

An Examination of Secondary Special Education Teachers' Self-Reported Efficacy and Performance through the Use of Case Study Methodology

by

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Abstract

Preparing students with disabilities for positive postschool outcomes is one of the most difficult responsibilities a secondary special education teacher can have. It is necessary that secondary level special education teachers have the training and confidence level needed to effectively transition students from high school to postschool settings. When special education teachers have higher levels of efficacy students with disabilities have more positive postschool outcomes (Buell, Hallam, Game-McCormick, & Scheer, 1999).

Unfortunately, many pre-service teachers are not being adequately prepared in the area of transition (Benitez, Morningstar, & Frey, 2009). Preparation programs are not providing the content that is needed to help students with disabilities exit high school (Anderson, et al., 2003). Many programs focus on special education terminology, laws, and the IEP (Council for Exceptional Children, 2001). However, pre-service educators are missing the knowledge and skills that will allow them to better serve students during their transition planning process. Case study methodology is one method that teacher preparation programs can use to evaluate their students' problem-solving and application skills (Block, 1996).

This study examined pre-service special education teachers' efficacy, knowledge, and skills towards educating secondary-age students with disabilities. Thirty pre-service secondary special education teachers were surveyed. Data were collected using the *Teacher Efficacy for Secondary Student with Disabilities Survey* and *Evidence-Based Practice Case Study Questionnaire*. The methods used to analyze the data included quantitative and descriptive

statistics. The results revealed that pre-service teachers have high levels of efficacy. However, their overall scores from the rubric which evaluated pre-service secondary special education teachers' performance on case study related to evidence-based practices and transition-related issues did not fall in at the "meet" or "exceed" expectation range.

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CHAPTER I. INTRODUCTION

The Education for All Handicapped Children Act of 1975 (EAHC) has required all students, regardless of disability, to receive a free and appropriate public education (FAPE). Since EAHC was created, there has been more than a 50% increase in students with disabilities who receive special education services (National Center for Education Statistics, 2011). Over the years, there has been an increased concern about what happens to students with disabilities once they leave high school. National studies reveal their postschool outcomes in employment, postsecondary education and training, and independent living is less than desirable (Newman, 2005). While there are many factors that contribute to these poor outcomes, one factor that can contribute to this is the lack of focus in teacher preparation programs in the area of transition (Anderson, Kleinhammer-Tramill, Morningstar, et al., 2003; Kochhar-Bryant, 2003). Currently, the No Child Left Behind Act (2001) and the reauthorization of the Individuals with Disabilities Education Improvement Act (2004) have improved the quality of education for students with disabilities regarding academic achievement. The services that are being provided are more academically-focused and teachers are being held more accountable to implement evidence-based practices (Anderson, Kleinhammer-Tramill, Morningstar, et al., 2003).

In addition to the evidence-based practices that support academic achievement, there are practices that support postschool options. Evidence-based practices are researched-based practices that have been found to be effective for creating positive postschool outcomes for students with disabilities (Landmark, et al., 2010). Currently, the National Secondary Transition

Technical Assistance Center (NSTTAC; 2010) has identified more than 33 evidence-based practices for preparing secondary students with disabilities. The practices are supported by research and validated by transition experts as practices that increase positive student outcomes during the transition planning process. To increase the likelihood of a positive postschool outcome, secondary educators must implement evidence-based practices and programs that relate to the students' postschool goals (Flexer, et al., 2007). There should be a support system for students and their families in transition planning that communicates individualized transition services that are scientifically-based (Cook, Tankersley, & Landrum, 2009). Although there are over 33 evidence-based practices some of those, such as funding, are not under the direct control of the special educator at the secondary level. However, several of these practices can be addressed by secondary special education teachers. Some of the most important practices that teachers can influence are self-determination, family involvement, interagency collaboration, student participation, and transition assessments (Kohler & Field, 2003).

Due to the unique academic and behavior needs of students with disabilities and the need for better postschool outcomes for these students, recognizing and effectively using evidence-based practices are of the utmost importance for special education teachers (Kretlow & Blatz, 2011; Landmark, Ju, & Zhang, 2010). Evidenced-based practices are used by teachers to assist in the development and implementation of individualized educational planning for youth with disabilities. This type of planning supports the transition from high school to postschool activities, such as college, employment, and independent living. The evidence-based practices that will be highlighted in this paper are (a) self-determination, (b) student participation, (c) family involvement, (d) interagency collaboration, and (e) transition assessments. These five practices have been found to be critical components of effective transition programs.

Unfortunately, many special education teachers lack the knowledge and skills to implement these practices effectively, and they report feeling unprepared to work with students with disabilities at the secondary level (Anderson et al., 2003). Special educators must have the confidence and knowledge to promote effective student learning. This impacts their sense of self-efficacy. Special educators' self-efficacy plays a key role in classroom learning and predicting positive postschool outcomes for students with disabilities. Teacher efficacy is demonstrated by having a positive attitude paired with effective instructional activities that will increase student achievement (Gibson & Dembo, 1984). Teacher efficacy is important to consider in the preparation of special education teachers. Students of teachers with higher self-efficacy demonstrate higher academic achievement, increased family involvement, and higher levels of commitment to the field (Gibson & Dembo, 1984; Hoy & Woolfolk, 1993; Soodak & Podell, 1993).

Preparation programs should include the content necessary to ensure that special educators understand the complete nature of the transition process and have the skills to develop and implement effective secondary education programs. The roles and responsibilities of secondary special educators have expanded, requiring them to take on more job duties. Many secondary special educators, however, lack the key content to perform their expanded job requirements (deFur & Tayman, 1995). Special education teacher preparation programs for the most part do not provide pre-service special educators with information and practical experiences to ensure competency in the area of transition. Most programs only offer one class, and novice teachers are left with many questions on how to help students transition from one setting to the next. Many special education programs focus solely on the IEP process and special education law that are related to the transition process. Colleges and universities have embedded these

preferred areas of knowledge and skills into their secondary level teacher preparation programs. The transition skills that pre-service teachers need are usually not developed until they obtain careers in a school system (Trussell et al., 2008). Current research findings are consistent with previous research in that there are gaps in the transition knowledge that teachers have and how often transition services are provided (Knott & Asselin, 1999).

Purpose of the Study

The purpose of this study was to examine pre-service teachers' efficacy, knowledge, and skills related to educating secondary-aged students with disabilities. The efficacy beliefs concerning secondary-age students with disabilities are important because they promote positive teacher practices and positive postschool outcomes (Gibson & Dembo, 1984; Hoy & Woolfolk, 1993; Soodak & Podell, 1993). Pre-service special education teachers' teacher efficacy was measured using the *Teacher Efficacy for Secondary Student with Disabilities* (TESSD) survey. Their knowledge of and skills related to the provision of evidence-based practices in transition was measured through the use of a case study that focused on transition.

Research Questions

The study investigated the following questions:

1. What proportion of students rated themselves as "confident" or "very confident" on the *Teacher Efficacy for Secondary Student with Disabilities* (TESSD) survey?
2. To what extent was there a difference between scores on the teacher efficacy scale (TESSD) for students at the undergraduate level and those at the graduate level?
3. To what extent was there a difference between scores on the teacher efficacy scale (TESSD) for students at the practicum level and those at the internship level?

4. What proportion of students' responses met or exceeded expectations on the rubric for the written response to *the Evidence-Based Practice Case Study*?
5. To what extent was there a difference between scores on the rubrics for evidence-based practices for students at the undergraduate level and those at the graduate level?
6. To what extent was there a difference between scores on the rubrics for evidence-based practices for students at the practicum level and those at the internship level?
7. To what extent was there a relationship between teacher efficacy scores (TESSD) and scores on the rubrics for evidence-based practices for students in special education teacher preparation programs?

Significance of the Study

This study provided information about pre-service special education teachers' efficacy, knowledge, and skills related to educating secondary-aged students with disabilities. As the roles and responsibilities of secondary teachers have changed due to emerging education priorities and legislative requirements, it is important to assess pre-service teachers' beliefs about their abilities to serve secondary students with disabilities and their knowledge related to evidence-based practices. The results of this study help guide the refinement of secondary special education teacher certification programs.

Definition of Terms

Case Study: An analysis of a particular situation used as a basis for problem-solving in similar situations (Block, 1996).

Evidence-Based Practices: Practices that are supported by research and supported by experts to increase positive student outcomes (Landmark, Ju, & Zhang, 2010).

Family Involvement: Family members participate in direct interactions with educators, administrators, and adult service providers regarding the education and postschool outcomes of their family member with a disability (Test, Aspel, & Everson, 2005).

Individualized Education Program: A written plan that states a student with a disability's strengths, weaknesses, and educational goals that outline the services and supports that will be provided to increase academic/behavioral achievement (IDEA, 1990).

Interagency Collaboration: A shared responsibility among educators, parents, and adult service providers actively working together to provide the best possible transition services for youth and young adults with disabilities (Test, Aspel, & Everson, 2005).

Postschool Outcomes: Outcomes that an individual experiences once exited from high school (Test, Aspel, & Everson, 2005).

Secondary Special Education Teacher: An educator that provides secondary school subjects and research-based instructional strategies that support the academic, behavioral, and postschool needs of all students with disabilities (Morningstar & Kleinhammer-Tramill, 2005).

Self-Determination: The attitude, abilities and skills that drives students to define goals for themselves and to take the initiative to reach these goals (Wehmeyer & Field, 2006).

Student Participation: An active participation of students in the decision-making process at the school level to help determine school and postschool options (Flexer, Baer, Luft, & Simmons, 2007).

Teacher Efficacy: Having a positive attitude paired with effective instructional activities that will increase student achievement (Bandura, 1977).

Transition Assessment: A process of obtaining and using information to assist young adults with disabilities, families, and educators make informed decisions about possible postschool outcomes (Clark, 1996).

Transition Planning Process: Activities, processes, and partnerships that prepare students with disabilities for postschool settings (Flexer, et al., 2007).

CHAPTER II. REVIEW OF LITERATURE

Introduction

Special education services have been required since the Education for All Handicapped Children Act of 1975. Over the years, there has been an increased concern about what happens to students with disabilities once they leave high school. National studies reveal their postschool outcomes in employment, postsecondary education and training, and independent living are less than desirable in comparison to their peers without disabilities (Newman, 2005). While there are many factors that contribute to these poor outcomes, one factor that may contribute to this is the lack of focus in teacher preparation programs in the area of transition (Anderson, Kleinhammer-Tramill, Morningstar, et al., 2003; Kochhar-Bryant, 2003). For example, Thoma, Held, and Saddler (2002) found that secondary special education teachers lack specific knowledge of transition skills and community resources to help students with disabilities enter adult life.

This lack of preparation may contribute to low levels of teacher efficacy. Teacher efficacy has been linked to student achievement and positive postschool outcomes (Gibson & Dembo, 1984; Hoy & Woolfolk, 1993). One method for increasing teacher efficacy in pre-service teachers is the case study method of instruction. The case study method of instruction allows pre-service teachers to gain insight into the transition planning process (Lengyel & Vernon-Dotson, 2010). The purpose of this paper is to examine the issues of teacher efficacy in transition and the use of case study methodology. To achieve this, an overview of transition and

evidence-based practices will be provided first. This will be followed by a review of secondary special education teachers' teacher efficacy, and finally case study methodology.

Overview of Transition

Transition Definitions and Models

PL 94-142, the Education for All Handicapped Children Act (EAHCA), passed in 1975, was the first federal legislation that required a free and appropriate education (FAPE) for all children with disabilities. Prior to this time, schools could deny educational services to students with disabilities. After the passage of the law, the main focus was on developing programs and services to educate students with disabilities. Beginning in the 1980s, however, after the first full generation of students served under EAHCA was exiting school, questions were raised by educators and parents about what happened to the students once they left school. Concerns about their outcomes in employment, residential, and independent living led to the beginning of the transition movement. The remainder of this section will provide an overview of transition by discussing the evolution of the definitions of transition and key legislation.

The beginning of the transition initiative in special education was in 1984 with Madeline Will's *Bridges from School to Working Life*. In this paper, Will (1984) provided the following definition:

The transition from school to working life is an outcome-oriented process encompassing a broad array of services and experiences that lead to employment. Transition is a period that includes high school, the point of graduation, additional postsecondary education or adult services, and the initial years of employment. Transition is a bridge between the security and structure offered by the school and the opportunities and risks of adult life. Any bridge requires both a solid span and secure foundation at either end. The transition

from school to work and adult life requires sound preparation in the secondary school, adequate support at the point of school leaving, and secure opportunities and services, if needed, in adult situations. (p. 30)

This cornerstone definition aided in creating and providing appropriate transition services for youth with disabilities to support postschool options. The definition included specific recommendations for connecting secondary and postsecondary environments, school curricula that support work environments, better postsecondary services, and incentive programs for hiring youth with disabilities. The suggestions were based on needs that guided the creation of the Office of Special Education and Rehabilitative Services (OSERS) transition policy during the 1980s. The needs included (a) a focus on all students with disabilities, (b) a focus to address postschool services, and (c) a focus to prepare students for work and independent living.

Will's definition centered attention on the collaborative efforts of the school and community agencies for improving outcomes for youth with disabilities exiting from secondary education settings to employment, adult life, and postsecondary institutions (Kohler, 1998). The definition also led to the OSERS Bridges Model that included three bridges from high school to employment (Will, 1983). The first bridge was called "no special services." It was used by individuals with and without disabilities. Individuals who use this route obtain support by using their own resources or what is typically available to those without disabilities. The second bridge, "time-limited services," referred to the opportunities individuals must qualify for to use special services for a specified amount of time. These special services can include vocational rehabilitation or vocational training programs. The third bridge, "ongoing services," provided support for individuals who needed long-term care such as "supported employment" in order to obtain vocational experiences. The Bridges Model was one of the first major influential models

that came out of the Department of Education. The model focused solely on employment as a transitional goal, while leaving out community and social involvement.

There was concern that the focus of the Bridgeø Model was too limited. Consequently, Halpern (1985) created another model that was more comprehensive. His model focused on total community adjustment, which he suggested was supported by not only employment, but also residential environment and social interpersonal networks. This model also had three paths, which he titled *no special services*, *time-limited services*, and *ongoing services*. The addition of residential environment and social interpersonal networks reflected the need for transition preparation in other areas besides employment.

The early definitions and models of transition helped shape the meaning of transition in the United States and influenced the development of transition programs. During this time, transition services were not required. It was not until 1990 that transition services were mandated under the Individuals with Disabilities Education Act (IDEA). At this point, the special education law initiated the requirement of transition planning services. Additionally, a definition for appropriate transition services was provided. In Section 602 (a) of IDEA transition services were defined as:

A coordinated set of activities for a 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), and community participation. The coordinated set of activities shall be based upon the individual studentø needs, taking into account the studentø preferences and interests, shall include instruction, community experiences, the development of

employment and other post-school adult living objectives, and if appropriate, acquisition of daily living skills and functional vocational evaluation. (P. L. 101-476, Section 602(a))

This definition provided a focus on activities that would allow students with disabilities to participate in a meaningful transition from high school to postsecondary settings. It also provided a comprehensive look at postsecondary opportunities such as employment, postsecondary education, vocational training, and independent living. Most importantly, educators, parents, and service providers had a rationale to create and implement effective transition services.

Early definitions and transition planning primarily emphasized employment. Researchers and professionals began to question this limited focus, arguing that the outcome of the transition process should also reflect independent living and recreational activities (Bates, Suter, & Poelvoorde, 1986; Polloway, Patton, Smith, & Roderique, 1991; Wehman, Kregel, Barcus, & Schalock, 1986). In 1994, the Division on Career Development and Transition (DCDT) of the Council for Exceptional Children presented a broader definition reflective of professionals' opinions that emphasized community participation, independent living, and recreation in addition to employment. According to this definition:

Transition refers to change in status from behaving primarily as a student to assuming emergent adult roles in the community. These roles include employment, participating in post-secondary education, maintaining a home, becoming appropriately involved in the community, and experiencing satisfactory personal and social relationships. The process on enhancing transition involves the participation and coordination of school programs, adult agency services, and natural supports within the community. The foundations for transition should be laid during the elementary and middle school years, guided by the

broad concept of career development. Transition planning should begin no later than age 14, and students should be encouraged, to the full extent of their capabilities, to assume a maximum amount of responsibility for such planning. (Halpern, 1994, p. 117)

DCDT's definition reflected the expansion of the practice of transition. It joined the terminology of career development from elementary school through high school, and emphasized the planning of other life domains, and promoted the roles of everyone in the planning process (Halpern, 1994).

With emphasis on career development and effective planning in all domains of life, Kohler developed a transition model that emphasized a broader view on what transition education was and how it should be structured (1998). Her model is actually a taxonomy developed through a multi-stage process involving literature and research reviews and input from experts from the field. Several investigations of reviewed literature, evaluation studies, and model transition projects helped develop the framework. Through a three-phased research process, evidence-based practices were identified and organized into five categories. The five categories included (a) student-focused planning, (b) family involvement, (c) program structure and attributes, (d) interagency collaboration, and (e) student development. Student-focused planning is defined as the most important factor that will aide in determining goals, objectives, and services. Family involvement emphasizes the participation of family members while training them to increase student empowerment. Program structures and attributes looks at the service system and the need for community educational options and the allocation of resources. Interagency collaboration promotes a collaborative effort among schools and local businesses that will sustain employment needs of the students. Student development includes activities that teach students life skills and career development strategies in order to become successful

members in society. The combination of these categories assist students with disabilities, family members, educators, and other stakeholders in creating outcome-oriented planning based on individualized goals and needs (Flexer, Simmons, Luft, & Baer, 2001).

In 2004, with the reauthorization of the Individuals with Disabilities Education Act (IDEA), the definition of transition was changed again to be reflective and consistent with other educational reform efforts. The current definition of transition in federal law is

The term "transition services" means a coordinated set of activities for a child 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 postsecondary education; vocational education; integrated employment (including supported employment); continuing and adult education; adult services; independent living or community participation. [(60234)]

This definition focuses on the child's strengths, needs, preferences, and interests that will produce successful outcomes once the student graduates from high school.

In sum, before 1990, transition had not been fully defined and required by law. Although some professionals, organizations, and educators worked together to develop efficient definitions and models for improving post-school outcomes for adolescents with disabilities, this was only the beginning to the movement of effective transition services. Over the past forty years, the relationship between transition-related legislation and transition models have been explored to better serve individuals with disabilities (Flexer, Baer, Luft, & Simmons, 2007). The two major influences on transition currently are IDEA and Kohler's Taxonomy. Both of these provide guidance and direction for the development of transition programs and implementation of

services. As well, the focus on skills and content in the definition and taxonomy has major implications for the training of secondary special education teachers.

Transition definitions, models, and legislation have created the foundation needed to ensure that all students with disabilities receive complete access to and benefit from their secondary transition programs. Despite the influences of the transition models, legislation, and transition definitions, students with disabilities still face many challenges to achieve positive postschool outcomes in comparison to their peers without disabilities. To improve postschool outcomes, secondary special educators, parents, and other stakeholders must implement evidence-based practices that assist students in achieving desired postschool settings. These evidence-based practices provide the foundation for effective secondary progress.

Evidence-Based Practices for Secondary Special Educators

Over the years, researchers have been trying to identify practices related to positive postschool outcomes. The Office of Special Education Programs (OSEP) funded the National Secondary Transition Technical Assistance Center (NSTTAC). The goals of NSTTAC are to: (a) assist states with collecting, reporting, and using Indicator 13 data to improve transition services for youth with disabilities; (b) produce knowledge of evidence-based secondary transition practices; (c) build state capacity to put into practice evidence-based secondary transition practices; and (d) disseminate information regarding evidence-based secondary transition practices. NSTTAC researchers have identified over 33 evidence-based practices in secondary transition. These 33 or more practices can be categorized into the taxonomy delineated in Kohler's *Taxonomy for Transition Programming* discussed earlier, while representing a comprehensive categorization of practices through which transition-focused activities are created and implemented (Kohler, 1993, 1996; Kohler, DeStefano, Wermuth,

Grayson, & McGinty, 1994). The practices are supported by research and validated by transition experts as practices that increase positive student outcomes during the transition planning process. Table 1 provides a summary of some examples of evidence-based practices categorized by the *Kohler’s Taxonomy for Transition Programming*.

Table 1

Kohler’s Taxonomy for Transition Programming

Kohler’s Taxonomy Category	NSTTAC Evidence-Based Practices
Student-Focused Planning	Involving students in the IEP process Using the Self-Advocacy Strategy
Student Development	Teaching functional life skills Teaching job specific employment skills Teaching social skills Teaching cooking and food prep skills
Family Involvement	Training parents about transition issues
Program Structure	Extending services beyond secondary school
Interagency Collaboration	Training for postschool employment

To increase the likelihood of positive postschool outcomes, secondary educators must implement evidence-based practices and programs that relate to the student’s postschool goals (Flexer, et al., 2007). There should be a support system for students and their families in transition planning that communicates individualized transition services that are scientifically based (Cook, Tankersley, & Landrum, 2009). Although there are over 33 evidence-based

practices, some of those are not under the direct control of the secondary special educator (e.g., funding) and some are very specific to a particular type of student and skill (e.g. food preparation). However, several of these practices should be considered by the secondary special education teacher for all secondary students with disabilities. Some of the most important practices that teachers can influence are self-determination, family involvement, student participation, transition assessments, and interagency collaboration (Kohler & Field, 2003). Each of these will be discussed briefly.

