CTE Prep?	0=NA, 1=yes, 2=no
Participated in CBI?	D21CBI CBI?	0=NA, 1=yes, 2=no
Participated in WBL?	D21WBL WBL?	0=NA, 1=yes, 2=no
Participated in cooperative classes?	D21Coop Coop?	0=NA, 1=yes, 2=no
Participated in LIFE skills class?	D21LIFE LIFE?	
Participated in other employment preparation?	D21Other Other Emp Prep?	0=NA, 1=yes, 2=no
Has the student participated in any employment preparation programming, or are there plans for the student to participate?	P6 Emp Prep (Prac)?	1=yes 2→0=no
Is there an independent living PS goal?	D22 Indep Liv PS Goal?	1=yes, 2=no
Community living goal?	D22ComLi Community Lvng?	0=NA, 1=yes, 2=no
Daily living goal?	D22ADL Daily Lvng Goal?	0=NA, 1=yes, 2=no
Self-care goal?	D22SelfC Self Care Goal?	0=NA, 1=yes, 2=no
Other independent living goal?	D22Other Other Indep Lv Goal?	0=NA, 1=yes, 2=no

Is the independent living PS goal measurable?	C13 Ind PS Goal Meas?	0→1=NA 1=yes 2=no
Is there evidence that the independent living goal was based on an age-appropriate transition assessment?	D23 Trans Assess? IL	0=NA, 1=yes, 2=no
IL PS: interest inventories?	D23Like Interest Invent? IL	0=NA, 1=yes, 2=no
IL PS: formal/informal interview with student/parent?	D23Inter Interview? IL	0=NA, 1=yes, 2=no
IL PS: other eval. data?	D23Other Other? IL	0=NA, 1=yes, 2=no
IL PS: teacher information?	D23Teac Teacher Info? IL	0=NA, 1=yes, 2=no
IL PS: IEP documentation?	D23IEP IEP docu? IL	0=NA, 1=yes, 2=no
Is the independent living PS goal based upon age appropriate transition assessments?	C14 IL PS Assess?	0→1=NA 1=yes 2=no
What is the total number of annual goals the student has?	D24 Total # of Annual?	
What percentage of the annual IEP goals is measurable?	D24AnPct Percent Annual Meas?	
Are 100% of the annual goals measurable?	C15 100% Ann Meas?	0→2=NA 1=yes 2=no
How many annual goals reasonably support the child to meet the education / training PS goal?	D25EduPS # Ann Support Edu PS?	-9=NA
How many annual goals reasonably support the child to meet the employment PS goal?	D25EmpPS # Ann Support Emp PS?	-9=NA

How many annual goals reasonably support the child to meet the independent living PS goal?	D25ILPS # Ann Support IL PS?	-9=NA
Is there at least one annual goal that supports the child's education / training PS goal?	C16 One Ann Goal Edu PS?	0→2=NA 1=yes 2=no 3→missing data=NA
Is there at least one annual goal that supports the student's employment PS goal?	C17 One Ann Goal Emp PS?	0→2=NA 1=yes 2=no 3→missing data=NA
Is there at least one annual goal that supports the child's independent living PS goal, if appropriate?	C18 One Ann Goal IL PS?	0→2=NA 1=yes 2=no 3→missing data=NA
Are there transition services that address social skills?	D26 Transition Services SS?	0=NA, 1=yes, 2=no
Are there annual goals or objectives that address social skills?	D27 Annual Goals SS?	0=NA, 1=yes, 2=no
Is there any indication that the student has received/is receiving social skills training OR that the student has appropriate social skills?	P7 Stu Rec' SS?	1=yes 2→0=no
Are there transition services that address self-determination?	D28 Transition Services SD?	0=NA, 1=yes, 2=no
Are there annual goals or objectives that address self-determination?	D29 Annual Goals SD?	0=NA, 1=yes, 2=no
Is there any indication that the student has received/is receiving instruction/training on self-determination OR that the student has appropriate self-determination skills?	P8 Stu Rec' SD?	1=yes 2→0=no

Are there transition services that address functional, daily living skills?	D30 Transition Services ADL?	0=NA, 1=yes, 2=no
Are there annual goals or objectives that address functional, daily living skills?	D31 Annual Goals ADL?	0=NA, 1=yes, 2=no
Is there any indication that the student has received/is receiving functional, daily living skills OR that the student has appropriate functional, daily living skills?	P9 Stu Rec' ADL?	1=yes 2→0=no
Transition services include instruction?	D32Inst Transition Srv Instr?	1=yes, 2=no
Transition services include course of study?	D32COS Transition Srv COS?	1=yes, 2=no
Transition services include related services?	D32RelSv Transition Srv Related Srv?	1=yes, 2=no
Transition services include community experiences?	D32ComEx Transition Srv Community?	1=yes, 2=no
Transition services include development of employment & other post-school adult living objectives?	D32EmpPS Transition Srv Emp & PS?	1=yes, 2=no
Transition services include acquisition of daily living skills?	D32ADL Transition Srv ADL?	1=yes, 2=no
Transition services include provision of functional vocational evaluation?	D32FuncV Transition Srv Voc Eval?	1=yes, 2=no

Are 100% of the required transition services addressed?	C19 100% Trans Srv?	0→1=NA 1=yes 2=no
Are the transition services aligned with the child's education/training PS goal?	C20 Align w Edu PS?	0→2=NA 1=yes 2=no
Are the transition services aligned with the child's employment PS goal?	C21 Align w Emp PS?	0→2=NA 1=yes 2=no
Are the transition services aligned with the child's independent living PS goal?	C22 Align w IL PS?	0→2=NA 1=yes 2=no
Is there any indication that the child's needs, strengths, preferences, and interests were discussed or captured in the IEP documentation?	D33 Needs, etc in IEP?	1=yes, 2=no
Is there evidence that the transition services were based on the child's needs, strengths, preferences, or interests?	C23 Trans based on needs, etc?	0→2=NA 1=yes 2=no
Gender	D34 Gender	1=male 2=female

*Note. The “→” symbolizes the coding transformation used to facilitate scoring of the variables.

