Employment Preparation for High School Students with Significant Intellectual Disabilities

by

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Abstract

Only eight percent of people with significant intellectual disabilities are employed, as compared to 81% of people without disabilities (Harris & Associates, 2000). A predictor of successful employment for students with significant intellectual disabilities is participation in employment preparation programs while in high school (Carter, Austin, & Trainor, 2011). This study's purpose was to examine the role high school special education teachers in Alabama and Georgia public schools play in exposing students with significant intellectual disabilities to employment preparation experiences. A survey was developed and distributed to collect desired data. This study found that the majority of high school students are receiving work preparation experiences within the classroom, while the fewest are receiving their instruction in a paid work setting. The variables that increase the likelihood of student participation in these programs are: high levels of perceived support and increased years of teaching experience. Additionally, survey respondents provided open-ended question data that contained common barriers and solutions for other special education teachers wanting to implement similar employment preparation programs.

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CHAPTER I. INTRODUCTION

The importance of preparing students with significant intellectual disabilities for employment after high school cannot be understated. Statistics show that despite the efforts to improve transition-focused education over the last 50 years, students with significant intellectual disabilities are still achieving less than desirable employment outcomes (Harris & Associates Inc, 2000; United Cerebral Palsy, 2013; Wehman, 2011). For example, only eight percent of those with significant disabilities are currently employed as compared to 81% of those without disabilities (Harris & Associates Inc, 2000).

Even though research shows the employment outcomes of students with disabilities are problematic, recent research indicates that the employment experiences provided to students with significant intellectual disabilities in high school are a major determinant of positive post-school employment outcomes (Carter, Austin, & Trainor, 2011; Certo, Luecking, Murphy, Brown, Courey, & Belanger, 2008; Test et al., 2009). Research has even established the optimal settings, timelines, and skills that should compose high school work experiences for students with significant intellectual disabilities (Rowe, Alverson, Unruh, Fowler, Kellems, & Test, 2013; Snell & Brown, 2006). It is the high school special education teacher's responsibility to ensure that students with significant intellectual disabilities are exposed to these types of employment experiences.

The purpose of this study was to examine the extent to which high school teachers expose students with significant intellectual disabilities to employment experiences and preparation. Teachers of students with significant intellectual disabilities were surveyed to explore the current trends in employment preparation for students with significant intellectual disabilities taking

place in today's schools. The alignment of these trends to evidence-based practices can serve as an indicator as to the extent to which special education teachers are implementing evidence-based practices for these students for employment after high school.

Statement of Problem

Students with significant intellectual disabilities are not achieving adequate employment outcomes. Research on this topic has indicated that exposure to high school work experiences can address this problem. Currently no studies have investigated special education teachers' level of alignment to research-based practices as they prepare students with significant disabilities for work after high school through work experiences. By generating data on this topic, the strengths and weaknesses in the area of employment preparation for students with significant intellectual disabilities in Alabama and Georgia high schools will become more evident.

Research Questions

The study investigated the following questions:

1. What is the nature of the work experiences students with significant intellectual disabilities in Alabama and Georgia participate in during their high school years?
    (a) Are they participating in work study programs, community work experiences, non-paid work experiences, or paid work experiences?
    (b) In what career clusters are the jobs focused?
    (c) How frequently do the experiences/jobs occur (daily, weekly, monthly)?
2. Which of the following variables affect the type of work experiences students with significant disabilities participate in: Geographic Location, Perceived Support, Experience/Training of Teacher, Type of Teacher Certification, and Teacher Perceptions of Importance of Work Experiences.

3. What advice would teachers currently providing work experiences to their students suggest for teachers who wish to implement similar programs?

Overview of Research Design

The following study was conceived and designed to systematically gather and analyze information about special education teachers' efforts in providing employment preparation experiences to students with more significant intellectual disabilities. Survey research methods allowed the researcher to generate data directly from special education teachers themselves. Through the survey questions quantitative and qualitative data about the current trends in employment preparation for students with significant intellectual disabilities in Alabama and Georgia high schools were gathered.

Significance of the Study

This study's purpose was to gather information on the status of employment preparation programs for students with significant intellectual disabilities in today's high schools. The results of literature reviews indicated no similar studies of its kind have previously been conducted. Specifically, there are no studies that have focused solely on the special education teacher's role in employment preparation process. The results of this study may serve as (a) a baseline for future research on this topic, (b) an assessment regarding how closely aligned teacher efforts are with evidence-based methods, and (c) as an idea sharing tool for special education teachers who want to implement employment preparation programs with their students.

Limitations of the Study

There are some limitations that should be considered when interpreting the results of this study. First of all, being an electronically distributed survey (via email), there was a small survey response rate. In a 2000 meta-analysis of web-based survey response rates, Cook, Heath, and

Thompson (2000) found that a 25% to 30% response rate for an electronic survey should be expected. The current study had a 21% response rate which is low, but acceptable, according to Cook et al. (2000), if the sample is representative. Increased participation would have strengthened the study's reliability. Next, the survey participants were teachers only in the states of Alabama and Georgia. Therefore, the results of this study may not be generalizable to other states in the country. These factors should be considered when planning and interpreting future research on this topic.