Self-Determination

Self-determination is important for all students. Moreover, promoting self-determination is a critical instructional objective for students with disabilities (Wehmeyer & Field, 2006). Secondary special education teachers are using self-determination instruction as a way to better motivate students and meet the growing need to teach children and youth ways to more fully accept responsibility for their lives. It also helps them to identify their needs and develop strategies to meet those needs. There are several definitions of self-determination that have been developed. One definition that was a collaborative effort among a group of recipients of federal grants focused on transition defined self-determination as:

a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strength and limitations together with a belief of oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes individuals have a greater ability to take control of their lives and assume the role of successful adult in society. (Field, Martin, Miller, Ward, & Wehmeyer, 1998, p. 2)

The importance of self-determination has been highlighted in legislation as well as the results of research studies. Several pieces of legislation actually support the development of such skills (Flexer, et al., 2007). IDEA requires secondary transition-aged students to be invited to attend their Individualized Education Program (IEP) meetings that focus on transition planning. The IEP transition goals and activities must be based on the student's strengths, needs, interests, and preferences. In addition to IDEA, the Rehabilitation Act Amendments of 1992 (P.L.102-569) addressed the need for self-determination for secondary-age students. The Act determined that the presence of a disability does not lessen the rights of individuals to benefit from self-determination. All programs and activities that receive monies from the federal and state offices of vocational rehabilitation must support the principles of self-determination.

Research also supports the importance of the development of self-determination skills. Many parents, researchers and policy makers have voiced concern about the high rates of unemployment, under-employment and poverty experienced by students with disabilities once they complete high school (Wehmeyer & Field, 2006). Research has shown that students who display self-determined behaviors are more likely to graduate from high school, gain meaningful employment, and earn more money than their peers who were not self-determined (Wehmeyer & Field, 2006; Wehmeyer & Palmer 2003; Wehmeyer & Schwartz, 1997).

Providing support for student self-determination in school settings is one way to enhance student learning and improve important postschool outcomes for students with disabilities (Field, et al., 1998; Flexer, et al., 2007; Test, Fowler, Brewer, & Wood, 2005; Wehmeyer & Field, 2006). Schools have particularly emphasized the use of self-determination curricula with students with disabilities to meet federal mandates to actively involve students with disabilities in the IEP planning process. Examples of various curricula that can support teachers in the

development of self-determination are *Steps to Self-Determination* (Fields & Hoffman, 1996), *NEXT S.T.E.P* (Halpern, Herr, Doren, & Wolf, 2000), and the *ChoiceMaker Series* (Martin & Marshall, 1996). Of the different curricula, *ChoiceMaker* is the most popular among special education teachers (Flexer, et al., 2007). The *ChoiceMaker* lesson package teaches specific goals and objectives through three strands, nine teaching goals, and fifty-four objectives (Martin & Marshall, 1996). Table 2 is a description of the *ChoiceMaker's* different sections and teaching goals.

Table 2

ChoiceMaker Self-Determination Transition Curriculum Strands and Teaching Goals

Strands	Teaching Goals
I. Choosing Goals	Student IEP Understanding Student Interest Student Skills & Limits Student Goals
II. Expressing Goals	Student Leading IEP Meeting Student Reporting
III. Taking Action	Student Plan Student Action Student Evaluation Student Adjustment

In addition to implementing self-determination curricula, teachers must also consider how they can adapt and structure their teaching and class environment. When special education teachers provide students with disabilities with choice making opportunities, students are able to express their individuality (Test, et al., 2005). In order to create these opportunities, educators can develop their own instructional activities or adapt previously developed lesson packages to teach self-determination skills to students (Flexer et al., 2001). Teachers also must implement and target self-determination skills by providing opportunities to learn these skills. Self-determination skills that are practiced and acquired through real-world experiences are critical to postschool success and include such skills as risk taking, making mistakes, and reflecting on decisions (Bremer, Kachgal, & Schoeller, 2003). Moreover, Szymanski (1994) suggested that classroom practices that increase student control develop and facilitate the generalization of these skills to natural environments.

Secondary special education teachers have many curricular resources to enhance self-determination skills in students with disabilities. Additionally, family members can be major contributors to the development of self-determination skills (Field et al., 1998; Field & Hoffman, 2002; Field, Hoffman, & Fullerton, 2002). Therefore, educators should strive to increase the role of parents in the self-determination (Field et al., 1998). Facilitating the development of self-determination skills components is one of the many ways families can become active members in the transition process.

Family Involvement

The key to a successful transition for students with disabilities is the active participation of family members (Benz, Doren, Yovanoff, 1998; Greene & Albright, 1995; McNair & Rusch, 1991; Turnbull & Turnbull, 1997). The collaboration among schools, adult service agencies, and

family members creates a meaningful transition planning process. Family members have known the student longer, and can provide valuable information that will support postschool educational planning (deFur, Todd-Allen, & Getzell, 2001). The information they provide will help in determining student needs, interests, and preferences.

Family involvement refers to activities and strategies that are designed to promote parents and families to become engaged in the planning and delivering of transition services for their child with a disability (Test, et al., 2005). Activities and strategies should be developed to help with the collaboration of parents, educators, and other stakeholders who are involved in the youth's transition from school to postschool settings. According to IDEA, family involvement is a right and it provides many benefits to the student.

Parent involvement has been an important part of disability legislation since the Education for All Handicapped Children Act of 1975. However, amendments to this law have increased the focus of parent and family involvement. While parents have always had the right to participate in their child's IEP meetings, the 1997 amendments of IDEA expanded those rights. By participating in the transition planning process, families can assist educators in providing efficient and suitable transition services from high school to postsecondary environments.

Research has shown that students whose families are involved in the decision making process were more successful in graduating from high school, finding competitive employment, and attending post-secondary institutions (Newman, 2005). Other benefits of parental involvement include better school attendance, higher education assessment scores, and improved student attitude and self-confidence (Wehmeyer, Morningstar, & Husted, 1999). Additionally, youth with disabilities reported that parents and families were their most important supporters to

their future plans (Ward, Mallet, Heslop, & Simons, 2003). Parental involvement also encourages the development of self-determination skills during the transition planning process (Morningstar, Turnbull, & Turnbull, 1996). Without family involvement, transition-focused activities might not support the needs of the students. In addition, the lack of support will decrease the chance of successful transition from high school to post-secondary settings.

The lack of support and parental involvement can be due to many reasons. However, one of the main reasons is the lack of knowledge and empowerment (Landmark, Zhang, & Montoya, 2007). Many parents have a lack of understanding about the special education and transition process, terminology, and procedures (Lytle & Bordin, 2001). This disadvantage places parents in a position that causes hesitation and vulnerability towards the processes and documents related to transition planning (Rock, 2000). Some parents also feel as though secondary special educators intentionally deter family involvement (Trussell, Hammond, & Ingalls, 2008). Educators have a tendency to control the IEP meetings and parental input is disregarded or not fostered (Dabkowski, 2004; Turnbull & Turnbull, 1997).

To encourage family involvement in the transition process, families must be informed about basic information related to the process. Parents will be better able to support their young adults in the transition planning process if they are well informed about the special education system and transition planning process, special education paperwork, parental rights, and advocacy support groups (Flexer, et al., 2007). When information is provided and discussed on these processes and resources parents can make better decisions for their child's post-school option (Cameto, 2005). In order for transition planning to be truly effective, relationships with all stakeholders should be created.

Parents also found that their improved participation in the transition planning process is based on the creation of personal relationships with educators and other stakeholders (deFur et al., 2001). Teachers who provide information and develop collaborative partnerships with parents demonstrate genuine concern for their child with a disability (Kohler & Field, 2003). These efforts encourage parents to speak more freely during planning meetings and provide input on specific family and child needs (Goodall, & Bruder, 1986). Also, parents will be more comfortable in asking questions when terminology or processes are not clear.

Although there are barriers to parental involvement in the transition planning process, there are activities and frameworks to increase family participation. Epstein (1995) provided a framework that supports the relationship between educators and family members during the planning process. While this framework was intended to promote the relationship between educators and family members in general settings, the activities can be particularly relevant during the transition planning process. The activities include (a) parenting activities that assist parents with information on adult services, support and services, employment and postsecondary education, independent living, and self-determination skills; (b) communication activities that provide opportunities for parental and other stakeholders' input; (c) volunteering activities that facilitate school-oriented goals and student learning; (d) home activities that incorporate student and parent engagement fostering partnerships beyond the classroom; (e) decision-making activities that create many strategies to involve parents in the creation of special education programs and services; and (f) collaboration with community activities to create relationships with the schools and communities to empower students and integrate resources.

Secondary special educators also should make every effort to familiarize themselves with the needs of the family and the demands and stresses a family may experience (Trussell et

al., 2008). Understanding the needs of the family will help foster the development of a stronger collaboration among educators and family members. Both parental and professional roles must be considered and defined so each voice will be heard and equally valued (Trussell et al., 2008). Additionally, there should be a continuous effort to increase parents' knowledge on special education issues and the transition process. Involving parents enhances the planning process and creates a partnership of families, schools, and community.

Interagency Collaboration

Active participation from all stakeholders involved in the transition process is essential in the development of postsecondary outcomes (e.g., early planning, funding, staffing, etc.) (Flexer et al., 2001). This type of participation is referred to as interagency collaboration. Interagency collaboration is defined as the collaboration of key individuals, businesses, and agencies that are joined together in an effort to promote successful student outcomes during the transition process (Test, et al., 2006). An interagency coordinating body should include students, parents, service providers, and employers (Kohler & Field, 2003). To facilitate effective collaboration, interagency agreements between the school and community agencies must be established to clearly define roles and responsibilities that each stakeholder will assume in the planning process (Kohler & Field, 2003). The shared responsibility of a common goal decreases the focus on individual differences among group members. This allows for collaboration to become an outcome process for the individuals who participate in the transition process.

The passage of key legislation mandated interagency collaboration and transition planning. The Rehabilitation Act of 1973 directed its attention to ensuring that transition planning must happen (defur & Tayman, 1995). The Act recognized the importance of living in the community and getting support for daily living activities that provide young adults with

disabilities with skills needed to transition from high school to work. The 1986 Amendments to the Rehabilitation Act encouraged vocational rehabilitation interagency cooperation and supported employment for both part-time and full-time employment. The 1992 and 1998 amendments paralleled the mandate of IDEA to emphasize an outcome-focused plan and collaboration. The Carl D. Perkins Vocational Education Act (P.L. 98-524) furthered the preparation of youth with disabilities to transition from high school to employment by supporting students who were economically disadvantaged to obtain vocational education. Reauthorized in 2006, it helped access appropriate vocational assessments and the offering of vocational programs for young adults in their least restrictive environments. The Perkins Act (2006) also held school more accountable for graduation, post-secondary education, and employment outcomes of the youth enrolled in the vocational programs. Finally, IDEIA (2004) required transition planning for students no later than age 16 to identify the professional that will assist in the process, highlighting interagency collaboration. It is recommended that the youth, their families, special education teachers, and rehabilitation professionals are members of the transition planning team (Oertle & Trach, 2007).

Research has shown many benefits to the practice of interagency collaboration. Devlieger and Trach (1999) found that when interagency collaboration is done well, it promotes positive outcomes for students with disabilities. Benz and Halpern (1993) discovered that interagency collaboration was effective in building school and community capacity to provide better services and resources for students who are going through the transition process. Additionally, interagency collaboration facilitates student focused planning and student development practices (Collet-Klingenberg, 1998; Kholer & Field, 2003). Students also are more likely to participate in work experiences and plan for their long and short-term endeavors

(Kohler & Field, 2003). More specifically, high school graduation rates and community college enrollment has been found to increase (Newman, 2005).

Research also indicates that a lack of collaboration and cooperation can serve as a barrier to the transition planning implementation and effectiveness (Kohler, 1993; Kohler & Field, 2003; Rusch, Kohler, & Hughes, 1992). The significance of interagency collaboration, rehabilitation professionals' participation, and leadership are needed for an effective transition planning process (Oertle & Trach, 2007). When rehabilitation professionals are involved early on in the process, they are able to develop better services and community links while the student is still in high school (Argan, Cain, & Cavin, 2002). When collaboration is poor between stakeholders it creates disconnect, duplication, and inefficient use of services (Everson & Moon, 1990). Benz, Johnson, Mikkelsen, and Lindstrom (1995) identified barriers such as unproductive transition planning meetings, intimidating language, and difficult agency procedures. Secondary school staff members, parents, and students often times have negative perceptions of outside agencies (Noonan, Morningstar, & Erickson, 2008). The issue of entitlement versus eligibility and differing of services from the school and community agencies also cause many issues when planning for the most appropriate services.

Although there are barriers, interagency collaboration is a key indicator of successful adult outcomes (Kohler, 1993; Kohler & Field, 2003; Noonan, et al., 2008; Rusch, et al., 1992). Noonan, et al. (2008) identified 11 key strategies to enhance interagency collaboration. These strategies included: (1) provide flexible scheduling and staffing, (2) follow-up after high school transition, (3) implement administrative support for transition, (4) use a variety of funding sources, (5) obtain state-supported technical assistance, (6) build relationships, (7) hold agency meetings with students and families, (8) train students and families on different postsecondary

options, (9) offer joint training of staff, (10) meet with agency staff and transition councils, and (11) disseminate information to all stakeholders. To ensure that interagency collaboration remains a priority during the transition planning process for secondary students with disabilities, parents, teachers, students, and outside agencies must utilize an array of approaches such as those just identified to coordinate effective services for students with disabilities.

Student Participation

Although school and other community agencies play a critical role in the transition planning process, students must take ownership. Currently, the Individuals with Disabilities Education Improvement Act (IDEIA; 2004) indicates that by age 16 or younger if appropriate, the IEP must identify measurable postsecondary goals and transition service needs. Goals must be based on student's interests, preferences, and needs. Further, students must be invited to meetings discussing the transition planning process and IEP. By taking an active role in the transition process, students will develop self-advocacy and self-determination skills.

Research suggests that many students are not actively participating in their IEP meetings (Newman, 2005). For example in a study of students' perspectives of the transition process from school to adult life, Morningstar, et al. (1996) investigated the degree to which students were involved in their IEP meetings. The majority of the students' responses revealed that they knew about their IEP meetings but did not know what an IEP was for and few had actually attended the meeting. The primary reason that students were not participating in their IEP meetings was the students felt the meetings were not helpful to their future plans. Without students actively involving themselves in the planning process, a lot is lost in preparing youth in the transition planning process. While they are in school, students need instruction regarding how they

personally can take actions to overcome obstacles to achieving their own personal goals (Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000).

Many curricula/materials have been shown to be effective in increasing student participation during the transition process. For example, the *Student-Directed Transition Planning* lessons were developed to teach students about self-awareness of their disabilities, develop postschool goals, and develop a script in order to help facilitate involvement in the IEP process (Sylvester, Woods, & Martin, 2007). The *McGill Action Planning System* (MAPS) is a person-centered process (pp. 108) that is used to assist in the planning for high school students with disabilities while implementing instruction purposely created to teach students involvement in their IEP process (Salembier & Furney, 1994). The *Self-Advocacy Strategy* developed by Van Reusen and colleagues (1994) studied the use of *I-PLAN*, which instructed high school students with learning disabilities to participate in their IEP meetings by inventorying strengths, needs, and preferences. This approach addressed acquisition skills such as verbal rehearsal, strategy feedback, and chances to generalize these skills in an actual IEP meeting (Van Reusen, Bos, Schumaker, & Deshler, 1994). Martin, Marshall, Maxson, and Jerman (1996) developed the *Self-Directed IEP* model. It has been useful in teaching students to participate in and/or lead their transition planning (Martin, et al., 1996). The *Self-Directed IEP* model also uses video modeling, student assignments, and role-playing to teach students IEP leadership skills. Although curricula are available, transition information about the student has to be gathered first.

Transition Assessments

The foundation of transition planning is assessment. To make more informed educational decisions appropriate assessments have to be performed. In fact, Clark (1996) noted that assessment is an integral and ongoing part of the transition process. Clark defined assessment as

the gathering of information for the purposes of planning instruction, or placement to aid in individual decision making. In the area of transition, the Division on Career Development and Transition (DCDT) of the Council for Exceptional Children defines transition assessments as the ongoing process of collecting data on the individual's needs, preferences, and interests as they relate to the demands of current and future working, educational, living, and personal and social environments. Assessment data serve as the common thread in the transition process and form the basis for defining goals and services to be included in the Individualized Education Program (IEP). (Sitlington, Neubert, & Leconte, 1997, p. 70671)

Transition assessments help in the identification of goals and development of plans (Flexer, et al., 2001). IDEIA (2004) indicates that age appropriate transition assessment is the foundation for identifying appropriate measurable postsecondary goals related to training, education, employment, and if appropriate independent living skills (P.L. 108-446, Section 614).

Transition assessment covers a wide range of areas including academics, personal/social, career, and daily living. An assessment that provides information in these areas enable students to make informed choices that will enhance postschool outcomes (Sitlington et al., 1997). Students must be provided with information and experiences that will help them in deciding their interests, needs, and preferences related to their long-term goals. Transition assessments can also have students assume the duties of facilitating their own assessment and transition process (Sitlington et al., 1997). While this goal allows students to be aware of their needs and interests, it also encourages the use of self-determination skills such as problem-solving, decision making, and self-advocacy (Test, et al., 2006). Finally, transition assessment ensures that all parties involved in the planning process have comprehensive understanding of the skills related to

postschool outcomes that will lead to goal setting and the selection of a course of study (Sitlington et al., 1997).

Information from transition assessments is very beneficial to the development of the IEP. This information is used to develop goals and objectives, and identify other agencies that will provide support and services to the student as an adult (Clark, 1996). Accommodations needed in post-secondary education and employment can also be determined (Morningstar et al., 2010). Assessing career/vocational interests and skills is essential because of the emphasis on career development in IDEA and the importance of work (Clark, 1996).

Transition assessments can be categorized as formal or informal. Formal assessments usually involve the use of standardized procedures for administering, scoring, and interpreting the assessment (Flexer, et al., 2007). However, informal assessment procedures allow student performance to be measured over time (Flexer, et al., 2007). These assessments are helpful in creating and evaluating the effects of academic interventions. Additionally, data from informal assessments can be collected from parents, teacher, employers, and other stakeholders (Kortering & Braziel, 2003).

Transition assessments should meet student's individual needs as well as provide information to IEP team members about interests and preferences. When conducting formal and informal assessments, Sitlington and colleagues (1997) created nine guidelines to assist secondary educators select the most appropriate assessment for students with disabilities during the transition process. These guidelines include: (1) methods must incorporate assistive technology or accommodations that allow an individual to demonstrate his or her abilities and potential; (2) methods must occur in settings that resemble actual education/training, employment, independent living, or community environments; (3) methods must produce

outcomes that contribute to ongoing development, planning, and implementation of "next steps" in an individual's transition process; (4) methods must be varied and include a sequence of activities that sample an individual's behavior and skills over time; (5) data should be verified by more than one method and by more than one person; (6) data must be synthesized and interpreted to students with disabilities, their families, and transition team members; (7) data and results must be documented in a format that can be used to facilitate transition planning; (8) methods should be appropriate for learning characteristics of the individual, including cultural and linguistic differences; and (9) information should be current, valid or verified, and relevant to transition in order to better inform the Summary of Performance (SOP). The SOP allows the school district to provide the student with a summary of his or her academic achievement and functional performance. It also must include recommendations on how to assist the student in meeting his or her postschool transition goals (IDEIA, 2004).

In sum, providing effective secondary special education transition programs is a right and need for adolescents with disabilities. Due to the unique academic and behavior needs of students with disabilities and the need for better postschool outcomes for these students, recognizing and effectively using evidence-based practices are of the utmost importance for special education teachers (Kretlow & Blatz, 2011; Landmark, Ju, & Zhang, 2010). The evidenced-based practices teachers use must assist in the development and implementation of individualized educational planning for youth with disabilities so they can move from high school to postschool activities successfully. This section described several of the evidence-based practices that teachers have direct control of teaching self-determination, involving families, encouraging student participation, encouraging interagency participation, and conducting appropriate transition assessments.

Unfortunately, many special education teachers lack the knowledge and skills to implement these practices effectively and report feeling unprepared to work with secondary students with disabilities (Anderson et al., 2003). Secondary special educators must have the confidence to promote effective student learning. This impacts their sense of self-efficacy. Special educators' self-efficacy plays a key role in classroom learning and predicting positive postschool outcomes for students with disabilities. The next section addresses teacher self-efficacy.