APPENDIX F

*Non-Statistically Significant Multiple Logistic Regression Results**and Predicted Probabilities for the Components of Compliance Variables**Multiple Logistic Regression Results for Timelines Full Compliance*

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.357	.300 (.326)	.713	1.350	2.555
Hispanic	.310	-.393 (.387)	.316	.675	1.441
Disability					
Emotional	.423	.300 (.375)	.647	1.350	2.817
Learning	.288	.353 (.333)	.742	1.424	2.733
Caucasian + Developmental	.097	-.488 (.295)		.614	

Note. $R^2 = .970$ (Hosmer & Lemeshow), .023 (Cox & Snell), .030 (Nagelkerke). Model $\chi^2(4) = 4.61, p < .330$.

Predicted Probabilities for Timelines Full Compliance

	African American	Hispanic	Caucasian
Developmental	45.3%	29.3%	38%
Emotional	52.8%	35.9%	45.3%
Learning	54.1%	37.1%	46.6%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Multiple Logistic Regression Results for Post Secondary Goals Full Compliance

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.068	.655 (.359)	.953	1.926	3.889
Hispanic	.231	.489 (.408)	.733	1.630	3.624
Disability					
Emotional	.520	.276 (.429)	.569	1.318	3.052
Learning	.554	.207 (.350)	.619	1.230	2.445
Caucasian + Developmental	.412	-.250 (.305)		.779	

Note. $R^2 = .058$ (Hosmer & Lemeshow), .025 (Cox & Snell), .034 (Nagelkerke). Model $\chi^2 (4) = 4.34, p < .363$.

Predicted Probabilities for Post Secondary Goals Full Compliance

	African American	Hispanic	Caucasian
Developmental	60%	55.9%	43.8%
Emotional	66.4%	62.6%	50.7%
Learning	64.9%	61%	48.9%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

APPENDIX G

*Non-Statistically Significant Multiple Logistic Regression and Predicted Probabilities**Tables for the Transition Practices**Multiple Logistic Regression Results for Evidence of Paid or Unpaid Work Experience Practice*

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.365	-.303 (.335)	.383	.738	1.423
Hispanic	.939	-.028 (.370)	.471	.972	2.007
Disability					
Emotional	.101	-.664 (.405)	.233	.515	1.139
Learning	.066	.592 (.322)	.962	1.808	3.397
Caucasian + Developmental	.191	-.379 (.290)		.685	

Note. $R^2 = .207$ (Hosmer & Lemeshow), .057(Cox & Snell), .077 (Nagelkerke). Model $\chi^2(4) = 12.44, p < .014$.

Predicted Probabilities for Evidence of Paid or Unpaid Work Experience Practice

	African American	Hispanic	Caucasian
Developmental	33.6%	40%	40.7%
Emotional	20.7%	25.5%	26.1%
Learning	47.8%	54.6%	55.3%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Multiple Logistic Regression Results for Evidence of Social Skills Training Practice

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.848	.077 (.401)	.492	1.080	2.371
Hispanic	.116	-.642 (.409)	.236	.526	1.172
Disability					
Emotional	.884	.066 (.451)	.441	1.068	2.586
Learning	.605	-.195 (.377)	.393	.823	1.722
Caucasian + Developmental	.000	1.445 (.351)		4.242	

Note. $R^2 = .853$ (Hosmer & Lemeshow), .020 (Cox & Snell), .030 (Nagelkerke). Model $\chi^2(4) = 4.242, p < .374$.

Predicted Probabilities for Evidence of Social Skills Training Practice

	African American	Hispanic	Caucasian
Developmental	82%	69.1%	80.9%
Emotional	83%	70.4%	81.9%
Learning	79%	64.7%	77.7%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

Multiple Logistic Regression Results for Evidence of Daily Living Skills Practice

	P	B (SE)	95% CI for Exp b (OR)		
			Lower	Exp b (OR)	Upper
Ethnicity					
African American	.857	-.106 (.587)	.285	.900	2.842
Hispanic	.656	-.286 (.643)	.213	.751	2.649
Disability					
Emotional	.051	-1.404 (.718)	.060	.246	1.003
Learning	.154	-.993 (.697)	.094	.370	1.453
Caucasian + Developmental	.000	3.344 (.677)		28.340	

Note. $R^2 = .721$ (Hosmer & Lemeshow), .022 (Cox & Snell), .049 (Nagelkerke). Model $\chi^2(4) = 4.67, p < .322$.

Predicted Probabilities for Evidence of Daily Living Skills Practice

	African American	Hispanic	Caucasian
Developmental	96.2%	95.5%	96.6%
Emotional	86.3%	84%	87.5%
Learning	90.4%	88.7%	91.3%

Note. The reference group was Caucasian and Developmental Disability. * indicates $p < .05$.

VITA

Leena Jo Landmark received her Bachelor of Arts degree in psychology from Texas A&M University in 1995, her Master of Education degree in educational psychology from Texas A&M University in 2003, and her Doctor of Philosophy degree in educational psychology from Texas A&M University in 2009. She is a certified pk-12 special educator and principal in the state of Texas. She has almost eight years of teaching experience at the middle school level and has taught courses at the undergraduate level. Her research interests include secondary special education, transition planning, developmental disabilities, and faculty learning communities. She may be contacted at Texas A&M University, Department of Educational Psychology, 4225 TAMU, College Station, TX 77843 or llandmark@cehd.tamu.edu.