Definitions of Terms

Alternative Assessment: An annual assessment for students with disabilities, based on an alternative set of curricular standards, linked to general education standards, as regulated by the United States Department of Education. Additionally, no more than one percent of students in a school may qualify for alternative assessment (i.e. this assessment is reserved for students with the most significant intellectual disabilities) (72 Fed. Reg., 2007).

Community Work Experiences: Activities occurring outside of the school setting, supported with in-class instruction; students apply academic, social, and/or general work behaviors and skills (Rowe et al., in progress).

Non-Paid Work Experiences: Activities that place students in an authentic workplace, and could include: work sampling, job shadowing, internships, apprenticeships, however, the student is not monetarily compensated for work (Rowe et al., in progress).

Paid Work Experiences: Activities that place students in an authentic workplace, and may include: work sampling, job shadowing, internships, apprenticeships, the student *is* monetarily compensated for work (Rowe et al., in progress).

Significant Intellectual Disability: For purposes of this study, a student was said to have a "significant intellectual disability," if he or she has an IQ of 55 or below and/or is assessed via an alternative assessment.

Transition-Focused Education: "A fundamental basis of education that…is directed toward adult outcomes and consists of academic, career, and extracurricular instruction and activities…." (Kohler & Field, 2003).

Work Study Programs: Programs within the school setting that provide a specified sequence of work skill instruction and experiences designed to develop students' work attitudes and general work behaviors by providing students with mutually supportive and integrated academic and vocational instruction (Rowe et al., in progress).

CHAPTER II. REVIEW OF THE LITERATURE

Introduction

A major focus of special education over the past fifty years has been on improving the post-school outcomes of students with disabilities. These efforts have made improvements, overall, but the outcomes for students with more significant disabilities are still not comparable to those with milder disabilities or those without disabilities. This inequality in post-school outcomes can be best observed in the area of employment for students with significant disabilities. For example, only 8% of those with significant disabilities are currently employed as compared to 81% of those without disabilities. Of the eight percent employed, the majority work in segregated, facility-based, non-competitive employment. Additionally, adults with significant disabilities are three times more likely than those without significant disabilities to live in poverty (Harris & Associates Inc, 2000).

Perhaps 50 years ago, the idea of a person with a significant disability working at all would have been unfathomable. With the social and educational advancements of today, the employment opportunities for individuals with significant disabilities should be much broader. Despite the intent of many disability laws, which are to increase meaningful, integrated employment, the data on employment for these individuals continues to show a decrease in this type of work and an increase in participation in segregated, non-competitive work (Wehman, 2011). As Wehman (2011) and Bates-Harris and Decker (2012) reported to the United States Senate in 2005, "transitioning from school into segregated day program centers and sheltered

workshops cannot be an acceptable end point for young people with disabilities" (as cited in Wehman, 2011, p.154).

In America, entering the work force is a rite of passage for young people. One's work contributes to several important aspects of life including social networks, economic well-being, and self-esteem, just to name a few. Special educators and other advocates for students with significant disabilities understand that successful employment outcomes can produce a high quality of life. What is still left to explore, though, is what can be done to change the trends of unemployment or underemployment for those with significant disabilities.

To explore this issue further, first a history of disability will be considered, followed by a discussion of many of the reforms that led individuals with disabilities, in general, to where they are today. Next, a look at the evolution of "transition education" and its attempt to focus students' time in high school to preparing them for the future will be provided. Based upon the foundations of transition education in modern history, the current literature on best practices in preparing students with significant disabilities for successful employment outcomes after high school will be presented.

Disability History

Earliest History of Treatment of People with Disabilities

One can assume that disability has been a part of human life since the beginning of time. As a matter of fact, archaeologists have found evidence of the existence of disabilities and even assistive technology from thousands of years ago. One example includes a bronze prosthetic leg in a tomb from 300BC (Albrecht, 1992; Braddock & Parish, 2001). Despite the existence of this progressive artifact, the concept and presence of disability was regarded as a negative trait and a burden to the individual, family, and society up until recent history. It is painful to imagine the

torture and mistreatment dealt upon individuals with disabilities due to the lack of insight and education of those around them. However, recognizing and learning from this past is essential to ensuring a prosperous future for people with disabilities.

In ancient Greece and Rome when babies were born with disabilities, it was common, and oftentimes legally required, for families to abandon their newborns and leave them to die (Garland, 1995). Those who were blind in Greek and Roman states had different fates; females were sold into prostitution and males who were blind were trained to be beggars (French, 1932). Others with disabilities in these societies, much like those of ancient China, were allowed to live solely for the purpose of entertaining and amusing those around them (Braddock & Parish, 2001).