Special Education Teachers' Efficacy

Self-efficacy is a belief in one's ability to execute the actions necessary to achieve certain levels of performance; it influences behavior and affects individuals' goal setting, efforts, and levels of determination (Bandura, 1977, 1986, 1993). Efficacy beliefs have been tied to both children and adults' cognitive and social functioning (Deemer & Minke, 1999). When it pertains to teachers, the teacher efficacy is paired with better instructional practices and attitudes towards students (Ashton & Webb, 1986; Bender, Vail, & Scott, 1995; Gibson & Dembo, 1984; Midgley, Anderman, & Hicks, 1995). Pre-service, novice, and in-service teachers at the elementary, middle, and secondary level in various environments have participated in studies that reflect the positive feelings of efficacy as a teacher (Deemer & Minke, 1999). This section of the paper will review self-efficacy literature focusing on (a) Bandura's theory of self-efficacy, (b) evolution and measurement of teacher efficacy, (c) efficacy of instructing students with disabilities, and (d) efficacy of pre-service teachers.

Bandura's Theory

In 1977, Albert Bandura provided a theoretical framework for studying the construct of self-efficacy. The theory of self-efficacy suggested that cognitive processes mediate change,

but that cognitive events are induced and altered most readily by experience of mastery arising from effective performance (Bandura, 1977, p. 191). Additionally, Bandura (1977) argued that human behavior is controlled by the individual's beliefs regarding two classes of expectations: an outcome expectation and an efficacy expectation. An outcome expectation is when a person estimates that a given behavior will lead to specific outcomes (Bandura, 1977). An efficacy expectation is the belief that one can successfully carry out the expected behavior to achieve the required outcomes (Bandura, 1977). In general, self-efficacy is the expectation a person has about his or her own ability to successfully carry out tasks at a specific level of performance (Bandura, 1997).

In order to better execute specific tasks, Bandura (1977, 1997) described four sources of self-efficacy: mastery experiences, physiological and emotional states, vicarious experiences, and social persuasion. Mastery experiences are the strongest source of efficacy information. The perception that a performance has been successful raises efficacy beliefs, contributing to the belief that performance will be successful in the future. Physiological and emotional states heighten the individual's feelings of competence or failure. Vicarious experiences are those in which a certain skill is modeled by someone else. The extent that the observer identifies with the model, determines the efficacy effect on the observer (Bandura, 1977). Social persuasions may entail specific verbal feedback from a supervisor, a colleague, or informal conversations from other co-workers that can lead to successful performances. These performances allow the individual's self-efficacy to increase and it leads the person to initiate a new task, attempt new strategies, or provide extra effort to become successful (Bandura, 1982). The effectiveness of the persuasion depends on the trustworthiness, expertise, and reliability of the persuader

(Bandura, 1986). In order to truly understand the effectiveness of efficacy, the construct has to be measured.

The Evolution and Measurement of Teacher Efficacy

Teacher efficacy was first introduced in the mid-seventies by research projects funded by Title III of the Federal Elementary and Secondary Education Act (Woolfolk & Hoy, 1990). In these studies (Armor et al., 1976; Berman, McLaughlin, Bass, Pauly, & Zellman, 1977) teacher efficacy was determined by examining teachers' responses to items from two Research And Development (RAND) studies. Studies at RAND investigated the improvement of policies and decisions that is made through research and analysis. Items selected from two different RAND studies included were: (a) "When it comes right down to it, a teacher really can't do much because a student's motivation and performance depends on his or her home environment" and (b) "If I try really hard, I can get through to even the most difficult or unmotivated student" (p. 82). The findings of these studies suggested that teachers' sense of efficacy had a positive relationship with student performance (Tschannen-Moran, Hoy, & Hoy, 1998).

In 1984, Gibson and Dembo wanted to improve upon the RAND items. They sought to develop a scale that was reliable and valid that could be used to study teacher efficacy. A three-phase study was conducted, and it resulted in the creation of the *Teacher Efficacy Scale*. The scale investigated the relationship between teacher efficacy and classroom behavior. Initially, a 53-item pilot study of the *Teacher Efficacy Scale* was developed from teacher interviews and a review of the literature. A total of 90 teachers were given the items and a factor analysis was provided. Shortly thereafter the revised *Teacher Efficacy Scale* included 30 items with a 6-point Likert Scale (Gibson & Dembo, 1984).

The pilot study resulted in a valid and reliable measure of the teacher efficacy scale. The scale was administered to 208 elementary school teachers from 13 schools. Data from phase one disclosed a two-factor model that is parallel to Bandura's model of self-efficacy. According to Bandura (1977), motivation is determined by individuals' judgment of their ability to perform different behavior (efficacy expectation) and their beliefs about the possible consequences of those actions (outcome expectations). Gibson and Dembo (1984) called Factor 1, Personal Teaching Efficacy (self-efficacy). Factor 2 was Teaching Efficacy (outcome expectancy). The second factor is a more reliable indicator of teacher's efficacy (Hoy & Woolfolk, 1993; Woolfolk & Hoy, 1990; Woolfolk, Rosoff, & Hoy, 1990).

The second phase of the study determined whether or not a teacher's sense of efficacy can be differentiated from other constructs and if data from the *Teacher Sense of Efficacy Scale* can be collected from other sources (Gibson & Dembo, 1984). With these questions in mind, Gibson and Dembo surveyed 55 teachers on teacher sense of efficacy, verbal ability and flexibility. Flexibility and verbal ability were compared to each other because they are traits of effective teachers (Gibson & Dembo, 1984). The authors measured the teacher sense of efficacy by using the *Teacher Efficacy Scale* and open-ended questions that required participants to choose 10 to 20 variables that effect students' success in school. The findings showed a strong evidence for the convergence of teacher sense of efficacy when measured by these two methods. Moreover, multi-trait multi-method data analysis indicated a strong evidence for discriminant validity, verifying that teacher sense of efficacy is distinctly different from verbal ability and flexibility.

The third and final phase of Gibson and Dembo's study investigated the difference between teachers with high and low self-efficacy and the behaviors and patterns each teacher

used in the classroom. There were four high efficacy teachers who were defined as teachers whose Factor 1 Personal Teaching Efficacy scores fell within the top 6% of the frequency distribution. The Factor 2 Teaching Efficacy scores fell within the bottom 22% of the distribution from the first phase of the study. There were also 4 low efficacy teachers selected to participate. The low efficacy teachers were defined as teachers whose Factor 1 scores fell in the bottom 45%. Additionally, the Factor 2 scores fell within the top 27% of the distribution. Teacher-use-time and question-answer-feedback measures were used to collect data on the teacher's classroom behaviors and patterns. The instruments provided information on the proportion of time a teacher spent on instructional activities, the quality of the students' responses, and the nature of the feedback. Each teacher was observed for a total of seven hours by three different trained observers.

Findings revealed that low-efficacy teachers spent 48% of their time in small group instruction. The data also revealed that many of the students spent the remainder of class time engaged in off-task behavior without redirection. However, high-efficacy teachers spent 28% of their time in small group instruction while redirecting students who were working independently. The high-efficacy teachers were observed using most of their instructional time in whole group instruction and engaged most students. There was a significant difference in the lack of persistence among the low-efficacy and the high-efficacy teachers. When students were unsuccessful, low-efficacy teachers were more likely to provide the correct answer, ask other students, or allow the answer to be stated aloud. High-efficacy teachers probed students to the correct answer by asking a series of questions.

Efficacy of Teachers Instructing Students with Disabilities

More recent self-efficacy research has found a relationship between teacher efficacy and important secondary outcomes. For example, Hoy and Woolfolk (1993) and Soodak and Podell (1993) found that teacher efficacy has been positively correlated to higher academic achievement, effective teacher practices, increased family involvement, and higher levels of teacher job commitment. These factors alone create a better academic environment for instructing students with disabilities. Ashton and Webb (1986) explained that teachers' sense of efficacy is important because it influences teachers' understanding of their position in the classroom, their attitudes toward their work, and their exchanges with their students. Further, Allinder (1994) found those teachers who have positive feelings and influences feel more comfortable about including and instructing students with disabilities. While the majority of the research has been conducted with students without disabilities, several studies have examined teachers' self-efficacy and students with disabilities. These studies are described next.

Freytag (2001) surveyed 36 general educators and 12 special educators with the *Teacher Efficacy Scale* (Gibson & Dembo, 1984). The purpose of the study was to investigate teachers' level of perceived efficacy and the impact of pre-service inclusion courses. The data suggested that the number of inclusion courses taken during pre-service preparation was not related to the level of efficacy perception. However, the findings did reveal a significant difference in personal sense of efficacy between general and special educators. Special education teachers had higher levels of confidence when teaching children with disabilities in an inclusive setting.

Buell, Hallam, Gamel-McCormick, and Scheer (1999) reported findings from a statewide needs assessment. The purpose of the needs assessment was to strengthen the states' *Comprehensive System of Personnel Development*. There were 202 general educators and 87

special educators who were surveyed about their feelings of efficacy regarding teaching students with disabilities. The survey included three sections: (a) "teacher's confidence regarding student success in inclusive settings," (b) "teachers' in-service needs regarding inclusive education," and (c) "teachers' perception of necessary programmatic supports for successful inclusionary practices" (p. 147). Results revealed a significant difference between general educators and special educators in regards to teacher's feeling of efficacy concerning educating students with disabilities in the areas of assessing progress, adapting curriculum, managing behavior, developing IEPs, and using assistive technology, which were identified as the greatest needs for general educators. Special educators reported significantly more confidence in all aspects of inclusive classroom except for working with parents and assistive technology.

Brownell and Pajares (1999) used a survey titled, *Working with Diverse Students*. The purpose of *The General Educator's Perspective* was to investigate whether seven variables had either a direct or indirect impact on teacher's sense of efficacy, which in turn have a direct impact on general educators' success in instructing students with disabilities. One hundred twenty-eight (128) elementary general education teachers from Florida participated in the study. The survey measured seven variables that included: (a) in-service training, (b) special education support, (c) pre-service preparation, (d) general support, (e) social economic status of students, (f) collegiality with special education, and (g) collegiality with regular education. A path analysis was conducted to examine the direct and indirect effects between variables. Results indicated that general education teachers reported that they are more successful with educating students with disabilities when they have participated in in-service programs that include information about (a) the needs of students with disabilities, (b) curricular and instructional

accommodations, and (c) behavior management techniques for students with disabilities than general education teachers who do not participate in these trainings.

Tschannen-Moran et al. (1998) reviewed published literature between 1974 and 1997; they concluded that general education teachers with high levels of teaching efficacy were more likely to consider the general education classroom as the appropriate place for students with problems in learning. The authors found that a teacher's sense of efficacy predicted their eagerness to teach students experiencing learning difficulties.

In 1994, Allinder examined the relationship between personal sense of efficacy and teacher sense of general efficacy and the following three instructional variables: business-like approach, instructional experimentation, and assuredness of 437 special education teachers. Efficacy was measured by the *Teacher Efficacy Scale* (Gibson & Dembo, 1984) and the instructional variables were measured by the *Teacher Characteristic Scale* (Fuchs, Fuchs, & Bishop, 1992). A multiple regression analysis indicated that personal sense of efficacy was significantly related to all three instructional variables and teaching was significantly related to assuredness (Allinder, 1994). Teachers who had a greater confidence in their abilities to teach students were more likely to implement effective teaching techniques, be more business-like in their classrooms, and be more assured during instruction.

Soodak and Podell (1993) investigated three different hypotheses related to teachers' efficacy: (a) general classroom teachers with greater perception of efficacy will be more likely to maintain general education placement of students with behavior and/or learning concerns, (b) students with a combination of learning and behavior problems will be referred to special education more often than students with a single deficit, and (c) personal and general sense of teaching efficacy will impact placement and referral decisions. General educators (n = 96) and

special educators (n = 96) were randomly assigned a case study describing a male student who was in the second grade with either a learning problem, behavior problem, or both. The teachers were asked to indicate the degree to which they agreed with the placement in the general education classroom and whether they would refer this student to special education. The teachers' levels of efficacy were measured using the *Teacher Efficacy Scale* (Gibson & Dembo, 1984).

The researchers found that general education teachers who perceive themselves to be effective were more likely to believe the general education placement is suitable. However, the extent of teacher sense of efficacy was not related to special education teachers' judgment of appropriate placement for students with learning or behavior concerns. Results also indicated that teachers were more likely to report the general education setting as appropriate if the student displayed either a learning or behavior problem, but not both. Last, the data indicated that teachers must feel both confident with their own teaching and the effects of teaching in general to agree with general education placement.

In sum, previous research has indicated that general and special educators who have higher levels of efficacy are more effective in educating students with disabilities (Ashton & Webb, 1986; Brownell & Pajares, 1999; Buell, et al., 1999; Soodak & Podell, 1993). One must ask the question, when does the sense of efficacy begin for those teachers identified in the studies? Teaching efficacy begins at the pre-service preparation stage of becoming an educator. Preparing undergraduate level educators well and building their teacher efficacy have been found to improve teacher retention and instructional motivation (Darling-Hammond, 2003; Guskey, 1988).

Pre-service Educators' Efficacy

Efficacy beliefs of pre-service teachers have been connected to attitudes toward children and control (Woolfolk & Hoy, 1990). Undergraduates with a low sense of teacher efficacy take negative views of students' motivation and rely on strict classroom management, extrinsic rewards, and punishments to make students achieve (Woolfolk & Hoy, 1990). Once pre-service teachers are engaged in practical experiences, efficacy beliefs have an impact on students' behavior. Student interns with higher personal teaching efficacy were rated more positively on lesson presenting behavior, classroom management, and questioning behavior by their university supervisor on their evaluations (Saklofske, Michaluk, & Randhawa, 1988).

The progression of teacher efficacy beliefs among prospective teachers has produced some interest once efficacy beliefs are established. There is some evidence that course work and practical experiences impact both personal and general teaching efficacy (Saklofske, et al., 1988). General teaching efficacy appears to increase during college coursework, then decline during student teachings (Hoy & Woolfolk, 1990). These findings suggest that pre-service teachers' optimism becomes tainted when the realities and difficulties of a teaching task is presented.

Campbell (1996) studied the differences of efficacy between pre-services and in-service teachers in Scottish and American teachers. His study analyzed Scottish pre-service teachers (n = 34) and Scottish in-service teachers (n = 39) and American pre-service teachers (n = 32) and American in-service teachers (n = 35) sense of efficacy. A modified version of the *Teacher Efficacy Scale* (Gibson & Dembo, 1984) and a questionnaire by Naring (1990) assessed teacher sense of efficacy. The results showed no differences in teacher sense of efficacy between the two countries. However, there was a significant difference between pre-service and in-service

teachers from both countries. Campbell also found a significant relationship between teacher sense of efficacy and age, level of degree, and years of experience. In-service teachers had a higher level of efficacy, indicating that teacher sense of efficacy increases with experience.

Research indicates that pre-service training has a direct impact on teacher's sense of efficacy, and an indirect effect on the success of teaching students with disabilities (Brownell & Pajares, 1999). Tschannen-Moran, et al. (1998) expressed how important it is to develop strong efficacy beliefs early in preparation programs because the levels of efficacy are difficult to adjust. Therefore, pre-service training plays a vital role in the development of teacher sense of efficacy.

Brownell and Pajares (1999) stressed the importance of recognizing differences in special education pre-service programs for special educators and the impact of program components on their teachers' efficacy beliefs. The authors hoped that university programs that prepare general and special educators simultaneously would produce graduates that would be more confident in teaching children with disabilities. Additionally, Buell, et al. (1999) agreed with Brownell and Pajares (1999) as they asserted the need for general education courses to include more information on teaching students with disabilities. Buell and colleagues found that the reported teaching needs of general educators are typical pre-service topics needed in preparatory programs for special education teachers. The training topics included program modification, assessing academic progress, adapting curriculum, managing students' behavior, developing IEPs, and using assistive technology. Buell and colleagues (1999) declared that it is critical for general educators to feel confident in doing these tasks for inclusion to be successful.

There is confirmation that educators' belief in their abilities to teach students may account for the difference in effectiveness (Armor et al., 1976; Berman & McLaughlin, 1977;

Brophy & Everston, 1976). Teacher efficacy provides educators with the confidence to attempt to apply their knowledge at the appropriate times. Further, the extent to which teachers believe they can affect student learning may influence teacher-student interaction and teachers' success in facilitating gains in student achievement (Gibson & Dembo, 1984). Additionally, teacher efficacy also supports the need to provide better outcomes for students with disabilities during the transition planning process. However, many special educators who prepare transition-age students do not feel prepared enough to support the student during their transition from high school to postschool settings (Anderson, et al., 2003).

Inadequate preparation of the educators who serve students with disabilities is one of the main reasons why transition goals are not achieved (Anderson, et al., 2003). Preparing individuals to provide coordinated transition services can become very difficult and time-consuming. Also, transition personnel are often not fully trained to deliver effective transition services or work collaboratively with other agency representatives. In order to improve transition service delivery that will promote successful student outcomes, special educators need to gain knowledge in transition-related content. This content can be learned during personnel preparation (Anderson, et al.). Typically, transition personnel receive most of their training from their local school district through their special education department (Anderson, et al.). On the job training leaves educators who are responsible for implementing transition services unclear about current policy, planning, and evaluation for students with disabilities (Green & Kochhar-Bryant, 2003).

Middle and high schools count on their special education teachers to effectively plan and implement transition services for students with disabilities. However, teachers do not feel adequately prepared to conduct and support these services. In 2003, a national leadership

summit was held to improve results for youth with disabilities. There were more than 250 agency leaders, policy-makers, educators, parents, and youth with disabilities that identified professional development for transition as one of the highest precedence for states (National Center for Secondary Education and Transition, 2004). In the pursuit to support the need for improved teacher preparation in implementation of transition services to students with disabilities, the next section of the paper will discuss the role of a secondary special educator, the transition gap, and key content for secondary special educators.

Secondary Special Educators Roles and Responsibilities

The No Child Left Behind Act (2001) and 2004 Amendments to IDEA emphasized a better foundation for special education that emphasizes successful postschool outcomes for students with disabilities. In response to the recent changes in legislation and student performance, secondary special educators must be prepared to teach in a manner that is culturally competent while providing access to general curriculum standards that link academic and social experiences to successful postschool outcomes (Morningstar & Kleinhammer-Tramill, 2005). The roles and responsibilities of special educators have changed tremendously over the past decade (Billingsley, Carlson, & Klein, 2004; Luft, 2008; Singh & Billingsley, 1996; Weiss & Lloyd, 2002; Wisniewski & Gargiulo, 1997). The increased need to include students with disabilities has caused special educators to spend more time in the general education classroom collaborating in the delivery of instruction (Shealey, Mchatton, & Farmer, 2009; Wasburn-Moses, 2005). In response to the changes, teacher preparation programs for pre-service special educators need to adapt their programs to prepare their students for the challenges of serving students with diverse needs in inclusive settings. These changes have shifted the need of

individuality in the area of special education and created new meanings to standards and accountability (Shealey, et al., 2009).

The overall goal of these changes is to ensure that every child is taught by a highly qualified teacher (NCLB, 2005). To be deemed as a highly qualified teacher, an educator must have at least a bachelor's degree, certification in his or her content area, and demonstrated competency in the core academics subject(s) he or she teaches. The same requirements are applied to special education teachers who provide direct instruction in core content areas to youth who are following a regular diploma track. In other words, secondary special educators must be certified in both special education and the content area in order to fully teach student with disabilities in a content area at the middle or secondary level.

In addition to being competent in a specific content area, secondary special educators have many other responsibilities. Secondary special education teachers have to collect, manage, and analyze data to improve teaching and learning (Coddling, Skowron, & Pace, 2005). They also have to be able to implement universal design (Hitchcock, Meyer, Rose, & Jackson, 2002), learning strategies (Deshler, Ellis, & Lenz, 1996), assistive technologies (Söderström & Ytterhus, 2010), and behavior management (Hayes, Hindle, & Withington, 2007). Most importantly, the secondary special educator must be able to create and effectively implement the IEP. General and special secondary educators must use the IEP as a tool and resource for planning student's educational goals and objectives.

Wasburn-Moses (2005) conducted a survey on 191 high school special education teachers that investigated their daily job roles and responsibilities. The author found that co-teaching was the teachers' primary role; however they only co-taught rarely. Although very few teachers co-taught, the special education teachers did work with the general education

teachers. On average, the participants directly taught between three and four different classes per day. The classes were mostly content courses (English/language arts, mathematics, science, social studies) rather than non-content specific courses (e.g., study skills, vocational skills). The teachers indicated that when working with students they spent about 18% of the time during class providing individualized instruction. The majority of the participants (67%) indicated that they implemented accommodations for students on a daily basis. Additionally, almost all participants (89.5%) stated that they managed student's behavior daily.

Conderman and Katsiyannis (2002) surveyed 132 secondary special educators who taught grades 7th through 12th. The teachers reported that 42% of their time was spent in a combination of roles: consulting with general educators, co-teaching, coordinating work experiences, and teaching in general education classes. Content instruction was found to be implemented the most by 85% of the teachers. Almost 80% of the participants indicated that they developed IEPs, wrote lesson plans, conducted assessments, and scheduled meetings. However, these responsibilities only accounted for 25% or less of their time. Furthermore, the secondary special education teachers provided remediation on basic skills, demonstrated learning strategies, supported students, and taught functional living skills.

As noted above, secondary special education teachers are responsible for a wide range of skills and roles. They work in different environments while teaching and accommodating content across many different levels. Sadly, the individualized instruction that is needed to improve post-school outcomes for secondary students with disabilities is not being effectively implemented (Council for Exceptional Children, 2001; Gersten, Keating, Yovanoof, & Harniss, 2001). This problem is very common in the area of transition services. One of the responsibilities of the secondary special educator is to provide vocational instruction, organize

work experiences, and retain community contacts that support the transition planning process (Conderman & Katsiyannis, 2002). Asselin, Todd-Allen, and deFur (1998) emphasized the changes in IDEA's language for transition has brought on a new duty for special educators that include transition services and activities. However, there is a gap between these roles and responsibilities and the teachers' knowledge and skills.

The Transition Gap

Although there have been strides in defining the roles and responsibilities of secondary special educators, there is a critical shortage of special education teachers who are competent in the area of transition (Wolfe, Boone, & Blanchett, 1998). Personnel development has been recognized as a strategy for systematic change and improvements in the area of special education (Kochar-Bryant, 2003). Many secondary teachers are unprepared and unable to plan and deliver effective transition services that will promote better outcomes for students with disabilities (Benitez, Morningstar, & Frey, 2009). Morningstar and Clark (2003) noted that there has been an increased focus on transition skills and knowledge in some special education teacher preparation program, but not all.

The transition requirements that are underlined in IDEA challenge many school districts and secondary special education supervisors and teachers. Unfortunately, many teacher training programs do not adequately prepare secondary special education teachers. The severity of this problem is clear in national survey results that found less than one half of 573 special education programs addressed transition standards and only 45% offered an individual course that is devoted solely to the area of transition (Anderson et al., 2003). Even though 70% of the instructors reported embedding transition content into other existing courses, they admitted to spending less time on teaching transition competencies to pre-service educators. These findings

were comparable with earlier research that found embedding transition content does not permit sufficient coverage of critical transition-related content (Severson, Hoover, & Wheeler, 1994).

Key Content for Secondary Special Educators

The expansion of secondary special education teachers' roles requires teacher training programs to expand their focus to reflect essential competencies for effective transition delivery (Wandry, Webb, Williams, Bassett, Asselin, & Hutchinson, 2008). However, the literature suggests that many pre-service educator preparation programs have not sufficiently addressed this need. For example, Benitez, et al. surveyed 557 middle and high school special education teachers from 31 states on their perceptions of important transition competencies compared to their level of preparedness. The teachers reported completing an average of one course in the area of transition during the teacher preparation program. They also reported that they felt somewhat unprepared to deliver transition services (Benitez, et al., 2009).

Many special education programs focus solely on the IEP process and special education law that is related to the transition process. However, Knott and Asselin (1999) noted an evident lack of preparation for practical experience in the area. If special education professionals lack knowledge and practical skills, they will be less likely to provide and apply successful transition services. The outcomes of unprepared teachers will present a hardship on students with disabilities when preparing to exit high school and achieve positive post-secondary outcomes.

In creating programs to prepare transition professionals, colleges and universities rely on resources that help them create programs based on best practices. The Council for Exceptional Children (CEC) is the primary national organization in the field of special education. Through its performance-based standards it has identified the knowledge and skills that beginning teachers and transition specialists need (Trussell, et al., 2008). However, many colleges and

universities do not offer transition specific programs or certifications. Most special education programs have embedded these preferred areas of knowledge and skills into their course requirements. The transition knowledge and skills that pre-service teachers need are usually not developed until they obtain careers in a school system (Trussell et al., 2008).

Several studies have examined teachers' perceived competencies and preparation in the area of transition. For example, Weidenthal and Kochar-Bryant (2007) examined middle and high special educators' practices associated with implementing transition services for students with disabilities ages 14 and 15. The study looked at student participation and attendance during scheduled IEP meetings. Results revealed that 56% of the students were almost always present. If they did not attend, 55% of the times steps were taken to include preferences, interests, and needs. As for participation, 94% of the teachers informed students about the importance of being an active member of the team. However, actual participation in the meeting was low. The study revealed that special educators and transition personnel should be trained to increase the areas that are needed to promote a successful transition process.

Morningstar and Clark (2003) evaluated the status of personnel preparation for transition. They identified five areas that are critical in preparing secondary special education teachers:

1. **Knowledge of the principles and basic concepts of transition education and services** – pre-service special educator should have a thorough knowledge and application of the transition service requirements of IDEA. Also, the up-and-coming practices that focuses on the IEP.
2. **Knowledge of models of transition and services** – knowledge of specific transition program models that can be applied across all disability groups that are aligned with general education secondary standards.

3. **Skills in using strategies for developing, organizing, and implementing transition education and services** — information on strategies to implement transition specific activities, as well as implementing assessments, service coordination, and curriculum planning with general and secondary instructional programs.
4. **Knowledge and use of collaboration competencies** — pre-service educators should be knowledgeable in the numerous agencies, programs, and services to support youth with disabilities. Professional interaction is also encouraged to help maintain these relationships with community members.
5. **Knowledge and skills to address systemic problems in transition delivery** — the capacity to understand and address barriers and strategies for planning, creating, implementing, and encouraging transition services and programs across many different levels.

These five areas are consistent with the research in the field of secondary teacher preparation and effective practices for transition programs (Kohler, 1998). Moreover, they reflect the need for critical transition planning across multiple levels (Lattin, Dove, Morningstar, Kleinhammer-Tramill, & Frey, 2004). Secondary special educators should be taught “how to” and not just the “what is” in transition planning (Morningstar & Kleinhammer-Tramill, 2005).

Another source of information for identifying critical content and skills for secondary teachers is Kohler’s (1996) *Taxonomy for Transition Programming*. Kohler’s *Taxonomy* is an applied framework of secondary education practices associated with improving post-school outcomes for youths with disabilities. The framework was developed as a product of four studies which sought to categorize effective secondary transition practices supported with evidence through a review of the literature (Kohler, 1993), an analysis of commendable transition

programs identified through evaluation studies (Kohler, et al., 1994), a meta-evaluation of model demonstration transition program outcomes and activities (Rusch, et al., 1992), and a concept mapping process (Kohler, 1996). Kohler's (1996) taxonomy for transition programs serves as the model for structuring transition content. The five areas include:

1. **Student-focused planning.** Student-focused planning practices centers on using assessment information and aiding students in developing self-determination skills that will support their individual education programs based on students' post-school goals.
2. **Student development.** Student development practices emphasize life, employment, and occupational skill development through school-based and work-based learning experiences. Student assessment results and accommodations provide a fundamental basis for student development that result in successful transition.
3. **Interagency collaboration.** Interagency collaboration activities facilitate involvement of community businesses, organizations, and agencies in all facets of transition-focused education. Interagency agreements that directly outline roles, responsibilities, communication strategies, and other collaborative actions that enhance curriculum and program development foster collaboration.
4. **Family involvement.** Family involvement practices are associated with parent and family involvement in planning and delivering education and transition services. Family-focused training and family empowerment activities increase the ability of family members to work effectively with educators and other service providers.
5. **Program structure.** Program structures and characteristic are features that relate to efficient and effective delivery of transition-focused education and services, including

philosophy, planning, policy, evaluation, and human resource development. The structures and attributes of a school provide the framework for better transition services.

Both CEC's performance-based transition standards and Kohler's *Taxonomy for Transition Programming* provide direction and guidelines for teacher training programs. Designing programs that reflect knowledge and skills related to the standards and the taxonomies will help ensure future teachers are well-prepared to teach secondary students with disabilities.

In summary, the transition from high school has been understood as one of the most difficult developmental changes confronting adolescents (Branstad et al., 2002). Current research findings are consistent with previous research in that there are gaps in transition knowledge that teachers have, and how often transition services are provided (Knott & Asselin, 1999). Secondary special educators must be trained in areas that support the planning process for students and families. Preparing qualified transition personnel is documented in the literature as one of the most critical areas of improving students with disabilities' post-school outcomes (Blalock et al., 2003; Kohler, 1993). However, the required knowledge and skills extend well beyond what many educators are taught in their preparation program (Anderson et al., 2003).

Case Study Methodology in Special Education

The issue of lack of preparation in the field of secondary special education and transition specific content has prompted the development of innovative ways to prepare pre-service educators during their preparation programs. The transfer of acquired knowledge and skills to actual practice is an important instructional outcome for special education training programs. Efforts have been made to increase the transfer and application of what is learned in the classroom to real life situations (Block, 1996; Gurman, Holliman, & Camperell, 1988).

Consequently, a range of instructional tools have been developed that demonstrate a pre-service educator's application of knowledge. The purpose of this section is to provide a foundation for the use of case studies in assessing secondary special education professionals. The case study method will be defined and a rationale for case method instruction and assessment in special education will be discussed as well.

Background of Case Method Teaching

Case studies have been used in many different fields of educational preparation such as medicine, nursing, law, and business (Block, 1996; Dardig, 1995; Velenchik, 1995). The methodology was originally used at the Harvard Business School in response to the need to bridge a gap between knowledge learned in the classroom and actual practical experiences in the field (McWilliams, 1992). Using cases of fictional businesses, students had to manage the business while applying the instructor's changes in the environment, so that the student could practice what had been learned in simulated situations (Richardson & Ginter, 1998). In the field of medicine, pre-med students and pre-nurses learn general principles as part of their knowledge-base and then apply their knowledge to cases. In law schools, pre-law students reason facts from previous court cases and apply precedents to their own case. Cases provide repeated opportunities to practice the principles of law and generalize the laws and principles to different situations.

Over the past ten years, there has been increased interest in case method teaching in the field of education to train pre-service educators (Boyle & Danforth, 2001). Educating pre-service teachers involves more than teaching a knowledge-base; instead, programs should encourage generalizing and applying ideas from research so teachers can make better educational decisions for students (Ferstermacher, 1986). Case method teaching can enhance the knowledge

base of future teachers (Boyle & Danforth). It can provide them with problem solving and decision making skills. Harrington and Garrison (1992) found that some educators feel that cases "bring to life" the knowledge pre-service teachers learned through their courses and allows them to "think like teachers." It also develops a higher order of thinking skills in students who use the case, resulting in a type of learning that continues long after the case has been discussed (Kuntz & Hessler, 1998). To further understand the importance of case method instruction, the strategy must be clearly defined.

Case Method Instruction Defined Through Teacher Preparation

Case study method teaching is a method to "connect" theory with practice, especially when problems from cases are explored in an environment of "shared inquiry" (Harrington & Garrison, 1992). Essentially, case studies are stories through which the reader gains insight into lives of student, teachers, and parents (Butera & Dunn, 2005). Theories that are learned during education courses are viewed through the use of case method instruction. Case studies also provide student teachers with the opportunity to reflect on their actions in certain situations. This allows instructors to provide much needed practice with identifying and solving problems related to the field. Therefore, case studies are used to develop skills in the area of collaboration and interpersonal communication as students work with their peers and offer commentary on problems and possible solutions (Elksnin, 2001; Manoucherhi & Enderson, 2003). Additionally, case studies may illustrate concepts in teaching particular lessons and practices that are given to pre-service teachers during class time (Elksnin, 1998, 2001).

To ensure that the case method of instruction is not confusing but effective, the instructor can provide detailed explanations and processes to filling in or problem solving for a specific case. Wasserman (1994 a, b) suggested four steps to preparing future educators to use cases in

the case method process. In the orientation stage, the instructor provides an explicit description of the expectations of the assignment and evaluation process of the assignment. Second, study or discussion questions are included with each case to assist the student with developing comprehensive answers that cover all issues and problems. The questions are framed to request specific details and engage students in higher order thinking.

Third, the instructor prepares students to work collaboratively in small groups. The purpose of the small groups is to encourage discussion and deliberation of the case. Small groups also relieve students of their anxiety of expressing their opinions. During the small group discussion, the instructor might recommend a problem solving procedure to better address the underlying issues of the case. Martin, Glatthorn, Winters, and Saif (1989) suggested six steps to problem solving and analyzing cases. The six steps include: (a) list the underlying issues of the case, (b) suggest solutions to determine the issues, (c) explain a rationale for the proposed solution, (d) list several potential consequences for each proposed solution, (e) provide an order for the solutions based upon the likelihood of success, and (f) present the suggested solution to the class.

Wasserman (1994 b) fourth and final component described the role of the instructor. He or she should be a facilitator during the discussion or debriefing of the case. As well, the instructor should establish an environment that students feel free to reject or disagree with their peers' responses. To facilitate the discussion, the instructor must paraphrase and summarize students' responses so that their statements are clear and understood. Questions also should be introduced to redirect to the main issues. Finally, the instructor should refrain from expressing his or her opinions during the discussion.

Although Wassermann suggested only four steps to teaching case studies, Boyle and Danforth (2001) recommended a fifth component to assist students with closure of a certain issue. Follow-up activities are proposed to center specific issues in the case. The instructor can develop these activities to further understand a concept or issue that the case provides. These activities could come in many different forms, such as videos, reading, observations, out-of-class discussions, or revisiting the issue (Boyle & Danforth, 2001). The purpose of the fifth component is to ensure that pre-service educators fully understand the issues and how to problem-solve for the case. The steps described by Wassermann (1994 a) and Boyle and Danforth (2001) provide a foundation for implementing case methodology in the field of special education.

Case studies can help preparation programs integrate knowledge within and across courses and other learning experiences (Darling-Hammond & Snyder, 2000). Harrington (1995) found that analysis of cases can help pre-service teachers develop reasoning skills, allowing them to accurately identify important issues and thoughtfully analyze an educational dilemma. He also found that pre-service teachers' pedagogical reasoning increased through reading and interpreting cases during their preparation program courses. Hammerness and Darling-Hammond (2002) conducted content analyses of twenty-one curriculum cases written by pre-service teachers. The researchers found after multiple drafts of the same cases students' responses were more able to create multiple solutions and make connections between theory and practice. The analyses of the cases also indicated that the pre-service teachers' responses became more sophisticated over time after multiple practices (Hammerness & Darling-Hammond, 2002).

Case Method as Performance Assessments

The research has illustrated that case method instruction is an effective instructional tool for preparing future teachers (Boyle & Danforth, 2001). Case studies are also used to examine the current performance of pre-service teachers. Case method used as a performance assessment examines pre-service teachers' thinking and action in situations that are experienced-based and problem-oriented (Darling-Hammond & Snyder, 2000). Participation in these assessments has been found to support learning both for teachers who are being evaluated, and for university faculty members who are trained to serve as evaluators (Darling-Hammond & Snyder, 2000). Although the research is very limited, when pre-service teachers are assessed by case method, it helps them to link content knowledge to practical application (Harrington, 1995; Hammerness & Darling-Hammond, 2002).

Rationale for Case Method in Special Education

The literature on case method in teacher education mostly consists of descriptions of activities in teacher education programs and courses (Goeke, 2008; Lengyel & Vernon-Dotson, 2010). There is limited research on its effectiveness, and so at this point it lacks an empirical foundation in supporting its use as an instructional tool and performance assessment (Goeke, 2008). Previous literature about the use of case method instruction consists mainly of anecdotal reports, argument papers, or qualitative reports about the benefits of the method (Kim, Utke, & Hupp, 2005). However, case method instruction has great potential in teacher education and can afford desirable outcomes for pre-service special educators. The method provides safe environments for pre-service teachers to explore and apply ideas and solutions under the guidance of experienced instructors (Lengyel & Vernon-Dotson, 2010). For future educators in the field of special education, case method instruction could be particularly beneficial because it

would allow pre-service teachers the opportunity to apply knowledge in a variety of contexts with the full range of students. According to a survey by Elksnin (1998), more than 78% of respondents in special education teacher training have used cases in their teaching. The cases are a great resource for educating pre-service special educators about teaching students with disabilities. Case studies can promote the development of knowledge, problem solving, and decision-making skills in pre-service teachers (Snyder & McWilliams, 1999).

Special education professionals need to develop specialized skills (Council for Exceptional Children, n.d.) for teaching students with diverse needs such as implementing federal mandates, collaborating with others, creating and implementing individualized education programs, advocating for students and parental rights, and transitioning students from high school to postschool settings. Case studies can help future special education teachers use the same tools as novice or veteran special education teachers to discover the profession and problem-solve for certain outcomes (Lengyel & Vernon-Dotson, 2010). Case methods are supported as a valuable and more meaningful method of allowing individuals to construct teaching knowledge, rather than having it taught through traditional methods (Goeke, 2008). Effective teaching of students with disabilities requires a foundation of knowledge that is not an "automatic consequence" of special education teacher programs (Goeke, 2008).

Research on cases with multicultural content has suggested that cases can change teachers' thoughts about particular settings or groups by presenting vicarious practices (Noordhoff & Kleinfeld, 1991; Shulman & Colbert, 1987; Shulman & Mesa-Bains, 1992). In the same way, case methods may be a strategy through which educators can conceptualize and emphasize information about students with disabilities into teacher preparation programs (Goeke, 2008). Cases can be developed to describe individual student's learning and behavior

problems that can be different across educational settings. Essentially, specific special education content can be incorporated into the case to reveal many different issues.

Lengyel and Vernon-Dotson (2010) explored two examples of case method instruction in special education teacher preparation courses. The authors found that the use of the case study methods allowed teacher candidates to come face-to-face with the different challenges of educating students with disabilities. They also found that the students experienced the levels of Bloom’s taxonomy from recognizing their knowledge and comprehension skills in using problem-solving skills to develop possible solutions. By the end of the two examples, the pre-service special education teachers were prepared to design data systems, collect data, employ data-based decision making processes, utilize evidence-based practices, and follow the appropriate procedure mandated by special education laws. Table 3 summarizes the Bloom’s Taxonomy cognitive domains that involve knowledge and the development of skills.

Table 3

Bloom’s Taxonomy

Category	Description
Knowledge	Recall data or information
Comprehension	Understand the meaning of instructions and problem
Application	Use a learned concept in a new situation
Analysis	Separate material or concepts into categories, so that it can be understood
Synthesis	Joins different parts together to form a whole
Evaluation	Make judgments about the value of idea or materials.

Case method instruction is steadily increasing in the field of education, especially in the area of special education (Butera & Dunn, 2005; Kim, et al., 2005; Lengyel & Vernon-Dotson, 2010; Spencer, Freund, & Browne, 2006). Pre-service educators are motivated when they can make a connection to real life problems and issues by applying knowledge and creating solutions to rid the dilemmas presented. Case studies produce an active, iterative, and reflective approach to educating future special educators (Spence et al., 2006).

Summary

The movement from high school to postsecondary environments can be one of the most difficult transitions an individual experiences, especially a person with a disability (Kohler & Field, 2003). To help students with this special movement, legislation and models were created to help better prepare students with disabilities to participate in programs for academic, social, and vocational training (Halpern, 1992). Although efforts to prepare students with disabilities for postschool have been around for decades, it was not until 1990 that the term transition was defined in the legislation and transition planning was required by law. The definition included employment, vocational training, and independent living as viable postschool outcomes. Currently, the No Child Left Behind Act (2001) and the reauthorization of the Individuals with Disabilities Education Act (2004) have improved the quality of education for students with disabilities. The services that are being provided are more academically focused and teachers are being held more accountable to implement evidence-based practices.

Evidence-based practices are researched-based practices that have been found to be effective for creating positive post school outcomes for students with disabilities (Landmark, et al., 2010). Currently NSTTAC (2010) has identified more than 33 evidence-based practices for preparing secondary students with disabilities. For the purpose of this paper, five evidence-

based practices were highlighted; self-determination, student participation, family involvement, interagency collaboration, and transition assessments. These five practices have been found to be critical components of effective transition programs and under direct control of the teacher.

The special educator helps students set goals and achieve academic success; therefore, the teacher must first believe that he or she is capable of assisting students. Bandura (1977) provided a framework that studied the construct of self-efficacy, which led to the evolution and measurement of teacher efficacy. Teacher efficacy is demonstrated by having a positive attitude paired with effective instructional activities that will increase student achievement (Gibson & Dembo, 1984). Teacher efficacy is an important aspect to consider in the preparation of special education teachers. Research has shown that teachers with high teacher self-efficacy demonstrate the following; (a) higher academic achievement, (b) greater effective teacher practices, (c) increased family involvement, and (d) higher levels of commitment to the field (Gibson & Dembo, 1984; Hoy & Woolfolk, 1993; Podell & Soodak, 1993). When pre-service special educators leave their preparation programs with high teacher efficacy, they will more likely demonstrate competence in transitioning students into postsecondary settings.

To ensure that special educators are competent in these areas, preparation programs have to better prepare secondary special education teachers. The roles and responsibilities of secondary special educators have expanded, requiring them to take on more job duties. Many secondary special educators lack the key content to perform their expanded job requirements (deFur & Tayman, 1995). Special education teacher preparation programs for the most part do not provide pre-service special educators with information and practical experiences to ensure competency in the area of transition. Most programs only offer one class and students are left with many questions on how to help students transition from one setting to the next.