In Europe during the middle ages, people with disabilities were also abandoned by their families at an early age. Though rather than death, "guilds and brotherhoods" of people with disabilities were formed (Jaeger & Bowman, 2005, p. 29). Many of these groups survived by begging, but some of them were forced into exile or locked away with others who were perceived to be "like" them. These places were known as "Cities of the Damned" (Braddock & Parish, 2001; PACER Center). It was also not uncommon for those with disabilities in early European times to be shipped off on a boat referred to as a "Ship of Fools," to a completely different community for abandonment (Braddock & Parish, 2001, PACER Center).

Much of the history of mistreatment of those with disabilities in America was rooted in religion (Braddock & Parish, 2001). Disability is often seen in the Old and New Testaments of the Holy Bible as a means of punishment or as a situation that is a result of being cursed or possessed by a demon. In the earliest American history most any type of treatment of people with disabilities, whether positive or negative, could be justified by religious leaders and their

religious texts (Braddock & Parish, 2001). Both Martin Luther and John Calvin, highly influential religious figures, sought to help those with disabilities by praying for their death, because they considered people with disabilities to be without souls (Shorter, 2000). The earliest religious underpinnings of disability constructs in America can be further illustrated by the attempted murder of its first special educator, Phillip Nelson, in 1679 after he was accused of blasphemy for attempting to teach a deaf child to communicate (Fay, 1899).

As America entered the 1700s, human equality would become a major theme as the Declaration of Independence was drafted and the freedom of the new colonies was being realized. Some positive events for those with disabilities included the opening of the first hospital to "rehabilitate" people with disabilities in 1752 and the first two federal laws passed in 1776 and 1798 to compensate soldiers who acquired a disability in service. Despite these changes people with disabilities were still not recognized as equal citizens (Albrecht, 1992). The norm was for the families of those with disabilities to provide all of their care and support. If this was not possible, the people with disabilities were sold to another caretaker or forced to leave their hometown (Braddock & Parish, 2001).

The 1800s saw groundbreakers like Edward Seguin, who believed students with disabilities could be educated. Dorthea Dix called for moral treatment of people with disabilities. Helen Keller became an advocate for those with disabilities by demonstrating all she could accomplish, despite the limitations of her disability. Although these events could have possibly helped America reach its ideal of equality for all, things would ultimately worsen for those with disabilities in the 1900s with the Eugenics movement and the rise of institutionalization.

Institutionalization and Eugenics

The treatment of people with disabilities may have varied throughout locations and eras, but one pattern can be seen throughout: the desire to separate people with disabilities from society. It may have appeared that there was advancement in the treatment of people with disabilities when the first hospitals, homes, and even a few schools were established to "treat" this population. However, confinement and isolation were the themes of these establishments. These residential dwellings for people with disabilities created more problems in the lives of people with disabilities. Halpern (1980) described what it was like to be institutionalized. He said patients became over-dependent on those at the institutions, inappropriate behaviors increased, there was no daily structure, and overall the environment "was found to have a negative effect on [a person's] health and well-being" (p. 6). Despite the negative aspects of institutions, their popularity increased throughout the late 1800s and early 1900s.

In 1914, the majority of states in the United States had laws that mandated institutionalization of those with disabilities (Stroman, 2003). By this time, institutions had become, "large efficient congregate dormitories where understaffing led to dehumanized treatment, peonage, abuse, and general neglect of inmate welfare" (Stroman, 2003, p. 151). It was not uncommon for a facility to house more than double its capacity and there was no individualized treatment (Stroman, 2003). Unfortunately, conditions would get worse in these facilities before they improved.

At the same time the number of residential institutions was increasing, the practice of *eugenics* was becoming a common occurrence for those with disabilities. Eugenics was ultimately an attempt to sterilize many of those with disabilities. It was based on the principle that "only certain people had the right to perpetuate their genetic materials through reproduction

and, therefore, reproduction should be regulated based on an individual's characteristics and endowments" (Jaeger & Bowman, 2005, p. 34). A British scientist named Francis Galton was responsible for the popularity of eugenics. His ideas were based on the evolution theories of his cousin, Charles Darwin. Interestingly enough though, Darwin was opposed to the principle of eugenics (Jagger & Bowman, 2005).

The popularity of eugenics led to the establishment of many other related laws in the United States. For example, in 1914 twelve of the states in America had laws that called for the "asexualization" of people with disabilities (Smith, Wilkinson, & Wagoner, 1914). One state official in North Carolina even wrote in a medical journal that sterilization was "an extremely important part of any well-rounded program for combating the problems of mental deficiency…" (Lawrence, 1947, p. 24). Keeping with this belief, the three states that performed the most sterilizations on people with disabilities were North Carolina, Virginia, and California (Noll, 1995).