In the effort to better prepare secondary special education teachers, case study method instruction has been suggested (Lengyel & Dotson, 2010). Case method instruction is a viable method that can help future educators bridge the gap between theory and practice (Darling-Harmond, 2006). It also helps students increase their performance skills of reflection and problem solving. Although the strategy is fairly new, case method instruction is necessary in the preparation of educators (Lengyel & Dotson). In the field of special education, case method used as a performance assessment provides a series of information that assists the future special educator with making judgments and higher order of thinking (Lengyel & Dotson). It also provides teacher educators with information on how to improve program planning. This allows pre-service educators to demonstrate confidence when educating students with disabilities. Secondary special education teacher programs must include courses and methods that include the application of students' knowledge and skills. These methods are necessary for the development of effective transition programs and provide opportunities for pre-service teachers to apply these skills in real life scenarios through methods such as case teaching and life practical experiences.

CHAPTER III. METHODOLOGY

Pre-service secondary special education teachers are being prepared to teach secondary-age students with disabilities every year. These pre-service teachers leave their preparation programs with high self-efficacy levels to educate students with disabilities during their transition process (Brownell & Pajares, 1999). Goddard, Hoy, and Woolfolk-Hoy (2004) noted there is a difference between perception of competence and actual performance in regards to educating students with disabilities. Researchers have found that case study methodology is an effective method to assess pre-service teachers' application and problem-solving skills (Doebler, Roberson, & Ponder, 1998). This study examined pre-service secondary special education teachers' efficacy levels and performance on a secondary student's transition plan process case study.

This chapter outlines the methodology used to conduct this study. First, a description of the participants and setting will be discussed. Next, a description is given of the instruments and scoring procedures used. Also presented in this chapter are a list of research questions and the procedures used to answer the research questions.

Methods

Participants and Setting

Pre-service teachers enrolled in a teacher training program from a medium/large public university in the southeast that offers a baccalaureate and a master's degree in either Collaborative Teacher (K612) or Collaborative Teaching (6612) were included in the study. The

participants completed curricula requirements outlined by the College of Education and Special Education Department. The pre-service teachers were recruited through both undergraduate and graduate practica and internship courses at the university. The criteria for participation in the study included being in their (a) next to last practicum, (b) last practicum, or (c) internship. In addition, the participants had to have completed Curriculum in Secondary Special Education or Program Implementation in Special Education and Transition from School to Community, and be currently working towards initial Collaborative Teacher K-12 certification.

Instrumentation

Three types of data collection instruments (see Appendix 1 for each instrument) were used. The first was a demographic questionnaire containing questions regarding characteristics of the participants. The second was a scale to measure the participants' perception of their teaching efficacy, which is titled *Teacher Efficacy for Secondary Student with Disabilities* (TESSD). The third instrument was the *Evidence-Based Practices Case Study Response Questionnaire* (EBPCSRQ). A rubric entitled *Evaluation Rubric for Evidence-Based Practices Written Analysis of Case Study* was used to score the case study.

Demographic questionnaire. The demographic questionnaire was developed by the primary investigator. The purpose of this questionnaire was to address variables that could potentially impact participants' perception of their teacher efficacy. These variables included (a) age, (b) gender, (c) student classification, (d) race, and (e) practica or internship placement.

Teacher efficacy for secondary students with disabilities (TESSD). TESSD is an adaptation of a survey titled *Teacher Efficacy for the Inclusion of Young Children with Disabilities* (TEIYD) (Walls, 2007). To support construct validity of the TEIYD, Walls consulted with an expert panel consisting of three professionals with expertise in early childhood

special education, and one professional with expertise in statistics and teacher efficacy. The panel and Walls were careful to address task specificity which has been an issue in measuring teacher efficacy. The TEIYD instrument included 22 items. The 22 items were categorized into four areas that were designed to assess teacher efficacy: (a) knowledge and procedures related to special education (6 items), (b) knowledge of young children with disabilities (5 items), (c) teacher confidence with young children with disabilities (7 items), and (d) perceptions of abilities to implement teaching strategies (4 items). Cronbach's coefficient alphas of these subscales were .92, .96, .94, and .93, respectively. The TEIYD demonstrated acceptable psychometric properties with item analysis exceeding the minimal limit of .70 (Nunnally, 1978; Walls, 2007).

For this study, the TESSD was modified to address teacher efficacy for special education teachers teaching secondary-age students with disabilities. When modifying the TESSD, the primary investigator consulted with an expert panel of three professionals. Two professionals had expertise in transition planning and implementing effective practices in secondary special education in pre-service teacher training programs. One professional had expertise in statistics and teacher efficacy. When adapting the TEIYD content to reflect secondary students with disabilities, the phrase "young children with disabilities" was removed and replaced with "secondary students with disabilities." Also, thirteen statements were adapted to reflect the transition planning process and the teacher's implementation of secondary level courses instead of early childhood instructional processes. These statements were added to determine pre-service teachers' confidence level in the areas of providing accommodations, assisting with vocational and career development, teaching functional skills, and working with community agencies. A total of 3 statements were added to the TESSD survey. Two statements were added to the teaching confidence at the secondary level category; and one statement was added to the

perception of abilities to implement collaborative efforts category. These adaptations allowed the survey to focus on the primary needs of secondary students who are going through the transition planning process.

The modified TESSD instrument that was used in this study included 25 items designed to assess efficacy beliefs in four areas: (a) knowledge and procedures related to special education (6 items), (b) knowledge of students with disabilities (5 items), (c) teaching confidence at the secondary level (9 items), and (d) perceptions of abilities to implement collaborative efforts (5 items). A five-point Likert-type scale was used to measure participants' confidence rating with anchors 5 = very confident, 4 = confident, 3 = moderate confidence, 2 = little confidence, and 1 = no confidence. The participants' overall scores could range from 25 to 125. Table 4 compares the TEIYD and TESSD survey items.

Table 4

TEIYD and TESSD Survey Items

The Teacher Efficacy for the Inclusion of Young Children with Disabilities (TEYID)	The Teacher Efficacy for Secondary Students with Disabilities (TESSD)
Knowledge and procedures related to special education (6 items)	Knowledge and procedures related to special education (6 items)
Knowledge of young children with disabilities (5 items)	Knowledge of students with disabilities (5 items)
Teacher confidence with young children with disabilities (7 items)	Teaching confidence at the secondary level (9 items)
Perceptions of abilities to implement teaching strategies (4 items)	Perceptions of abilities to implement collaborative efforts (5 items)

Evidence-based practices case study and evidence-based practices response questionnaire. The principle investigator performed an extensive review of literature concerning the use of case study methodology and how it is used to examine the current knowledge and skills of special education pre-service teachers (Ainsworth & Viegut, 2006). Research has shown that case studies are commonly used to link theory with practice (Harrington & Garrison, 1992) and to assess pre-service teachers' application and problem-solving skills (Ainsworth & Viegut, 2006). The principle investigator created a case study for the purpose of this study. This case study was titled *Evidence-Based Practices Case Study* (EBPCS); it described the transition planning process of a secondary-age student with a disability. Self-determination, family involvement, student participation, transition assessments, and interagency collaboration were the practices that were used to create the case. The case was created to contain important transition planning information for each of these areas. Research has shown that these practices increase positive student outcomes during the transition planning process (Kohler & Field, 2003).

The case included four issues per evidence-based practice (see Appendix 1 for issues for each practice). The case also included (a) pertinent information about the student, (b) terminology that is relevant to the specified evidence-based practices, (c) characteristics of the evidence-based practices, and (d) information that will support a solution to the problem. The case was followed by a response form.

The researcher created the response form in a similar fashion. The researcher consulted books that included case studies and possible questions that described issues related to secondary-age students with disabilities. The case study books provided examples of scenarios and questions that could be used to illustrate the dilemmas that students go through during the

transition planning process. After completing the research, the principle investigator created the *Evidence-Based Practices Response Questionnaire* (EBPRQ). It is a one paragraph statement that was designed to demonstrate the participants' knowledge and application skills in the five evidence-based practices: self-determination, family involvement, transition assessments, student participation, and interagency collaboration. The EBPRQ required the students to construct a response that included the identification of the four issues related to each evidence-based practice. The EBPRQ form included an open-ended question that focused on (1) providing an analysis of the case study, (2) identifying the strengths and weakness, and (3) providing a resolution to the issues discussed in the case. The open-ended question used in the study required demonstration of knowledge, skills, application, and problem-solving skills (Ainsworth & Viegut, 2006).

Development and field testing of evidence-based practices case study and evidence-based practices response questionnaire. The EBPCS and EBPRQ were field tested to ensure the content (e.g., identification of the evidence-based practices) and the process (e.g., clarity of directions) of the instruments were sufficient to actually measure the students' responses. The content of the case study was piloted with three master's-level secondary special education teachers. The principle investigator administered a copy of the case study and questionnaire, checklist of issues, and content survey. The master's-level secondary special education teachers were instructed to read the case and locate the identified evidence-based practices and issues from the checklist while responding to the questionnaire. The content of the case study included characteristics of each evidence-based practice: self-determination, parental involvement, transition assessments, student participation, and interagency collaboration. Once the surveys were completed, the students were to rate the content of the case with the *Case Study Content*

Review Survey (CSCRS) (see Appendix 1). The principle investigator created the CSCRS to measure the identification of each evidence-based practice and its issues. The survey allowed participants to record a start and finish time. A comment section was also provided to make comments about the content of the case study and the response questionnaire. The responses of the CSCRS were on a 3-point scale that indicated 3 = clearly reflected, 2 = partially reflected, and 1 = not reflected.

The average time it took for the participants to read the case study and respond to the questionnaire was 33 minutes. The participants' ratings ranged from clearly reflected to partially reflected ($M = 2.73$) for their overall rating of the evidence-based practices and issues identified in the case study. The mean ratings for the evidence-based practice ratings were as followed: self-determination ($M = 3.00$), parental involvement ($M = 3.00$), transition assessments ($M = 2.67$), student participation ($M = 2.67$) and interagency collaboration ($M = 2.67$). The principle investigator also reviewed and categorized the participants' comments. The trend of the comments included: (a) the lack of student's strengths/positives included in the case study, (b) each evidence-based practice was identified, (c) the evidence-based practice interagency collaboration was not detailed enough, (d) the case study was very clear and descriptive, (e) the response questionnaire was clear, and (f) the description of the student and overall concerns were evident. The participants' comments suggested that the overall case study could be longer in length to provide more detailed information about the student and the evidence-based practices.

The process of the case study was piloted with 16 undergraduate level pre-service teachers. They were administered the case study, response questionnaire, and a Likert-type scale, entitled *Case Study Review Survey (CSRS)* (see Appendix 1). The survey was created to survey the following aspects of the administration of case study and response questionnaire: (a)

the case study response questionnaire statement for directions were clear, (b) the scenario described in the case study was clear, (c) the length of the case study was reasonable, (d) the case study was easy to comprehend, and (f) all five evidence-based practices were clearly identified in the case study. The survey included a place for participants to record a start and finish time. The principle investigator also provided a section to make comments regarding the process of the instrument. The responses were on a 5-point scale that included the anchors: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = somewhat agree, and 1 = disagree.

The average time it took for participants to read the case study was 6 minutes. The results also indicated that participants' ratings ranged from strongly agree to agree. The mean ratings for the CSRS were: (a) the response questionnaire was clear ($M = 4.87$), (b) the scenario described in the case was clear (4.73), (c) the length of the case was reasonable ($M = 4.87$), and (d) all five-evidence-based practices were identified ($M = 4.60$). The principle investigator also reviewed each comment and categorized the comments. The comments were similar to areas that were rated. In general, comments indicated: (a) the case study was easy to read and comprehend, (b) all five evidence-based practices were identified, (c) the response questionnaire was clear, and (d) the case study was sufficiently descriptive and detailed. The participants did have a common theme of one concern. The evidence-based practice, interagency collaboration, lacked or needed more detail.

Based on the results of the pilot testing of the *Case Study Content Review Survey* and the *Case Study Review Survey* the principle investigator modified the content of the case study. The principle investigator added information about the student's personal dislikes and likes as well as the student's academic and behavioral strengths and weaknesses. The evidence-based practice of interagency collaboration lacked detail. Additional information was added to illustrate the

relationship between the vocational rehabilitation counselor and school. The suggested modifications made the case study longer in length, creating a clearer description of the student and her challenges going through the transition planning process.

Evidence-based practices written analyses rubric. A rubric was used to score the participants' responses used in the case study. The principle investigator adapted a rubric used in the Department to grade coursework and practica assignments. The rubric evaluated the participants' responses in four different areas: (a) evidence-based practice identification, (b) analysis of issues, (c) plan of action, and (d) evaluation of plan of action. The four evaluation component categories were rated using the following scale: 4 = exceeds expectation, 3 = meets expectations, 2 = partially meets expectation and 1 = does not meet expectation. For each evidence-based practice, there were 4 issues that were described in the case study. As stated earlier, a checklist was created to identify the issues per evidence-based practice. The participants were required to create a plan of action that identified all five evidence-based practices and issues that were related to the practice. The participants' total score could range from 4 to 16. The principle investigator expected participants to score at least in the 'meets expectations' range in all components of the rubric.

Evidence-based practices written analyses rubric training and inter-rater reliability. Results from the case study written response questionnaire were evaluated by the principle investigator and an assistant professor in Special Education with an emphasis in transition. The principle investigator trained the assistant professor on how to score each case study response. Each evidence-based practice had four issues that were discussed in the case study. The two raters were each given a copy of 10 of the same case studies and a copy of the checklist of issues for each evidence-based practice. The principle investigator also discussed how each response

rated against the *Evidence-Based Practices Written Analyses Rubric* (EBPWAR). Once the transition specialist was trained on how to identify the issues and rate each response, the principle investigator and transition specialist scored ten of the same responses. The first response that was scored by the raters was rated 11(principle investigator) and 12 (transition specialist). The raters discussed their differences in how many recommendations are needed for each evidence-based practice. The discussion led to the revision of the first response. The raters agreed that the score should be 11. Next, the raters independently rated nine more students' responses. After they were rated, scores were compared. There was 100% agreement on the nine responses. The principle investigator and assistant professor rated 20 responses independently.

Procedures

Institutional review board. The principle investigator submitted a formal request to the Institutional Review Board (IRB) at Auburn University (AU) to complete research involving AU students. The request was approved. Once the principle investigator received clearance from the IRB committee, a packet was created to administer to potential participants. Participation was voluntary and the principle investigator provided an informational letter explaining the risks to participating, rights, and contact information in case of questions or concerns regarding the study.

Recruitment of participants. To recruit participants for the study, the principle investigator created a flyer (see Appendix 3) that outlined the participants' requirements. The flyer included the following requirements for participation in the study: age, current semester, and program of study. The principle investigator attended weekly practica and internship meetings to recruit potential participants and passed out the flyer and explained to the practica and

internship students the importance of the study. The flyer was emailed to distance education students as well. It was emphasized that participation was voluntary and it would not interfere with the relationship between the principle investigator and participants. The principle investigator returned the week following her visit to practica and intern meeting to administer the instruments to willing participants.

Administering of instruments. The principle investigator returned and explained the study in more detail to the participants that remained after last practicum and final internship meetings. An informational letter was administered (see Appendix 2). The questionnaire, survey, and case study with response questions were distributed by the principle investigator in the form of a packet completed by undergraduate and graduate level pre-service teachers enrolled or previously enrolled in a practica and/or internship courses. All questionnaires, surveys, and cases were numbered. Participants were not allowed to provide any identifying information outside the questions from the demographic questionnaire.

The pre-service educators who agreed to participate filled out all documents in the classroom after practica or internship classes. Participants were instructed to complete the inventories in the order in which they appeared in the packet. The principle investigator left the room after asking individuals to volunteer to complete the questionnaire, survey, and case studies with response questions provided in the packet. Once the participants completed the packet, the packet was placed into a bin. Participants could choose to complete the packet or not. No time limit was assigned to complete the questionnaire. Half of the participants received a packet in the following order: (1) demographic questionnaire, (2) TESSD scale, and (3) evidence-based practice case studies with response questions. The second half of participants received a packet in the following order: (1) demographic questionnaire, (2) evidence-based practice case studies

with response questions, and (3) TESSD scale. This was done to control for participant fatigue or order effects. All participants, whether they completed a packet or not, sealed the survey and response forms and placed them in a bin provided by the principle investigator. The principle investigator returned after the last participant left the class and collected the 30 completed and 5 uncompleted packets.

Research Questions

The following research questions and corresponding null hypothesis were examined in this study:

1. What proportion of students rated themselves as "confident" or "very confident" on the *Teacher Efficacy for Secondary Student with Disabilities* survey?

2. To what extent was there a difference between scores on the teacher efficacy scale (TESSD) for students at the undergraduate level and those at the graduate level?

Ho1: There was no statistically significant difference between scores on the teacher efficacy scale (TESSD) for student at the undergraduate level and those at graduate level.

3. To what extent was there a difference between scores on the teacher efficacy scale (TESSD) for students at the practicum level and those at the internship level?

Ho2: There was no statistically significant difference between scores on the teacher efficacy scale (TESSD) for student at the practicum level and those at internship level.

4. What proportion of students' responses "met" or "exceeded" expectations on the rubric for the written response to *the Evidence-Based Practice Case Study*?

5. To what extent was there a difference between scores on the rubrics for evidence-base practices for students at the undergraduate level and those at the graduate level?

Ho3: There was no statistically significant difference between scores on the rubrics for evidence-based practices for students at the undergraduate level and those at the graduate level.

6. To what extent was there a difference between scores on the rubrics for evidence-based practices for students at the practicum level and those at the internship level?

Ho4: There was no statistically significant difference between scores on the rubrics for evidence-based practices for students at the practicum level and those at the internship level.

7. To what extent was there a relationship between teacher efficacy scores (TESSD) and scores on the rubrics for evidence-based practices for students in special education teacher preparation programs?

Ho5: There was no statistically significant relationship between teacher efficacy scores (TESSD) and scores on the rubrics for evidence-based practices for students in special education teacher preparation programs.

Data Analysis

Several different statistics were used to analyze data in this study. Descriptive statistics were used to summarize demographic information on participants. Two one-sample *t* tests were conducted to evaluate the scores of the TESSD Survey and rubric. Independent samples *t* tests were conducted to examine the mean differences in teacher efficacy (TESSD scores) and the mean differences in evidence-based practices rubric scores for students at the undergraduate and graduate levels. Independent samples *t* tests were also conducted to examine the mean differences in teacher efficacy scores and evidenced-based practice rubric scores for students at the practicum and internship levels. To determine the relationship between the scores on the

TESSD and rubrics based on the evidence-based practice case study, data were analyzed by Pearson Product Moment Correlation Coefficient.

CHAPTER IV. RESULTS

This study investigated secondary special education pre-service teachers' self-efficacy and knowledge and skills towards educating secondary-age students with disabilities. More specifically, the researcher wanted to determine pre-service teachers' efficacy in regards to educating secondary-age students going through the transition planning process. A second purpose was to examine pre-service secondary special education teachers' performance on a case study related to evidence-based practices and transition-related issues. The primary investigator conducted analyses for seven research questions and participant demographics. The results of the participant demographics and seven research questions are presented in this chapter.

Demographic data collected on 30 participants included: (a) student classification (n = 23, 76.7% undergraduates; n = 7, 23.3% graduates), (b) age ranges 20-22 (n = 18, 60%), 23-25 (n = 6, 20%), and 26 and older (n = 6, 20%), (c) gender (n = 3, 10% males; n = 27, 90% females), race (n = 3, 10% African Americans; n = 2, 6.67% Native American; n = 25, 83.3% White), and practicum/internship placement (n = 11, 36.7% 2nd practicum; n = 5, 16.6% 3rd practicum; n = 14, 46.7% internship). Table 5 presents the demographic information on the participants. In addition, data were collected on graduate students' undergraduate degree majors, type of certification, and whether the students were on-campus or distance education learners. The undergraduates represented 76.67% of the participants and 23.33% of participants were graduate students. The graduate students' educational background included psychology, elementary education, business, and special education. Students who have non-educational

undergraduate degrees were pursuing special education certification through an alternative route. The composition of the participants in this study is comparable to demographic statistic from the United States Department of Education on public school teachers (2010). Participant demographic information is displayed in Table 5.

Table 5

Participant Demographic Information

	<i>n</i>	Percent
Student Classification		
Undergraduate	23	76.7
Graduate	7	23.3
Age Ranges		
20-22	18	60.0
23-25	6	20.0
>26	6	20.0
Gender		
Male	3	10.0
Female	27	90.0
Race		
African American	3	10.0
Native American	2	6.67
White	25	83.3
Semester		
2 nd Practicum	11	36.7
3 rd Practicum	5	16.6

Research has shown that 12% to 15 % of all new special education teachers are prepared through alternative certification programs (Wasburn-Moses & Rosenberg, 2008). The ages of the participants of this study range from 20 to 57. The participants that fell between the ages of 20-22 represented 60% of the participants. The majority of the participants were females (90%). The race/ethnicity for the participants of this study was African American, White, and Native American. The White participants represented over 80% of the individuals surveyed. The United States Department of Education (2010) indicates that about 73% of special education teachers who teach at the secondary level are females, 48% are under the age of 25, and over 80% of teachers are White (2010).