As the United States was employing principles of eugenics to improve the genetic makeup of its society, the male vasectomy procedure was perfected. This occurred in Indiana where one doctor performed more than 700 vasectomies on males with disabilities between 1909 and 1924 (Jaeger & Bowman, 2005). The vasectomy may have been a preferable method of sterilization when compared to other commonly used methods of this era. Other common sterilization procedures were removal of reproductive organs, radium injections to these organs, and even extreme X-ray radiation exposure to these organs (Proctor, 2002).

Although the conditions and presence of people with disabilities in institutions were not improving, the Eugenics Movement lost much of its momentum in the 1940s. The loss of momentum was mainly due to the advancement in medicine, biology, and other fields of science

that made the principles of eugenics null (Heberer, 2002). However, the practice was not completely obliterated from the United States until the 1970s. By then, tens of thousands of people had been robbed of the rights of reproduction and the protection of their own bodies (Pfeiffer, 1999). If anything positive came from the eugenics movement in the United States, it was that a "sustained social awareness of disabilities and related issues" was brought to light (Jaeger & Bowman, 2005, p. 40).

Reforms

The lives of those with disabilities began to improve as the twentieth century progressed. Many of these reforms were due to people acquiring a disability later in life through injuries acquired during wars and in factories during the Industrial Revolution. The Civil Rights movement for racial and gender equality throughout the mid-1900s also played a great role in reforming the lives of people with disabilities at this time (Jaeger & Bowman, 2005). In 1895 Elizabeth Farrell taught the first class of students with special educational needs, and would go on to form one of special education's first professional organizations, *The Council for Exceptional Children*. Furthermore, it was in 1962 that the Kennedys family of then President John F. Kennedy openly addressed the issue of disability in their own family (Shorter, 2000). Due to these events and situations, the fear, stigma, and lack of education about and for those with disabilities would begin to wane, but not immediately.

The first substantial improvements for those with disabilities were the parental advocacy movements that began in the 1950s and are still in existence today. The parents of those with disabilities wanted to see better outcomes for their loved ones. Most importantly perhaps, parents began to demand that their children receive public education. This led to two of the most important court cases in the history of special education. First was the ruling in the 1971

Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania court case, which stated that it was unconstitutional to exclude children with disabilities from public schools. In 1972, Mills v. The Board of Education in the District of Columbia further ruled that no matter how significant a student's disability and needs may be, the school must still find a way to educate him or her. These decisions paved the way for thousands of students with disabilities in public education today.

At the same time that parents were demanding changes in how their children with disabilities were educated, they were also forming advocacy groups and associations to strengthen their cause. In 1953, in order to gain familial support, find alternatives to institutionalization, and increase knowledge about disabilities, the National Association for Retarded Children (NARC) was founded. Today this organization is still intact and known as the Arc of the United States (The Arc of the United States, 2012). It was also in the late 1950s and early 1960s that the National Association of the Physically Handicapped, American Council for the Blind, Special Olympics, and the Learning Disabilities Association of America were formed to improve the lives of those with disabilities (Stroman, 2003).

Around the end of the 1960s much attention was being given to the living conditions of people with disabilities who were still segregated in institutions. In 1966 *Christmas in Purgatory: A Photographic Essay on Mental Retardation* was published by Dr. Burton Blatt and Fred Kaplan. Blatt accompanied these photographs by saying, "our pictures could not even begin to capture the total overwhelming horror we saw, smelled, and felt (Stroman, 2003, p. 157). Also exposing the unacceptable conditions of the institutions at this time was Senator Robert Kennedy and journalist Geraldo Rivera as they reported to the public what they saw touring state run institutions in New York. These occurrences and the new philosophies that people with

disabilities could function and be integrated in their communities led to slow reforms in institutional conditions and closings, which are still continuing today (Stroman, 2003).

In response to society's enlightenment on the conditions of institutions, in 1970 the Developmental Disabilities and Construction Act (P.L. 517) was passed. This Act was intended to fund and improve state facilities serving those with disabilities and to encourage their integrated participation in society. This was also the first time that the term "developmental disabilities" was used. Also in response to poor living conditions in institutions, based on the ruling in the Wyatt versus Stickney case in Alabama in 1971, people living in institutions now had to receive treatment, education, and other basic rights as part of their daily lives while living in these facilities.

Then, in 1973 the first law that specifically addressed the rights of people with disabilities was passed. This law was Section 504 of the Rehabilitation Act of 1973, which made discrimination against a person with a disability illegal in all entities that received federal funding. Unfortunately, the implementation and enforcement of this law was slow. Many protests were staged and lawsuits filed against the federal government for their lack of action on this law, as different presidential administrations moved in and out of the White House (Jagger & Bowman, 2005). Although the uprisings against the poor follow-through with the Section 504 law did not provide substantial improvement in the discrimination of people with disabilities, it did result in increased social, political, and media attention to disabilities and disability rights (Barnartt & Scotch, 2001).

Perhaps in response to this spotlight on people with disabilities and previous special education court cases, another key law was passed in 1975. This was the Education for All Handicapped Children Act (EHA) (P.L. 94-142), which further protected and extended the

educational rights of students with disabilities. This law would ensure that all students were given services in their least restrictive learning environment. It required that students with disabilities have an Individualized Education Program (IEP). The law also had other components that were intended to protect the parents of these students if they felt their child was not being educated or treated fairly.

After almost 30 years of fighting for less discrimination in the lives of people with disabilities, in 1990 a new, much more extensive set of laws than those in Section 504 to protect people with disabilities was passed. The Americans with Disabilities Act (ADA) was the most powerful set of laws to protect those with disabilities in the world (Jaeger & Bowman, 2005). When President George H. W. Bush signed the act he said, "Let the shameful wall of exclusion finally come tumbling down" (Jaeger & Bowman, 2005, p. 41). The hope of the ADA was to ensure that discrimination was illegal and to establish equal access for those with disabilities in employment, state and local government services, public accommodations, commercial facilities, transportation, and telecommunication services.

The passage of the ADA is often known as the most important piece of disability legislation. As important as it was and still is, the transition education movements that gained momentum in the 1980s but date back to the 1960s, were also proving to be powerful in shaping the outcomes of those with disabilities. The next section will focus on the transition education movement in America, and how it can help one, "understand where we have been, where we are, and where we need to go to improve employment outcomes for persons with disabilities" (Wehman, 2011, p. 145–146).

History of Transition Education

In 1991, Andrew Halpern called the idea of transition education, "old wine in new bottles." This statement was meant to convey the idea that a need for transition education was not a novel theory, but rather one that had been around for a while and reconfigured many times. The need for transition education for students with disabilities gained much more momentum as students with disabilities were entering public schools and their educational programming and outcomes had to be considered. Kohler and Field (2003) pointed out there have been three main forces responsible for improving transition education for students with disabilities in the most recent past. These are: (a) federal special education and disability legislation; (b) federal, state, and local investment in transition services and their development; and (c) research on effective transition practices (Kohler & Field, 2003). The following is an in-depth look at the transition education developments over the past fifty years, but first a definition and framework for understanding transition education is provided.

Transition education is about preparing students with disabilities to achieve their desired life outcomes after exiting high school. There are four specific domains in which the skills of transition education fall: academic skills, daily living skills, personal/social skills, and occupations/careers. These are the four skill areas that all people must master to have an optimal adult outcome, but the mastery of these skill sets is often more difficult for students with disabilities (Halpern, 1985; Stuart & Smith, 2002). Therefore, educators must focus on ensuring these skill sets are mastered by these students before they leave high school. Finally, the most recent definition of "transition services" provided by the Individuals with Disabilities Education Improvement Act (IDEIA) (2004) says:

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;
- Is based on the individual child's needs, taking into account the child's strengths, preferences, and interests; and
- Includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, if appropriate, acquisition of daily living skills and functional vocational evaluation [IDEIA 34 CFR 300.43 (a)] [20 U.S.C. 1401(34)].

1960s – Cooperative Work Study Programs

In the 1960s many started to realize that people with disabilities could contribute to society. The problem was, though, that these individuals had not been trained in any skill set; a solution was needed. It was at this time that public schools and Vocational Rehabilitation agencies decided to partner together in an attempt to integrate career and educational experiences for those with disabilities.

In the 1960s two major pieces of legislation related to transition were passed. The first one in 1963 was the Vocational Education Act (P.L. 88-210), which provided money for schools to develop vocational programs for students with disabilities, and would later provide more

money from other established vocational programs when amendments were added in 1968 (P.L. 90-576) (Flexer, Baer, Luft, & Simmons, 2008). Also in 1967, the VR amendments provided funding to increase the presence of VR professionals, programs, and research (Flexer et al., 2008).

The cooperative work study programs had some interesting components. First of all, there were a large number of students who participated in this program (Halpern, 1991). This is probably due to the fact that the teachers of students with disabilities were also the teachers at the work sites; therefore, when the teacher left school to provide work skill instruction, his or her students went with him or her. Also, this program was only available to students with mild disabilities at this time, which still left many without any transition work or daily living training (Halpern, 1991).

Two main issues led to the end of the cooperative work study programs. First of all, there was the issue of supervision. Laws required that teachers had to be supervised by VR professionals; this led to a conflict of interest between VR and school administrators (Halpern, 1991). Second, the money to fund these programs became a problem. There was no question that career education was part of an "appropriate" education for students with disabilities, but there was no agreement on whose responsibility it was to provide this service (Halpern, 1991). Therefore, career education for students with disabilities did not disappear, but its components would have to change in the 1970s.

1970s – Career Education

The career education movement of the 1970s was different from the 1960s cooperative work study program in many ways. One of the main differences is that unlike the earlier transition education model, this one was geared towards all ages of students, both with and

without disabilities (Halpern, 1991). The career education programs focused on teaching students a wide array of skills necessary to succeed in the work world. For example, "self-understanding, …occupational awareness,…[and skills in the] interpersonal, domestic, and community domains" (Flexer et al., 2008). Halpern (1991), Clark (1979), and Hoyt (1977) agreed that the holistic approach of the career education movement was one of its biggest strengths.