Research Question Results

Research Question 1

Research question 1 asked: What proportion of students rated themselves as "confident" or "very confident" on the *Teacher Efficacy for Secondary Student with Disabilities* survey? A one-sample *t* test was conducted on the scores of the *Teacher Efficacy for Secondary Student with Disabilities* survey to evaluate whether the students' mean was significantly different from the test value 100. A test value of 100 was used because the students would have to score at least in the "confident" range or above on the TESSD survey. The sample mean ($M = 100$, $SD = 11.9$) was not significantly different from 100, $t(29) = .323$, $p = .749$. The results indicated that there was no difference between the test value and the observed value. The results suggest that the majority of the students felt "confident" or "very confident" about their ability to educate secondary-age students with disabilities. Table 6 shows the frequency of students who felt "very confident" to "little confidence" based on each statement on the TESSD survey.

Table 6

TESSD Survey Questions Frequency

Survey Question	Very Confident <i>n</i>	Confident <i>n</i>	Moderate Confidence <i>n</i>	Little Confidence <i>n</i>
Law and regulations	3	14	11	2
Student eligibility	2	19	7	2
IEP	11	16	2	1
My role in the IEP	14	14	2	0
Transition requirements	7	18	4	1
Teacher effort	18	11	1	0
Define disabilities	5	20	5	0
Manifestations of disabilities	6	12	11	1
School difficulty	11	17	2	0
Understanding needs	9	21	0	0
Student's disability affect transition	13	13	3	1
Exposure to secondary content areas	3	16	9	2
Teach basic skills	7	17	5	1
Implement learning strategies	6	15	8	1
Modify and accommodate	9	11	9	1
Vocational training	6	13	7	4
Student's role in transition process	5	15	8	2
Manage student's behavior	5	19	2	4
Teach functional skills	7	16	7	0

(table continues)

Table 6 (continued)

Survey Question	Very Confident <i>n</i>	Confident <i>n</i>	Moderate Confidence <i>n</i>	Little Confidence <i>n</i>
Implement co-teaching	6	16	7	1
Work with general education	14	12	4	0
Work with special education administrators	14	12	4	0
Work with community agencies	6	14	6	4
Work with parents	12	15	2	1
Work with other professionals	10	17	2	1

Research Question 2

Research question 2 asked: To what extent was there a difference between scores on the teacher efficacy scale (TESSD) for students at the undergraduate level and those at the graduate level? An independent sample *t*-test was conducted to compare the level of efficacy for undergraduate and graduate level pre-service teachers in special education teacher preparation programs. There was not a statistically significant difference in the self-reported level of efficacy $t(28) = -.075, p = .155$ on the TESSD survey for undergraduate ($M = 100, SD = 12.9$) and the self-reported level of efficacy for graduate students ($M = 101, SD = 7.76$) in a special education teacher preparation program. The results showed no differences in the total scores on the teacher efficacy scale between the two groups in how confident they felt about teaching students with disabilities at the secondary level. Table 7 shows the mean scores and standard deviations for undergraduate and graduate pre-service special education teachers.

Table 7

Mean Scores and Standard Deviations of Teacher Efficacy

	N	Mean	Standard Deviation
Undergraduate	23	100	12.9
Graduate	7	101	7.76

Research Question 3

Research Question 3 asked: To what extent was there a difference between scores on the teacher efficacy scale (TESSD) for students at the practicum level and those at the internship level? An independent sample *t*-test was implemented to compare the level of efficacy for pre-service teachers at the practicum and internship level. There was not a statistically significant difference in the self-reported level of efficacy at the .05 level $t(28) = 1.79, p = .084$ on the TESSD survey for practicum level students ($M = 96.0, SD = 10.8$) and the self-reported level of efficacy for internship level students ($M = 104, SD = 10.6$) in a special education teacher preparation program. However, it is noteworthy that the probability of difference between students at the practicum level and those in internships was statistically significant at the .08 level, indicating that such difference would occur eight or fewer times out of 100 by chance. The results indicated that regardless of the students' number of formal field experiences, the total scores on the teacher efficacy scale were about the same. Table 8 shows the mean and standard deviations for practicum and internship level pre-service special education teachers' efficacy scores.

Table 8

Mean Scores and Standard Deviations of Teacher Efficacy Scores

	<i>N</i>	Mean	Standard Deviations
Practicum	16	96.0	12.4
Internship	14	104	11.5

Research Question 4

Research question 4 asked: What proportion of students' responses met or exceeded expectations on the rubric for the written response to *the Evidence-Based Practice Case Study*? A one-sample *t* test was conducted on the scores from *Evidence-Based Practice Rubric* to evaluate whether the sample mean was significantly different from the test value 12. The test value of 12 was used because it would have students' mean rating be in the 'meet expectations' range or above for their total score. The sample mean ($M = 10.3$, $SD = 1.95$) was significantly different from 12, $t(29) = -4.573$, $p = < .001$. The results indicated that the sample mean is below the test value. Table 9 shows each component of the *Evidence-Based Practice Rubric* and the percent of students who scored in the 'meet or exceed expectations' range.

Table 9

Evidence-Based Practice Rubric Component Percentages

	<i>n</i>	Percent
Identification of Evidence-Based Practices		
Exceeds Expectation	11	36.7
Meets Expectation	18	60.0
Partially Meets Expectations	1	3.34
Does Not Meet Expectations	0	0
Analysis of Issues		
Exceeds Expectation	3	10.0
Meets Expectation	16	53.3
Partially Meets Expectations	10	33.3
Does Not Meet Expectations	1	3.34
Plan of Action		
Exceeds Expectation	1	3.34
Meets Expectation	12	40.0
Partially Meets Expectations	10	33.3
Does Not Meet Expectations	7	23.3
Evaluation of Plan of Action		
Exceeds Expectation	1	3.34
Meets Expectation	4	13.3
Partially Meets Expectations	18	60.0
Does Not Meet Expectations	7	23.3

Research Question 5

Research question 5 asked: To what extent was there a difference between scores on the rubrics for evidence-base practices for students at the undergraduate level and those at the graduate level? An independent sample *t*-test was conducted to compare rubric scores from the *Evidence-Based Practice Response Questionnaire* for undergraduate and graduate level pre-service special education teachers. There was not a statistically significant difference in the rubric scores $t(28) = -1.44$, $p = .431$ for undergraduate level pre-service special education teachers ($M = 10.1$, $SD = 1.99$) and graduate level pre-service special education teachers ($M = 11.2$, $SD = 1.60$) in special education preparation programs. The results indicated that regardless of student classification, the scores from the rubric were about the same. Table 10 shows the mean scores and standard deviations of the undergraduate and graduate students' rubric scores.

Table 10

Mean Scores and Standard Deviations of Undergraduate and Graduate's Rubric Scores

	N	Mean	Standard Deviation
Undergraduate	23	10.1	1.99
Graduate	7	11.2	1.60

Research Question 6

Research question 6 asked: To what extent was there a difference between scores on the rubrics for evidence-based practices for students at the practicum level and those at the internship level? An independent sample *t*-test was conducted to compare rubric scores from the *Evidence-Based Practice Response Questionnaire* for students and the practicum and internship level. There was not a statistically significant difference in the rubric scores $t(28) = -.699$, $p = .214$ for

practicum level pre-service special education teachers ($M = 10.1$, $SD = 2.13$) and internship level pre-service special education teachers ($M = 10.5$, $SD = 1.16$) in special education preparation programs. The results indicated that regardless of the students' number of formal field experiences, the scores from the rubric were about the same. Table 11 shows the mean and standard deviations for practicum and internship level pre-service special education teachers' rubric scores.

Table 11

Mean Scores and Standard Deviations of Practicum and Internship Students' Rubric Scores

	N	Mean	Standard Deviations
Practicum	16	10.1	2.13
Internship	14	10.5	1.16

Research Question 7

Research question 7 asked: To what extent was there a relationship between teacher efficacy scores (TESSD survey) and scores on the rubric for evidence-based practices for students in special education teacher preparation programs? A Pearson product-moment correlation coefficient was calculated to assess the relationship between the scores on the TESSD survey and scores on the rubric for evidence-based practices. There was a negative correlation between the two scores. The correlation was not significant, $r(28) = -.245$, $p = .192$. Lower scores on the rubric tend to be associated with higher scores on the TESSD survey, and high scores on the rubric tend to be associated with lower scores on the TESSD survey, but the relationship was not significant.

CHAPTER V. DISCUSSION OF RESULTS, LIMITATIONS, FUTURE RESEARCH AND SUMMARY

Preparing secondary-age students with disabilities to transition from high school to postsecondary environments is one of the most important processes for teachers and students. Teacher preparation programs have courses and practical experiences to support the academic and behavioral needs of students with disabilities that go through the transition process. Teachers with higher self-efficacy focus on the direct needs of their students (Darling-Hammond, Chung, & Frelow, 2002). Teacher efficacy is a very important goal of teacher preparation programs. Teacher efficacy has been found to be related to better instructional practices, higher student academic achievement, increased family involvement, and higher levels of job commitment (Allinder, 1994; Ashton & Web, 1986; Hoy & Woolfolk, 1993; Soodak & Podell, 1993). Higher teacher efficacy also allows teachers to step into challenging roles with the confidence and ability to change the student's opinion about school and learning (Henson, 2001). Self-efficacy is especially important for secondary special education teachers who have so many roles and responsibilities.

The primary purpose of this study was to examine secondary special education pre-service teachers' efficacy levels towards educating secondary-age students with disabilities. This was accomplished by examining scores from a teacher efficacy survey. A secondary purpose of this study was to examine pre-service secondary special education teachers' knowledge and skills towards educating secondary-age students with disabilities. Their knowledge and skills

were examined through a case study performance assessment developed by the principle investigator. Presented in this chapter are a discussion of the findings, limitations, future research, and implications.

Discussion of Results

Secondary Special Education Pre-Service Teachers' Efficacy

The results of the TESSD survey indicated that the pre-service secondary special education teachers felt "confident" or "very confident" in educating secondary-age students with disabilities. This is an encouraging finding because research has shown that teacher efficacy has been positively correlated to students having higher academic achievement, effective teacher practices, increased family involvement, and higher levels of job commitment (Gibson & Dembo, 1984; Hoy & Woolfolk, 1993; Podell & Soodak, 1993; Rosenholtz, Bassler, & Hoover-Dempsey, 1989; Ware & Kitsantis, 2007). Specifically, special education teachers with higher levels of efficacy are also more organized and more likely to engage in instructional planning with general education teachers (Allinder, 1994). These factors alone create better academic environments for instructing students with disabilities. Given the positive impact of teacher self-efficacy, it is necessary to identify other areas that may increase positive results in educating secondary-age students with disabilities (Caprara, Barbaranelli, Borgogni, & Steca, 2003).

Secondary Special Education Pre-Service Teachers' Performance Abilities

The mean rating for pre-service secondary special education teachers on the case study rubric was below the "meet expectations" range. The rubric components included identification of evidence-based practices, analysis of issues, plan of action, and evaluation of plan of action. An examination of the scores by components indicated that there was variability in scores across the four areas. For example, for identifying evidence-based practices component, over 36% of

the pre-service teachers "exceeded" expectations and 60% "met" expectations; moreover, 50% of the pre-service teachers "exceeded" or "met" expectations in analyzing the strengths and weaknesses related to the evidence-based practices. The majority of the students did not "meet" expectations for the plan of action and evaluation of plan of action components. This information suggested that the pre-service teachers are familiar with the definitions of evidence-based practice described in the case study and can identify positive and negative practices; however, they appear to have difficulty in creating a plan of action for the weaknesses discussed in the case study. A possible reason for the low overall scores is that the pre-service teachers' preparation program does not assess pre-service teachers' application and problem solving skills with case study methodology. Therefore the students might not be familiar with this type of activity. The pre-service teachers' preparation program evaluates the students through field experiences and course assessments. The lack of experience with the use of case study methodology as a performance assessment tool was unfamiliar to the students. Therefore, their scores could be reflective of a lack of experience with this type of task rather than a lack of ability. For example, Doebler, Roberson, and Ponder (1998) found that the more practice pre-service teachers have with providing written solutions from case studies, the more likely the response will be more sophisticated and rated higher.

Relationship between Efficacy and Performance

The results indicated that there was a very small insignificant negative correlation between the TESSD survey scores and scores on the rubrics for evidence-based practices for secondary special education pre-service teachers $r(28) = -.245, p = .192$. This is somewhat surprising. It was expected there would be a significant positive relationship between the TESSD and the case study rubric. That is, it was expected that pre-service teachers with high

efficacy would also have scores on rubric that at least met expectations. A possible explanation for the lack of a significant relationship between self-efficacy and the case study rubric score could be the lack of practice with case study methodology as previously discussed. Research has shown that case study analysis promotes critical reflection and more in-depth understanding of the educational needs of students (Alexandrowicz, 2001).

Differences between Undergraduate and Graduate Level Pre-Service Teachers

The results showed no statistically significant differences between students at the undergraduate level and those at the graduate level based on teacher efficacy scores (TESSD) $t(28) = -.075$, $p = .155$, and scores on the rubrics for evidence-based practices, $t(28) = -1.446$, $p = .431$ for students in special education teacher preparation programs. This information suggests that regardless of student classification, pre-service teachers feel confident in educating students with disabilities at the secondary level. Although the data suggested that there were no differences between the undergraduate and graduate level pre-service teachers, undergraduate seniors in their internship placement had higher efficacy scores than graduate students. The undergraduate seniors' efficacy scores ranged from 92 to 111 ($M = 99.6$); whereas, the graduate students' efficacy scores ranged from 81 to 103 ($M = 92.5$). A possible reason that the graduate students' scores are lower could be their non-educational backgrounds. The educational background of the graduate students who participated in the study included business, psychology, and general education.

There also was no statistically significant difference between students at the undergraduate level and those at the graduate level based on scores on the rubrics for evidence-based practices for students in special education teacher preparation programs. The graduate level students' mean score ($M = 11.2$) was slightly higher than the undergraduates ($M = 10.0$).

Given that the undergraduate and graduate students have very similar programs, it is not surprising there was not a statistically significant difference. The evidence-based practices that were most likely to be identified were self-determination, student participation, parental involvement, and transition assessments. The evidence-based practices that had more detailed plans of actions were self-determination, parental involvement, and student participation.

Differences between Practicum and Internship Level Pre-Service Teachers

The results indicated that there is not a statistically significant difference between pre-service teachers at the practicum level and those at the internship level based on teacher efficacy scores (TESSD) $t(28) = -.699, p = .214$ and scores on the rubrics for evidence-based practices $t(28) = -1.76, p = .933$. One would expect the efficacy of interns, who have completed all coursework and three practica experiences, to be higher than practicum students. Although the mean for interns was slightly higher ($M=104$), the difference was not significant. Pre-service teachers at the internship level efficacy scores ranged from 81 to 121. Whereas, the pre-service teachers at the practicum level efficacy scores ranged from 83 to 119. It might be anticipated that interns would have a statistically significant higher scores because they are at the end of their program. Clift and Brady (2005) found that influences of courses and practical experiences through teacher preparation programs influence the development of pre-service efficacy levels. Both undergraduate and graduate level students reported high levels of efficacy. Perhaps this is the result of having completed two courses on secondary education and transition as a condition of participation in the study and at least one practicum.

The study also found that there is no statistically significant difference between students at the practicum level and those at the internship level based on scores on the rubrics for evidence-based practices for students in special education teacher preparation programs. The

rubric mean scores for pre-service teachers at the practicum level ($M = 10.1$) and pre-service teachers at the internship level ($M = 10.5$) were very close. Given that the undergraduate and graduate students are in an initial certification program, these results are unexpected because the students take many of the same courses.

Overall, pre-service teachers at the practicum level were rated in the "meets" expectation range ($M = 3.18$) in identifying evidence-based practices. The evidence-based practices that were identified most frequently in both groups' responses were self-determination, parental involvement, student participation, and transition assessments. However, interagency collaboration was omitted in most responses. This information illustrated that their preparation program provided courses that taught key terminology and information about evidence-based practices for secondary-age students with disabilities. The pre-service teachers at the internship and practicum level were able to identify the evidence-based practices in the case study.

The undergraduate and graduate level pre-service teachers' rubric scores ranged between "meets expectation" and "partially meets expectation" range in regards to creating a plan of action. The students were able to "present realistic and appropriate recommendations" for three of the five evidence-based practices. Those evidence-based practices were self-determination, parental involvement, and student participation. Interagency collaboration and transition assessments were excluded in most student responses. Some student responses mentioned interagency collaboration, but there were no recommendations on how to improve the issue. Transition assessments were also mentioned but students provided incorrect solutions to the problem.

The results indicated that pre-service special education teachers in this study have a high level of self-efficacy related to educating secondary students with disabilities. This was true for

both undergraduate and graduate level students as well as practicum and internship students. Their overall scores on the rubric did not meet the "meet" or "exceed" expectations level. However, an examination of scores by components and areas revealed that pre-service teachers could at least "meet expectations" when identifying evidence-based practices and analyzing issues in regards to the evidence-based practices. They had more difficulty with creating a plan of action. The low scores do not necessarily mean that students do not have the skills and ability to create responses that "present realistic and appropriate recommendations for three to four evidence-based practices;" rather, it could be that students are unfamiliar or have not had practice with the use of case study methodology. In fact, case studies are used as tools to measure pre-service teachers' problem solving and decision-making skills in many teacher training programs (Doyle, 1990). Research has shown that the more practice students have with providing solutions to cases, the more likely they will be rated higher and derive a better understanding of how to apply their knowledge (Doebler, Roberson, & Ponder, 1998).

Limitations

When interpreting the results of the study one must consider the limitations of the study. One major limitation of the study is the small sample size. There were 30 participants in this study, which included 23 undergraduates and 7 graduate students. It is not appropriate to assume that a larger sample size would yield the same results as the participants in this study.

The time in the semester and the actual time of day assessments were administered could have influenced these results. The participants were provided with the instruments at the end of their practica or internship meetings at the end of the semester and close to graduation. This may have influenced the participants' written response due to the time frame of the class. It appeared to the researcher that the pre-service teachers were in a hurry to complete their last assignments

and coursework of their program. The responses may not have been as clear and detailed due to the time in the semester.

The use of self-report measure is a potential limitation. The TESSD survey was a self-report measure. It depended on the ability and willingness of the participant to provide accurate and honest answers. Another possible limitation is the time it took to complete the case study and the actual tasks required on the case study. The time it took to complete the instruments may have affected the participation rate or responses of those who participated. Five students did not participate due to time constraints.

The familiarity of the case study methodology is another potential limitation. The participants' required courses provide minimal practice with case studies. The pre-service teachers were not familiar with reading case studies and creating solutions to the described issues. Some courses may include case studies but they are not as long and their written responses may not be required to be as detailed as the case involved in this study. The lack of experience with case studies, specifically creating a plan of action, may have caused the participants' responses to be rated lower.

Participant familiarity with the primary investigator is another potential limitation. The primary investigator taught or supervised the majority of the participants. The relationship may have caused participants to provide socially acceptable answers which could be different from what they actually believe. Participants may have assumed that the study would affect their relationship with the primary investigator currently or in the near future.

Future Research

Presented in this section are recommendations for further research. The first recommendation is to continue to investigate teacher efficacy. More studies need to be

conducted that take a closer look at the areas that were rated in the "little" confidence and "no" confidence range on the TESSD survey. It is very difficult to generalize the results of this study due to the sample size and single setting. Therefore, this type of research should be conducted in other universities around the state of Alabama, as well as, in other states with comparable special education teacher preparation programs. With additional research, the results of this study could be generalized.

The implementation of case study methodology into special education teacher preparation program coursework would benefit pre-service teachers. Case study methodology will give pre-service teachers more practice with finding solutions and creating plan of actions. Darling-Hammond and Snyder (2000) found that case study provides students with the practice of linking content to practical application. This type of learning activity will give pre-service teachers possible solutions for future classroom issues and might increase their self-efficacy even more.

Further research could also be conducted on self-efficacy and other evaluation tools such as practicum/internship rating forms and classroom observations to examine the relationship between the students' performance and ability level. It would be expected, if students rated themselves as having high self-efficacy, their performance scores on evaluation tools would be high as well. This type of information would provide teacher educators with the strengths and weaknesses of their students. It would also allow teacher education programs to develop courses and class discussions that will close the gap between students' efficacy and knowledge.

Finally, it is also recommended that research be conducted on transition-related content for special and general education teachers. Surveys should also be created to determine practicing teachers' perceptions of the transition planning process. This would provide useful information for professional development and teacher preparation for special and general education teachers.