The career education movement was fueled by many different federal initiatives, as well as societal forces taking place during the 1970s. First of all, in 1974 the Office of Career Education within the United States Department of Education was founded, which led to the biggest push yet for career education (Halpern, 1991). Second, in 1975, the EHA was passed, which required that a student's IEP include career and vocational objectives (Flexer et al., 2008). In 1976, the Council for Exceptional Children approved the Division of Career Development, now known as the Division on Career Development and Transition, as one of its many smaller divisions which solidified the idea that students with disabilities needed career education (Halpern, 1991). Finally, in 1977 the Career Education Implementation Incentive Act (P.L. 95-207) and the Vocational Education Amendments (P.L. 94-482) enhanced the career education programs already in place by specifically naming students with disabilities as a population requiring career education services under this act (Flexer et al., 2008; Halpern, 1991).

Shortly after its beginning in 1977, the Career Education Implementation Incentive Act would expire in 1982. However, this would not be the end of career education for students with disabilities. In fact, the 1980s would be a time of great strides in the policy, legislation, and practices in transition education for students with disabilities (Flexer et al., 2008). During this

time the term, "transition" would become part of the vocabulary of those with disabilities and for those who were interested in improving these students' outcomes after high school.

1980s – "Transition"

The 1980s saw many programs begun and much legislation passed aimed to promote improved transition education programs. In 1982, the United States Department of Labor developed the Job Training and Partnership Act, which funded programs to train unemployed young people and adults with disabilities for work (Flexer et al., 2008). In 1983, the amendments to the EHA called for more funding in transition education research and programs (Kohler & Field, 2003). In 1984, the Carl D. Perkins Vocational Education Act (P.L. 98-542) ensured that students with disabilities would have equal access to vocational programs in schools (Flexer et al., 2008). Furthermore, extending legislation to students with disabilities after exiting school, the 1984 Developmental Disabilities amendments (P.L. 98-527) and the 1986 amendments to the Rehabilitation Act (P.L. 99-506) provided definitions and funding for supported employment, a practice in which those with the most significant disabilities were able to go to work (Flexer et al., 2008; Halpern, 1991).

As mentioned earlier, when the Career Education Implementation Incentive Act expired, the United States Office of Special Education and Rehabilitative Services (OSERS), and its secretary, Madeline Will, who was also a parent of a student with a disability, knew action must be taken to improve transition education and the outcomes of students with disabilities. In 1984 Will and OSERS presented a position paper emphasizing the need for transition education and suggested a service model to deliver the most optimal education and preparation for students with disabilities (Halpern, 1985, 1991; Will, 1984). Will defined transition as: "…an outcome-oriented process encompassing a broad array of services and experiences that lead to

employment" (Will, 1984, p. 1). The model of transition education service delivery presented by Will and OSERS in 1984 would be the first of three major models in the 1980s and two additional models in the 1990s. The models of the 1980s are discussed below.

Transition Models of 1980s

OSERS and Will's bridges model. OSERS' and Will's (1984) model focused mostly on preparing students with disabilities for the somewhat singular outcome of employment. It proposed that optimal transitions could be achieved as students crossed three "bridges" of assistance after high school, all of which lead to employment. The three "bridges" students could cross to get to employment were those with: (a) no special services, (b) ongoing services, or (c) time-limited services (Will, 1984). Despite the criticisms of the narrowness of this model, one of its main accomplishments was that it established transition education for students with disabilities as a new focus in the United States (Halpern, 1985).

Halpern's community adjustment model. In response to what he called the "narrowness" of the Bridges model, in 1985 Halpern presented his revised version, the Community Adjustment model. This model still kept the "bridges" leaving high school intact (with somewhat different wording on the service types); however, rather than having the bridges lead to employment, they lead to community adjustment. Community adjustment rests on three pillars: (a) employment, (b) residential environments, and (c) social and interpersonal networks. Halpern justified adding the community pillars, because of data that showed employment success does not always lead to community adjustment (Halpern, 1985).

Ianacone and Stodden's life span model. In 1987, following Will and OSERS model, as well as Halpern's, Ianacone and Stodden presented yet another model of transition education. Their model went much more in-depth and focused on an individual's entire life span, not just his or her high school years. First of all, Ianacone and Stodden's model had levels of preparation across the life span that all linked together. Next, they listed the environments in which these phases should take place, from home to adult environments. Finally, they listed the outcomes that accompany each level and phase of one's transition: (a) increasing participation, (b) contribution, (c) satisfaction, and (d) independence. In addition to all of these components, they also provided an explanation of what the transition "development growth process" should look like (Ianacone & Stodden, 1987, p. 4). They said:

> As individuals transition from one environment to the next they should experience an increased awareness, exploration, integration, and application of skills, behaviors, and knowledge necessary to participate within the next immediate environment and with the valued roles of our society. (p. 4)

The transition education models of the 1980s broadened the concept and scope of transition education as the decade progressed. The contributions of the transition research from the 1980s would ultimately lead to the success of the new perspectives in transition education in the 1990s (Bates, 1990; Halpern, 1985; Wehman, 1992). The 1990s would see what Kohler called *transition-focused education* (Kohler & Field, 2003). That is, transition education would be the focus of a student with a disability's time in school, rather than just an "add-on activity" as they neared the end of high school (Kohler & Field, 2003, p.176).

1990s – Transition-Focused Education

The 1990s began with many reforms being made in the lives of students with disabilities. In fact, Flexer et al. (2008) described the 1990s as a time when there was a "major shift from charity to rights, and from separation to integration for persons with disabilities" (p. 44). As mentioned earlier, the monumental Americans with Disabilities Act (P.L. 101-336) was signed into legislation in 1990, and included many facets to protect those with disabilities from discrimination. This is because the ADA made discrimination in the workplace against the law. In harmony with the new ADA, the 1990s also saw the push for improvements in transition-focused education for students with disabilities by strengthening and improving the requirements and definitions of "transition" and "transition services" with the EHA's 1990 reauthorization and re-naming. The Education for All Handicapped Children Act was now known as the person-first, Individuals with Disabilities Education Act (IDEA) (P.L. 101-476).

The 1990 IDEA included the most thorough set of transition requirements special education had seen up until this time. Rather than just defining transition, the 1990 IDEA went a step further and added the term, "transition services" to define the "coordinated set of activities….in an outcome oriented process…to promote movement from school to post-school activities". Some more specific examples of "transition services" that were now mandated are: instruction, community experiences, development of employment objectives, development of daily living objectives, and a functional vocational evaluation (Flexer et al., 2008). Transition planning was required to begin by the time a student was sixteen years old, but planning could also start at fourteen, or earlier, if appropriate. In addition to providing these services, schools had to refer students with disabilities to adult agencies in a timely manner. For the first time this

legislation required that students help establish their own goals for the future, based on their needs and preferences.

As the 1990s progressed, more legislation and improvements in special education laws that effected the transition education of students with disabilities were passed. In 1990 the Carl D. Perkins Act (P.L. 101-392) was amended, with the goal of improving vocational education programs in schools and providing supplemental services to special populations (Flexer et al., 2008). The Rehabilitation Act Amendments of 1992 solidified the new age of respect for people with disabilities by stating the entitlement of respect, support, and inclusion for those with disabilities working in society. The School-to-Work Opportunity Act of 1994 (P.L. 103-239) stressed the importance of transition education for all students with and without disabilities, which required states to assess the current transition services being delivered. In 1998 the Rehabilitation Act Amendments, under the Workforce Investment Act (WIA) (P.L. 105-220), began attempts to connect employers and training programs for workers with disabilities in order to benefit all parties involved. Finally, in 1997, IDEA was once again reauthorized, adding "related services" to the list of transition services making it the only major change related to transition in this particular reauthorization. Kohler and Field (2003) and Flexer et al. (2008) all pointed out, regarding the 1990s, the legislative requirements and focus on education was changing from a process-oriented focus to an outcome-oriented focus. This change in transition education conceptualization can be seen in the models of transition education from the 1990s.

Transition Models of 1990s

Clark and Kolstoe's career development and transition education model. In 1990 Clark and Kolstoe presented their "School Based Career Development and Transition Education Model for Adolescents with Disabilities." This model suggested what types of transition

activities students should be doing across their years in school from before kindergarten until they reach their sixteenth year of schooling or above. For example, when a student is in the early elementary school grades, Sitlington, Clark and Kolstoe (2000) suggested he or she begin acquiring their essential daily living skills and beliefs, attitudes, and values about employment. Then, when a student reaches the twelfth grade, he or she should exit school for an entry level, semi-skilled, or specialized position, or go on to further training (Sitlington et al., 2000). This model of transition education was, perhaps, the most specific yet concerning a student's progression throughout school.

Kohler's taxonomy for transition planning. The model of transition programming that Paula Kohler introduced in 1998 was a comprehensive and strongly research based, "organization of practices through which transition-focused education and services should be developed and delivered" (Kohler, 2003, p. 176). One main difference of Kohler's (1998) model from the model of the 1980s was that she focused on ensuring that transition planning was focused on the individualized needs, strengths, and interests of the student and was more outcome oriented versus program oriented (Flexer et al., 2008). Kohler identified five categories around which transition education programming should be planned so that it can be most effective: (a) student-focused planning, (b) student development, (c) interagency collaboration, (d) program structure, and (e) family involvement (Kohler, 2003). Within each of these categories Kohler listed the essential elements needed to optimize achievement and student success within the category.