General education teachers are required to participate in the transition planning and IEP process but are unaware of their roles and responsibilities. This type of study would allow one to compare the knowledge and skills of general and special education teachers in regards to transitioning students with disabilities.

Summary

The roles and demands of the secondary special education teacher have shifted from providing school-based services to requiring effective collaboration with a variety of individuals to meet the unique needs of each student (deFur & Taymans, 1995; Morningstar, Kim, & Clark, 2008). Expanding roles and responsibilities of secondary special education teachers increase the need for secondary special education programs to adapt or refine their programs. A national survey revealed that less than half of the special education programs addressed transition-related content, and 45% of the programs only offered one course that is related to transition (Anderson et al., 2003). Although pre-service special education teachers are at least introduced to the transition basics, teachers are unprepared to effectively implement the transition planning process (Morningstar, Kim, & Clark, 2008).

The lack of preparation in transition-related content may decrease teacher efficacy. Research has shown that coursework and related topics taught in preparation programs impact overall teacher efficacy (Saklofske, et al., 1988). Higher teacher efficacy has so many benefits for the teacher and the student. Job satisfaction, student achievement, effective collaborative efforts, and increased parental involvement are only a few of the reasons why teacher efficacy is important (Woolfolk & Hoy, 1990). To improve students with disabilities' postschool outcomes, secondary special education teachers must feel confident. Teacher preparation programs must

help students develop that initial feeling of confidence through coursework and practical experiences.

This study investigated teacher efficacy and the performance level of pre-service special education teachers during their preparation program. The TESSD survey provided information on pre-service special education teachers' self-reported efficacy levels. The survey indicated that undergraduate and graduate level pre-service special education teachers feel at least "confident" in educating secondary-age students with disabilities. The evidence-based practice rubric scores provided information about pre-service special education teachers' ability to complete a case study that focused on transition. Overall, the pre-service teachers did not "meet expectations" on their analysis of the case. While they were able to identify the evidence-based practices and issues in the case study, they were not able to create solutions that "met expectations". As well there was not a relationship between self-efficacy and performance on the case study, which was expected.

In sum, it is encouraging that the pre-service teachers in this study had high levels of self-efficacy because of the important role self-efficacy plays in promoting positive student outcomes. The use of case study methodology as a performance assessment needs to be considered in future research. In order to refine secondary teacher education training programs, we must continue to examine pre-service teachers' efficacy and their ability to identify evidence-based practices and problem solve real life teaching issues.

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Appendix 1

Evidence-Based Practices Case Study and Teacher Efficacy Instruments

Start Time: _____

End Time: _____

Case Study Review Survey

	<i>5 Strongly Agree</i>	<i>4 Agree</i>	<i>3 Neutral</i>	<i>2 Somewhat Disagree</i>	<i>1 Disagree</i>
The <i>Evidence-Based Practice Case Study Response Questionnaire</i> statement for directions was clear.					
The scenario described in the <i>Evidence-Based Practice Case Study</i> was clear.					
The length of the <i>Evidence-Based Practice Case Study</i> was reasonable.					
The <i>Evidence-Based Practice Case Study</i> was easy to read.					
The <i>Evidence-Based Practice Case Study</i> was easy to comprehend.					
All 5 evidence-based practices were clearly identified in the <i>Evidence-Based Practice Case Study</i> .					

Comments

Demographic Questionnaire

Check the response that most closely reflects your current status.

1. Student Classification

___ Junior ___ Senior ___ 1st year Graduate ___ 2nd year Graduate ___ 3rd year Graduate

2. Graduate Students: My undergraduate degree was in _____ (write-in).

3. My initial certification will be in _____. (College of Education , Department of Special Education, Rehabilitation, and Counseling)

Undergraduate

___ Collaborative (K612) Traditional

Graduate

___ Collaborative (K612) Traditional ___ on campus ___ distance education

___ Collaborative (6612) Traditional ___ on campus ___ distance education

___ Collaborative (K612) Alternative ___ on campus ___ distance education

___ Collaborative (6612) Alternative ___ on campus ___ distance education

4. Age _____

5. Gender ___ Male ___ Female

6. Race/Ethnicity/Nationality

___ African American ___ Native American ___ Caucasian ___ Hispanic

___ Asian American Multicultural or Other _____ (write-in not check)

7. This semester I am in my _____.

___ 2nd practicum

___ 3rd practicum

___ 4th practicum

___ Internship

Adapted from:

Soodak, L. C., Podell, D. M., & Lehman, L. R. (1998). Teacher, student, and school attributes as predictors of teachers' responses to inclusion. *Journal of Special Education, 31*, 480-498.

Shippen, M. E., Crites, S. A., Houchins, D. E., Ramsey, M. L., & Simon, M. (2005). Pre-service teachers' perceptions of including students with disabilities. *Teacher Education and Special Education, 28*(2), 92-99.

Evidence-Based Practices Case Study

Ashley Cotton is a 16 year-old female in the tenth grade at Scott Taylor High School. Ashley enjoys taking pictures of nature and animals. Her favorite animal is a dog, but she does not have any pets. Ashley's dad bought her first high definition camera for Christmas. She has been taking pictures every day since the day after Christmas. Ashley has been identified as having a learning disability since the 3rd grade. Ashley's learning disability affects the speed at which she processes information. She responds slower than other students her age, and it takes her longer to process what the teacher and other students are saying. Ashley reads and performs math problems very slowly. Also, she has problems with completing upcoming assignments in a timely manner. Ashley's favorite subject is World Geography. She enjoys looking at pictures of different locations in the world. She receives all instruction inside of a general education classroom of 23 students and small group instruction inside the resource room for her academic deficits. Ashley is somewhat of a shy girl who gets intimidated by her peers because of her disability and mostly keeps to herself. Although Ashley is very shy at school, she loves to Skype her cousin, Tonya, who lives in Turkey.

Ashley lives at home with both parents and younger brother. Her father works the night shift at the local car plant and her mother works full time at an insurance company. Ashley's mom is involved in Ashley's education as much as her job allows her to be. She drives Ashley and her brother to school in the morning but is unable to pick them up due to late hours at the office. During Ashley's middle school years, her mother participated in the Parent Teacher Association (PTA). Most of the activities and meetings that were planned were held in the evenings so she was able to attend. Mrs. Cotton attempts to attend Ashley's annual IEP meetings but many times in the past she was unable to participate because she could not get off work.

Throughout Ashley's elementary and middle school years, her mother attended 5 IEP meetings. Ashley has only attended her 9th grade exit IEP meeting (planning for 10th grade). Due to Mr. and Mrs. Cotton work schedules, they allow for the IEP meetings to go on without their participation. The limited parent participation in the IEP meetings has also been an issue since she has been in high school. However, Mrs. Cotton did attend Ashley's 9th grade exit IEP (planning for 10th grade) meeting along with Ashley.

Ashley, Mrs. Cotton, the general education teacher, special education teacher, and school administrator attended Ashley's 9th grade exit IEP meeting (planning for 10th grade). Ashley and her mother were unfamiliar with the use of special education terminology, and they were unaware of their rights and roles in these meetings. During the IEP meeting, Mrs. Cotton became very defensive and answered questions without allowing Ashley to respond. Ashley was never given the chance to share her interests, future goals, and successful accomplishments. The IEP meeting became very negative and ultimately the teachers finalized goals and future plans for Ashley without discussing her options with her first. Ashley was very upset and began to cry.

Ms. Price, the special education teacher, was so disappointed in the 9th grade exit IEP meeting (planning for 10th grade) she decided to make a change for Ashley's sophomore year in high school. Ashley's 9th grade school schedule indicated that she took all general education classes (see Appendix A). Ms. Price regularly makes accommodations for Ashley so that she is successful in the general education classroom. She might reduce the length of the assignments, so that Ashley can complete them in the time allowed. Although processing can cause many academic issues for Ashley, Ms. Price works hard to provide the academic support that she needs to be successful. Additionally, Ms. Price regularly meets with the general education teacher, Ms.

Gilley, about Ashley's progress in the classroom. Ms. Gilley has reported that Ashley does not demonstrate goal-directed behaviors. The class was asked to discuss and present their future plans. Ashley did not respond and privately told Ms. Gilley that she had no future plans. Ms. Gilley has also noticed that Ashley has problems with making decisions. She is always confused about what to eat for lunch and is easily frustrated when making choices with several options. Ashley has expressed that her mother usually picks her clothes out and prepares her dinner with very few suggestions. Ms. Price and Ms. Gilley are very concerned with Ashley's passive role in her own life.

In order to set meaningful postsecondary goals, Ms. Price and Ms. Gilley begin to prepare for this year's 10th grade exit IEP meeting (planning for 11th grade). Ashley's 10th grade school schedule indicates that she is only enrolled in general education courses led by the general education teachers with support from Ms. Price (see Appendix B). The goal is to help Ashley create a plan to transition into the community. Mrs. Cotton has expressed that she and her husband are very worried about Ashley's life after exiting high school, but they are unable to help her. Mrs. Cotton has recently observed that Ashley is very uncertain about her future plans. Ashley rarely expresses her interests, strengths, and weaknesses. The only activity that Ashley enjoys doing is taking pictures. With very little information being provided by Ashley and her parents, Ms. Price decided to administer age appropriate assessments. She selected to administer an intelligence and achievement test. The results indicated Ashley's recent cognitive performance and academic skills.

Once the results were presented, Ms. Price scheduled the yearly IEP meeting to discuss transition plans with Ashley's general education teacher, the principal, Ashley's parents, and a rehabilitation counselor. While at the meeting, it was difficult for the team to put together a plan

for many reasons. The lack of collaboration and communication among the school, parent, and vocational rehabilitation is an issue. The school members and the rehabilitation counselor were unsure about their roles and responsibilities in the process. Ms. Price has previously contacted the rehabilitation counselor, Ms. Hare, for support, but she is never able to meet. Ms. Price invited, Ms. Hare, the rehabilitation counselor to the IEP meeting but she did not respond. However, she arrived 15 minutes late to the meeting.

At the beginning of the school year, Ms. Hare sent out an email to Ms. Price that invited Ashley, her family, and Ms. Price to attend a community career fair. The community fair gave educators, parents, and students that are transitioning from high school an opportunity to explore possible career paths. Ms. Price printed the email out and sent it home with Ashley, but there was no response from her parents. Ms. Price did not respond to the invitation and as a result she did not attend the community career fair. Mrs. Cotton is also confused because she was unclear about the support and resources that rehabilitation and other adult service agencies can provide. Ms. Price was also unfamiliar with other community resources that were available to help Ashley. During the meeting, Ms. Price and Ms. Gilley disagreed with Ashley's mother about her living arrangements after graduation. The teachers felt that Ashley should be able to transition into her own apartment, but her mother wanted her to remain at home. Ashley's 10th grade exit IEP (planning for 11th grade) meeting did not go as planned and teachers, administrators, and adult service provider are left confused about Ashley's future plans and goals.

Scott Taylor High School
Ashley Cotton's Class Schedule-9th grade

	Monday	Tuesday	Wednesday	Thursday	Friday
7:30-8:00 Homeroom					
1st Block 8:00-9:30	English/ Language Arts	Study Hall	English/ Language Arts	Study Hall	English/ Language Arts
10 min Break					
2nd Block 9:40-11:00	Intro to Algebra	Computer Applications	Intro to Algebra	Computer Applications	Intro to Algebra
10 min Break					
3rd Block 11:10-12:40	World Geography & Culture	Physical Science	World Geography & Culture	Physical Science	World Geography & Culture
30 min Lunch					
4th Block 1:10-2:40	Health	P.E.	Health	P.E.	Health
Dismissal 2:45-3:10					

Scott Taylor High School
Ashley Cotton's Class Schedule-10th grade

	Monday	Tuesday	Wednesday	Thursday	Friday
7:30-8:00 Homeroom					
1st Block 8:00-9:30	English/ Language Arts II	Elective	English/ Language Arts II	Elective	English/ Language Arts II
10 min Break					
2nd Block 9:40-11:00	Algebra I	Study Hall	Algebra I	Study Hall	Algebra I
10 min Break					
3rd Block 11:10-12:40	Biology	World History	Biology	World History	Biology
30 min Lunch					
4th Block 1:10-2:40	Visual Art	P.E.	Visual Art	P.E.	Visual Art
Dismissal 2:45-3:10					

Evidence-Based Practice Case Study Response Questionnaire

Student Number _____

Read the case study. Provide a written analysis of the case that includes the strengths and weakness in regards to parental involvement, student participation, self-determination, transition assessments, and interagency collaboration. Finally, provide a plan of action to resolve short and long-term issues based on your identified strengths and weaknesses.

Evidence- Based Practice Case Study Issues

Self-Determination	Parental Involvement	Student Participation	Transition Assessments	Interagency Collaboration
Ashley does not share interests, future goals, and other accomplishments.	Both parents are not consistently involved in the transition planning process	Ashley does not play an active role in her IEP meetings.	Teachers and parents are unaware of Ashley's interests, strengths, and weaknesses.	There is a lack of collaboration between the school and Vocational Rehabilitation.
Ashley does not participate in goal-directed behaviors.	Parents are unaware of special education terminology.	Ashley is not aware of rights and responsibilities in the transition planning process.	The special education teacher only administered an IQ and achievement test.	There is a lack of communication among the school and rehabilitation counselor.
Ashley has no future plans.	Parents are unaware of their rights, roles, and responsibilities in the transition planning process.	Ashley is unaware of special education terminology.	The Special education teacher did not assess Ashley's transition needs.	The special education teacher is not familiar and/or actively involved with community resources and agencies that can support Ashley.
Ashley does not make decisions easily. She is used to her mother making decisions for her.	Parents are unaware of community resources that can help Ashley transition into the community.	Ashley does not participate in the planning of her future.	The rehabilitation counselor has not addressed/assessed Ashley's career interests.	The IEP team members are unaware of their roles and responsibilities in the transition planning process in regards to planning with outside agencies.

Evaluation Rubric for Evidence-Based Practice Written Analysis of Case Study

Student Number _____ Score _____/16

Evaluation Component	4- Exceeds Expectation	3-Meets Expectation	2-Partially Meets Expectation	1-Does Not Meet Expectation
Evidence-Based Practice Identification <i>Self-Determination</i> <i>Student Participation</i> <i>Family Involvement</i> <i>Interagency Collaboration</i> <i>Transition Assessments</i>	Clearly and fully describes 4 to 5 evidence-based practices in multiple useful ways or the most useful way that is reflective of the case study	Adequately describes 3 to 4 evidence-based practices in multiple useful ways that is reflective of the case study	Describes 1 to 2 evidence-based practices in multiple ways	Fails to describe any evidence-based practices in multiple useful ways or the most useful way that is reflective of the case study
Analysis of Issues	Presents all 4 issues identified for each evidence-based practice; reveals the student's strengths and weaknesses regarding the transition planning process	Presents 2 to 3 issues identified for each evidence-based practice; reveals the student's strengths and weaknesses regarding the transition planning process	Presents 1 to 2 issues identified for each evidence-based practice; reveals the student's strengths and weaknesses regarding the transition planning process	Presents no or little issues identified for each evidence-based practice; reveals the student's strengths and weaknesses regarding the transition planning process
Plan of Action	Presents realistic, and appropriate recommendations for all 5 evidence-based practices that clearly supports the information presented and concepts from the case study	Presents realistic, and appropriate recommendations for 3 to 4 evidence-based practices that clearly supports the information presented and concepts from the case study	Presents realistic, and appropriate recommendations for all 1 to 2 evidence-based practices that clearly supports the information presented and concepts from the case study	Presents no or little recommendations with little, if any, support from the information presented and concepts from the reading
Evaluation of Plan Action	Provides evidence for 4 to 5 short- and 4 to 5 long-term solutions based on each plan of action	Provides evidence for 2 to 3 short- and 2 to 3 long-term solutions based on each plan of action	Provides evidence for 1 to 2 short- and 1 to 2 long-term solutions based on each plan of action	Provides no or little evidence for short and long term solutions based on each plan of action

The Teacher Efficacy for Secondary Students with Disabilities

Using the 5-point scale below, indicate your confidence level for each of the following questions.

	5	4	3	2	1	
	<i>Very Confident</i>	<i>Confident</i>	<i>Moderate Confidence</i>	<i>Little Confidence</i>	<i>No Confidence</i>	
	I am confident that I					
5	4	3	2	1		1. understand the laws and regulations related to secondary special education.
5	4	3	2	1		2. understand the process of qualifying students for special education services.
5	4	3	2	1		3. understand the information contained in an Individualized Education Program (IEP).
5	4	3	2	1		4. understand my role in serving students with an active IEP.
5	4	3	2	1		5. understand the information that is needed to complete the transition requirements of IEP.
5	4	3	2	1		6. understand when I exerted more effort in the transition planning process, my students become more successful.
	I am confident that I					
5	4	3	2	1		7. can define what the different disabilities are.
5	4	3	2	1		8. understand the manifestations of the disabilities.
5	4	3	2	1		9. understand the difficulties students with disabilities encounter in school.
5	4	3	2	1		10. understand the exceptional needs of a students with disabilities.
5	4	3	2	1		11. understand how a student's disability can affect the transition planning process.
	I am confident that I					
5	4	3	2	1		12. know how to expose students with disabilities to secondary content-areas.
5	4	3	2	1		13. know how to teach basics skills such as reading, writing, and mathematics.
5	4	3	2	1		14. know how to implement effective learning strategies.
5	4	3	2	1		15. can modify and accommodate instructional practices to meet the needs of secondary age students with disabilities.
5	4	3	2	1		16. know how to aid students with vocational training and career development.
5	4	3	2	1		17. know how to aid students in their role in the transition planning process.
5	4	3	2	1		18. know how to manage students' behavior.
5	4	3	2	1		19. know how to teach functional skills.
5	4	3	2	1		20. know how to implement the practices of co-teaching.
	I am confident that I					
5	4	3	2	1		21. know how to work with general education teachers.
5	4	3	2	1		22. know how to work with school and other special education administrators.
5	4	3	2	1		23. know how to work with community agencies
5	4	3	2	1		24. know how to work with parents.
5	4	3	2	1		25. know how to work with other professionals.

Adapted from

Walls, S. D. (2007). *Early childhood pre-service training and perceived teacher efficacy beliefs concerning the inclusion of young children with disabilities*. Unpublished doctoral dissertation. Auburn University, Auburn, AL. Retrieved October 20, 2011, from Auburn University Libraries.

Appendix 2

Auburn University Institutional Review Board (IRB) Approval

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
RESEARCH PROTOCOL REVIEW FORM**

For information or help contact THE OFFICE OF RESEARCH COMPLIANCE, 115 Ramsay Hall, Auburn University
Phone: 334-844-5966 e-mail: hsrbjoc@auburn.edu Web Address: <http://www.auburn.edu/research/vpr/ohs/>

Revised 03.26.11 - DO NOT STAPLE, CLIP TOGETHER ONLY.



1. PROPOSED START DATE of STUDY: Feb 20, 2012

PROPOSED REVIEW CATEGORY (Check one): FULL BOARD EXPEDITED EXEMPT

2. PROJECT TITLE: Secondary Special Education Teachers' Efficacy and the use of Case Study Methodology

3. Stephanie L. Taylor Doctoral Candidate SERC 334-844-2318 sit0001@tigermail.auburn.edu
PRINCIPAL INVESTIGATOR TITLE DEPT PHONE AU E-MAIL

2084 Haley Center 334-844-7677
MAILING ADDRESS FAX ALTERNATE E-MAIL

4. SOURCE OF FUNDING SUPPORT: Not Applicable Internal External Agency: _____ Pending Received

5. LIST ANY CONTRACTORS, SUB-CONTRACTORS, OTHER ENTITIES OR IRBs ASSOCIATED WITH THIS PROJECT:
Not applicable

6. GENERAL RESEARCH PROJECT CHARACTERISTICS

6A. Mandatory CITI Training	6B. Research Methodology
<p>Names of key personnel who have completed CITI: Stephanie Taylor <input checked="" type="checkbox"/> Caroline Dunn <input checked="" type="checkbox"/></p> <hr/> <p>CITI group completed for this study: <input checked="" type="checkbox"/> Social/Behavioral <input type="checkbox"/> Biomedical</p> <p align="center">PLEASE ATTACH TO HARD COPY ALL CITI CERTIFICATES FOR EACH KEY PERSONNEL</p>	<p>Please check all descriptors that best apply to the research methodology.</p> <p>Data Source(s): <input checked="" type="checkbox"/> New Data <input type="checkbox"/> Existing Data</p> <p>Will recorded data directly or indirectly identify participants? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>Data collection will involve the use of: <input type="checkbox"/> Educational Tests (cognitive diagnostic, aptitude, etc.) <input type="checkbox"/> Interview / Observation <input type="checkbox"/> Physical / Physiological Measures or Specimens (see Section 6D) <input checked="" type="checkbox"/> Surveys / Questionnaires <input type="checkbox"/> Internet / Electronic <input type="checkbox"/> Audio / Video / Photos <input type="checkbox"/> Private records or files</p>

The Auburn University Institutional Review Board has approved this document for use from 2/28/12 to 2/27/13
Protocol # 12-059 EX 1202

6C. Participant Information	6D. Risks to Participants								
<p>Please check all descriptors that apply to the participant population. <input checked="" type="checkbox"/> Males <input checked="" type="checkbox"/> Females <input checked="" type="checkbox"/> AU students</p> <p>Vulnerable Populations <input type="checkbox"/> Pregnant Women/Fetuses <input type="checkbox"/> Prisoners <input type="checkbox"/> Children and/or Adolescents (under age 19 in AL)</p> <p>Persons with: <input type="checkbox"/> Economic Disadvantages <input type="checkbox"/> Physical Disabilities <input type="checkbox"/> Educational Disadvantages <input type="checkbox"/> Intellectual Disabilities</p> <p>Do you plan to compensate your participants? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Please identify all risks that participants might encounter in this research.</p> <table border="1"> <tr> <td><input type="checkbox"/> Breach of Confidentiality</td> <td><input checked="" type="checkbox"/> Coercion</td> </tr> <tr> <td><input type="checkbox"/> Deception</td> <td><input type="checkbox"/> Physical</td> </tr> <tr> <td><input checked="" type="checkbox"/> Psychological</td> <td><input type="checkbox"/> Stigmatization</td> </tr> <tr> <td><input type="checkbox"/> None</td> <td><input type="checkbox"/> Other</td> </tr> </table> <p align="center">RECEIVED FEB 07 2012 Research Compliance</p> <p><small>*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.</small></p>	<input type="checkbox"/> Breach of Confidentiality	<input checked="" type="checkbox"/> Coercion	<input type="checkbox"/> Deception	<input type="checkbox"/> Physical	<input checked="" type="checkbox"/> Psychological	<input type="checkbox"/> Stigmatization	<input type="checkbox"/> None	<input type="checkbox"/> Other
<input type="checkbox"/> Breach of Confidentiality	<input checked="" type="checkbox"/> Coercion								
<input type="checkbox"/> Deception	<input type="checkbox"/> Physical								
<input checked="" type="checkbox"/> Psychological	<input type="checkbox"/> Stigmatization								
<input type="checkbox"/> None	<input type="checkbox"/> Other								

Do you need IBC Approval for this study? No Yes - BUA # _____ Expiration date _____

FOR OHSR OFFICE USE ONLY

DATE RECEIVED IN OHSR: 2.7.12 by GB	PROTOCOL #: 12-059 EX 1202
DATE OF IRB REVIEW: 2/28/12 by kje	APPROVAL CATEGORY: 45 CFR 46.101(b)(2)
DATE OF IRB APPROVAL: _____ by _____	INTERVAL FOR CONTINUING REVIEW: 1 year
COMMENTS:	

7. PROJECT ASSURANCES

PROJECT TITLE: Secondary Special Education Teachers' Efficacy and the use of Case Study Methodology

A. PRINCIPAL INVESTIGATOR'S ASSURANCES

1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
 - a. Conducting the project by qualified personnel according to the approved protocol
 - b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Human Subjects Research
 - c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
 - d. Promptly reporting significant adverse events and/or effects to the Office of Human Subjects Research in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise OHSR, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Human Subjects Research before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand and agree to conduct this research project in accordance with the assurances listed above.

Stephanie L. Taylor

Printed name of Principal Investigator

Stephanie L. Taylor
Principal Investigator's Signature
(SIGN IN BLUE INK ONLY)

2/7/12
Date

B. FACULTY ADVISOR/SPONSOR'S ASSURANCES

1. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
2. I certify that the project will be performed by qualified personnel according to the approved protocol using conventional or experimental methodology.
3. I agree to meet with the investigator on a regular basis to monitor study progress.
4. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
5. I assure that the investigator will promptly report significant adverse events and/or effects to the OHSR in writing within 5 working days of the occurrence.
6. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the OHSR by letter of such arrangements. If the investigator is unable to fulfill requirements for submission of renewals, modifications or the final report, I will assume that responsibility.
7. I have read the protocol submitted for this project for content, clarity, and methodology

Dr. Caroline Dunn

Printed name of Faculty Advisor / Sponsor

Caroline Dunn
Signature (SIGN IN BLUE INK ONLY)

2/7/12
Date

C. DEPARTMENT HEAD'S ASSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

Dr. Dave Martin

Printed name of Department Head

D. O. Martin
Signature (SIGN IN BLUE INK ONLY)

2/7/2012
Date

8. PROJECT OVERVIEW: Prepare an abstract that includes:
(400 word maximum, in language understandable to someone who is not familiar with your area of study):

- I.) A summary of relevant research findings leading to this research proposal:**
(Cite sources; include a "Reference List" as Appendix A.)
- II.) A brief description of the methodology,**
- III.) Expected and/or possible outcomes, and,**
- IV.) A statement regarding the potential significance of this research project.**

I. Many secondary special education teachers lack the knowledge and skills needed to design and implement evidence-based secondary programs for students with disabilities (deFur & Tayman, 1995). These teachers report feeling unprepared to work with students with disabilities at the secondary level due to lack of knowledge about (a) student characteristics and needs and (b) effective practices (Anderson, Kleinhammer-Tramill, Morningstar, et al., 2003; Kochhar-Bryant, 2003). This lack of confidence impacts self-efficacy (Deemer & Minke, 1999). Teacher self-efficacy is important to consider in the preparation of secondary special education teachers because students of teachers with high self-efficacy demonstrate higher achievement, and high teacher self-efficacy is related to students performing better in school (Allinder, 1994).

II. Pre-service special educators' self-efficacy in secondary special education and knowledge and skills related to evidence-based practices in the area of secondary special education will be investigated using the (a) Teacher Efficacy for Secondary Students with Disabilities (TESSD) and (b) Evidence-Based Practice Case Study (EBPCS). For the case study, participants will read a case and then respond to three questions. Response will be scored using a rubric developed by the researcher. Pre-service teachers will be recruited from undergraduate and graduate classes at Auburn University. Participation will be voluntary. There will be no compensation for participating in the study. The relationship between the TESSD scores and EBPC scores will be examined using Pearson Product Moment Correlation Coefficients.

III. Important information related to pre-service special education teachers' self-efficacy and knowledge of evidence-based secondary special education and transition practices will be obtained. The researcher believes there will be a positive relationship between scores on the TESSD and EBPCS, indicating pre-service teachers who are knowledgeable about evidence-based secondary special education practices will report higher levels of self-efficacy.

IV. National studies reveal the postschool outcomes of students with disabilities in employment, post, postsecondary education training, and independent livings is less than desirable (Newman, 2005). One of the factors that contributes to these poor outcomes is the lack of focus in teacher preparation programs in the area of secondary special education (Anderson, Kleinhammer-Tramill, Morningstar, et al., 2003). The results of this study can provide valuable information about the self-efficacy and knowledge of secondary programming practices of pre-service special education teachers. This information can be used in refining special education teacher preparation programs.

9. PURPOSE.

a. Clearly state all of the objectives, goals, or aims of this project.

The purpose of this study is to explore pre-service special educators' knowledge, skills, and self-efficacy in providing evidence-based practices to secondary-age students with disabilities. The goal of this study is to answer the following questions:

- (1) to what extent is there a relationship between teacher efficacy scores (TESSD) and scores on the rubrics for evidence-based practices for students in special education teacher preparation programs
- (2) to what extent is there a difference between students at the undergraduate level and those at the graduate level based on teacher efficacy scores (TESSD) and scores on the rubrics for evidence-based practices for students in special education teacher preparation programs, and
- (3) to what extent is there an interaction effect between teacher efficacy scores (TESSD) and scores on the rubric for evidence-based practices for students in special education teacher preparation programs.

The results of this study can provide pertinent information to preparation programs about the knowledge, skills, and self-efficacy of pre-service special education teachers.

b. How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)

The results of this study will be used to complete a dissertation. Also, the findings will be used to write a manuscript for publication in a scholarly journal within the field of special education as well as to prepare presentations for professional conferences.

10a. **KEY PERSONNEL.** Describe responsibilities. Include information on research training or certifications related to this project. **CITI is required.** Be as specific as possible. (Attach extra page if needed.) All non AU-affiliated key personnel must attach **CITI certificates of completion.**

Principle Investigator Stephanie Taylor Title: Doctoral Candidate E-mail address stt0001@tigermail.auburn.edu
 Dept / Affiliation: SERC

Roles / Responsibilities:

Ms. Taylor will recruit undergraduate and graduate level special education pre-service educators and collect completed TESSD and EBPCS. She will enter and analyze the data generated from the instruments.

Individual: Caroline Dunn Title: Professor E-mail address dunnca1@tigermail.auburn.edu
 Dept / Affiliation: SERC

Roles / Responsibilities:

Dr. Dunn will assist with entering and analyzing the data generated from the TESSD and EBPCS.

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

11. **LOCATION OF RESEARCH.** List all locations where data collection will take place. (School systems, organizations, businesses, buildings and room numbers, servers for web surveys, etc.) Be as specific as possible. Attach permission letters in Appendix E.

(See sample letters at <http://www.auburn.edu/research/vpr/che/sample.htm>)

This research project will take place on the campus of Auburn University in the Haley Center. Students enrolled in the College of Education, Department of Special Education, Rehabilitation, and Counseling practicum and Internship classes will be recruited to participate. These classes were chosen because they are required of all pre-service undergraduate and graduate special education teacher educators. The surveys will be completed after regularly scheduled practicum and Internship classes.

12. PARTICIPANTS.

a. Describe the participant population you have chosen for this project.

Check here if there is existing data; describe the population from whom data was collected & include the # of data files.

The participant population for this study will include adults (ages 19-70) who intend to be teachers and are currently enrolled in special education teacher preparation programs (undergraduate and graduate) at Auburn University. This population is extremely diverse along gender, race, and ethnicity lines. Some of the proposed subjects are members of racial and ethnic minority groups in the United States and some of the participants may be pregnant. The estimated number of subjects to be recruited will be 150.

b. Describe why is this participant population is appropriate for inclusion in this research project. (Include criteria for selection.)

The roles and responsibilities of secondary special educators have expanded, requiring them to take on more job duties. However, pre-service teachers are not demonstrating the knowledge and skills that are needed to complete these job duties. Therefore, it is important to gather information on the knowledge, skills, self-efficacy of pre-service special educators. Pre-service special education teacher enrolled in undergraduate and graduate level classes in the College of Education Department of Special Education, Rehabilitation, and Counseling in Spring 2012, Summer, 2012, and Fall 2012 semesters will be eligible participation. Potential participants will be informed that their participation is voluntary, that they can discontinue participation at any time, and their work will be anonymous.

c. Describe, step-by-step, all procedures you will use to recruit participants. Include in Appendix B a copy of all e-mails, flyers, advertisements, recruiting scripts, invitations, etc., that will be used to invite people to participate.

(See sample documents at <http://www.auburn.edu/research/vprohs/sample.htm>.)

The principle investigator will obtain permission to visit the College of Education, Department of Special Education, Rehabilitation, and Counseling practica and internship classes from the course instructor. The principle investigator will briefly explain the components of the instruments and anonymity of the responses. She will emphasize that participation is voluntary and can be discontinued at anytime without penalty. She will provide the students in the practica and internship classes with a flyer. It is included in Appendix B. The principle investigator will recruit participants after regularly scheduled practica or internship classes. One week, she will explain the study and recruit participants. The recruitment flyer will provide eligibility and contact information. The following week the principle investigator will provide potential participants with an information letter that will clearly explain the procedures involved in the study. There will be a time for questions prior to administering the instruments. Once the students agree to volunteer, the principle investigator will administer the instruments (TESSD and EBPCS) and wait for the envelopes to be returned. Participation is voluntary. There is no penalty for lack of participation.

What is the minimum number of participants you need to validate the study? 100

Is there a limit on the number of participants you will recruit? No Yes - the number is 150

Is there a limit on the number of participants you will include in the study? No Yes - the number is 150

d. Describe the type, amount and method of compensation and/or incentives for participants.

(If no compensation will be given, check here)

Select the type of compensation: Monetary Incentives

Raffle or Drawing incentive (Include the chances of winning.)

Extra Credit (State the value)

Other

Description:

13. PROJECT DESIGN & METHODS.

a. Describe, step-by-step, all procedures and methods that will be used to consent participants.

(Check here if this is "not applicable"; you are using existing data.)

Prior to the study, the principle investigator will obtain permission from the instructors of COE/SERC practica and Internship classes to visit classes and recruit students for participation in the study. The principle investigator will come to a class meeting after the class is over and explain the purpose of the study. The following week, the principle investigator will provide details associated with participation, anonymity of participation, and the voluntary nature of participation to students who are volunteering. This information will be described through an informational letter. The willing participants will keep a signed copy of the informational letter for their records. The participants will complete the TESSD and EBPCS in the classroom after class. There will be no record of the participants' identities on the instruments. Each packet will have a number code written at the top of each page. Each participant will be asked to take note of the code. If a participant wishes to revoke his/her participation after completing the TESSD and EBPCS, the code can be provided so that the researcher can locate the instruments and destroy them by shredding.

b. Describe the procedures you will use in order to address your purpose. Provide a step-by-step description of how you will carry out this research project. Include specific information about the participants' time and effort commitment. (NOTE: Use language that would be understandable to someone who is not familiar with your area of study. Without a complete description of all procedures, the Auburn University IRB will not be able to review this protocol. If additional space is needed for this section, save the information as a .PDF file and insert after page 6 of this form.)

After distributing the TESSD and EBPCS the principle investigator will leave the classroom. It is estimated that participants will complete the TESSD and EBPCS instruments within 50 minutes; there will be no imposed time limit on the participants. The participants will first complete a demographic questionnaire that involves questions pertaining to their age, gender, cultural background, and student classification. The participants will then complete the TESSD and EBPCS. Upon completion of the TESSD and EBPCS, the participants will return their instruments in a sealed envelope. The sealed envelopes will be placed in a bin until the last participant has completed the instruments. The principle investigator will collect the bin. The principle investigator will keep the instruments in a locked file cabinet in her office on campus. There will be no way for the researcher to match the participants' completed instruments to their identities. For any reason a participant decides not to participate in the study, the participant can contact the principle investigator by providing the assigned number on the instrument. The principle investigator will then locate the instruments with matching number and shred the completed instruments.

Once the instruments have been collected, the Evidence-Based Practice Case Study will be evaluated by using a rubric adapted from the Department's practicum assignment rubric. The scores from the rubrics and the TESSD scale will be analyzed by Pearson Product Moment Correlation Coefficients. The principle investigator will examine the direction of association between the two scores. In addition, a two-way analysis of variance (ANOVA) procedure will be conducted to examine main effects and interactions effects for teacher efficacy (TESSD scores) and evidence-based practice case study (rubric scores) for pre-service teachers at the undergraduate and graduate levels. This information will be used to complete and fulfill the dissertation requirements of the College of Education, Special Education, Rehabilitation, and Counseling Department.

13c. List all data collection instruments used in this project, in the order they appear in Appendix C.

(e.g., surveys and questionnaires in the format that will be presented to participants, educational tests, data collection sheets, interview questions, audio/video taping methods etc.)

- ✓ The data collection instruments used in this project will be the Teacher Efficacy for Secondary Student with Disabilities (TESSD) scale and
- ✓ Evidence-Based Practice Case Study (EBPCS) for undergraduate and graduate students. A demographic questionnaire will be included to identify gender, age, and current classification status (undergraduate/graduate).

d. Data analysis: Explain how the data will be analyzed.

The data from the TESSD and EBPCS rubric scores will be analyzed by Pearson Product Moment Correlation Coefficients. A two-way Analysis of Variance will be conducted to examine main effects and interaction effects for teacher efficacy (TESSD scores) and evidence-based practice case study (rubric scores). Descriptive statistics will be used on data collected from the demographic questionnaire.

14. RISKS & DISCOMFORTS: List and describe all of the risks that participants might encounter in this research. If you are using deception in this study, please justify the use of deception and be sure to attach a copy of the debriefing form you plan to use in Appendix D. (Examples of possible risks are in section #6D on page 1.)

The project may involve risks associated with psychological stress due to anxiety. The anxiety may occur due to a previous student and supervisor relationship. The principal investigator may have been or may be the participants' practicum or intern supervisor. Coercion to participate is also a possible risk because of a previous relationship (student and university practicum or internship supervisor) between the principle investigator and participant.

15. **PRECAUTIONS.** Identify and describe all precautions you have taken to eliminate or reduce risks as listed in #14. If the participants can be classified as a "vulnerable" population, please describe additional safeguards that you will use to assure the ethical treatment of these individuals. Provide a copy of any emergency plans/procedures and medical referral lists in Appendix D.

In order to address these risks, the principle investigator will not remain in the classroom when students are completing the instruments. The risk of psychological stress will be addressed by emphasizing that participation is anonymous; the researcher will have no means of connecting participant identity with the participants' instruments. Additionally, the principle investigator will emphasize that participation is voluntary and can be withdrawn at anytime without penalty. Finally, although it is estimated that the packet will be completed within 50 minutes, there will be no time limit imposed upon the participants. The participants will return the TESSD and ERPCS in a sealed envelope in order to protect privacy.

If using the Internet to collect data, what confidentiality or security precautions are in place to protect (or not collect) identifiable data? Include protections used during both the collection and transfer of data.

(These are likely listed on the server's website.)

N/A

16. **BENEFITS.**

- a. List all realistic direct benefits participants can expect by participating in this specific study.

(Do not include "compensation" listed in #12d.) Check here if there are no direct benefits to participants. ✓

There will be no personal benefit for participating in the study.

- b. List all realistic benefits for the general population that may be generated from this study.

This project has the potential to benefit the field of teacher preparation by providing information about pre-service special educators' self-efficacy, knowledge, and skills of evidence-based practices in the transition process for secondary-aged students with disabilities. This information can be useful to faculty in teacher education programs as they strive to develop programs that prepare special educators to be competent in teaching and supporting students with disabilities.

17. PROTECTION OF DATA.

- a. Will data be collected as anonymous? Yes No If "YES", skip to part "g".
(*Anonymous* means that you will not collect any identifiable data.)
- b. Will data be collected as confidential? Yes No
(*Confidential* means that you will collect and protect identifiable data.)
- c. If data are collected as confidential, will the participants' data be coded or linked to identifying information?
 Yes (if so, describe how linked.) No

d. Justify your need to code participants' data or link the data with identifying information.

e. Where will code lists be stored? (Building, room number?)

f. Will data collected as "confidential" be recorded and analyzed as "anonymous"? Yes No
(If you will maintain identifiable data, protections should have been described in #15.)

g. Describe how and where the data will be stored (e.g., hard copy, audio cassette, electronic data, etc.), and how the location where data is stored will be secured in your absence. For electronic data, describe security. If applicable, state specifically where any IRB-approved and participant-signed consent documents will be kept on campus for 3 years after the study ends.

An information letter will be used rather than a consent form in order to avoid collecting participant names. The students will keep the letters, therefore, it will not be stored. The completed packets will not have any identifying information that could be connected to the participants. These packets will be stored in the principal investigator's office in a file cabinet.

h. Who will have access to participants' data?

(The faculty advisor should have full access and be able to produce the data in the case of a federal or institutional audit.)
The principle investigator and Dr. Dunn will have access to participant data.

i. When is the latest date that confidential data will be retained? (Check here if only anonymous data will be retained. ✓)

j. How will the confidential data be destroyed? (NOTE: Data recorded and analyzed as "anonymous" may be retained indefinitely.)
N/A

Appendix 3

Participant Recruitment Flyer and Email Recruitment Letter

Secondary Special Educators' Teacher Efficacy Study

Be part of an important pre-service teacher preparation research study!!!

- **Are you at least 19 years of age?**
- **Are you a pre-service Collaborative Teacher Education major?**

If you answered **YES** to these questions, you may be eligible to participate in a Teacher Efficacy Study.

The purpose of this research study is to explore pre-service special educators' self-efficacy, knowledge, and skills in providing evidence-based practices to secondary-age students with disabilities.

Adults at least 19 years of age who are enrolled in Collaborative Teacher practica or internship classes are eligible.

This study is being conducted by a Doctoral Student in the Department of Special Education, Rehabilitation, and Counseling at Auburn University.

Please contact Ms. Stephanie Taylor at slt0001@tigermail.auburn.edu or (334) 844-2318 for more information.

Email Recruitment Letter

As you know, I am a doctoral candidate and I am in the process of collecting data. I am contacting you to recruit participants for my study entitled *Secondary Special Education Teachers' Efficacy and the Use of Case Study Methodology*. I have attached the informational letter and actual survey to this email. If you agree to participate, please complete each instrument in the order that it has been attached. Please use your own handwriting and scan your results into a word document or pdf file. Any data obtained will be anonymous. You will email your results to **Dr. Vanessa Hinton** at vmh0002@tigermail.auburn.edu. I will not have any way of identifying your answers to your email address. If you have any questions about your participation in study, please feel free to email or call me at 334-844-2318. Again, thank you in advance for participating in my study.