2000 – Transition in the New Millennium

By the beginning of the new millennium, the term "transition" was being heard more and more frequently by stakeholders involved in special education. Preparing students with

disabilities to function in domains of adulthood after high school was a priority. However, much like the decades preceding this one, the most effective models and methods to use in this quest were ever developing and evolving. Much of the transition education reforms in the 2000s would focus on increasing accountability and monitoring progress of transition education processes and outcomes.

First of all, in 2001, under the reauthorization of the Elementary and Secondary Education Act (P.L.89-10), the No Child Left Behind Act (NCLB) (P.L. 107-110) was authorized giving transition in special education a full evaluation and suggestions for improvement. These suggestions included: full-participation by all students with special needs in career exploration and work experience activities, and improvements in collaborations among agencies providing transition services during and after high school (Flexer et al., 2008). The NCLB Act also required that scientifically-based teaching programs were used in classrooms. This meant that methods and materials had to go through a process of "rigorous, systematic, and objective procedures" to ensure their reliability in teaching effectiveness (Test et al., 2008, p. 115).

In 2004, IDEA was once again reauthorized, this time changing the name to the Individuals with Disabilities Education Improvement Act (IDEIA) (P.L. 108-446). Several changes were made regarding transition in this reauthorization. Services were now defined as being "results-oriented," rather than, "outcome-oriented." Vocational education was added as a possible transition service. A student's strengths, in addition to his or her interests and preferences, were now to be taken into account when planning for their future. Finally, when students with disabilities exit school they should receive a summary of the academic and functional performance to accompany them in adulthood.

Though the NCLB Act and IDEIA led to improvements and changes in transition education, there were two other pieces of legislation that effected students in transition. The Carl D. Perkins Career and Technical Education Improvement Act of 2006 (P.L. 109-207) would provide more funding to career and technical training programs that benefited students with disabilities. Additionally, the Higher Education Opportunity Act (P.L. 220-315) would change how a student with a disability qualified for a student loan, in attempts to create more opportunities for people with disabilities to go on to post-secondary education.

Best Practices in Transition Today

Today, special education professionals and other related personnel are committed to improving the adult outcomes of students with disabilities. Projects like the *What Works Transition Research Synthesis Project,* The National Longitudinal Transition Studies (NLTS), and the establishment of the National Secondary Transition Technical Assistance Center (NSTTAC) are all attempts to examine the deficits in transition education and to provide a prescription for improvement. Still, in comparison to the research on best practices in other educational fields, very little research has been conducted regarding best practices in transition education overall, but especially in transition education practices related to students with significant disabilities (Stuart & Smith, 2002; Test et al., 2009).

Research into the best practices for students with significant disabilities can often be most effectively accomplished through the use of single subject experimental design methodologies or through qualitative data analysis (Horner & Kratochwill, 2012). This is due to the, often unique, student participant characteristics and the settings in which the research takes place. Unfortunately, the United States Department of Education and the Institute of Education Science are oftentimes reluctant to accept results of these types of experiments as quality evidence-based

practices (Odom et al., 2005). This results in few published experimental research studies on the best practices in employment preparation for students with significant disabilities. Therefore, the most commonly seen types of research into employment preparation for students with significant disabilities are descriptive case studies, model program reviews, expert commentaries, and experimental results classified as "promising practices" (Odom et al., 2005).

Despite this problem, one can see that from the inception of work study programs of the 1960s to the current evidence-based methods and programs in place today, post-school outcomes for many students with disabilities are improving. However, students with significant disabilities continue to lag behind. More specifically to the subgroups of students with significant disabilities, two years after high school only 25% of young adults with intellectual disabilities, 32% of young adults with autism, and 32% of students with multiple disabilities were employed (NLTS-2). The next section of this paper will review these areas in relation to employment for students with significant disabilities, and then follows with a section on the role that secondary schools play in improving employment outcomes for students with significant disabilities.

Overview of Students with Significant Intellectual Disabilities and Employment

Definition of Significant Intellectual Disabilities

There are differing interpretations and definitions of "significant disability." This can present problems for students as they get older and transition from high school. As students enter and exit different service agencies, the supports they receive based on their disability and level of needs will vary. For example, one individual with a traumatic brain injury might not be considered to have a significant disability, while another, having a similar brain injury, could have a different set of limitations and receive more services due to the needs of his or her disability. Furthermore, researchers have greater difficulty in exploring effective learning

practices and methods to enhance the success of these individuals due to the disability characteristics that vary from person to person (Odom et al., 2005).

The Individuals with Disabilities Education Act (IDEA) (P.L. 94-142), which will be discussed in-depth later, covers the educational rights of students with disabilities until they reach the age of 21, but does not provide a specific definition of "significant disabilities." However, Vocational Rehabilitation (VR), the adult agency that assists eligible adults with disabilities in employment matters, provides a definition of "significant disabilities." Vocational Rehabilitation says a person with a significant disability lacks the "ability to function independently in family or community or whose ability to become gainfully employed is limited due to the severity of his or her disability" (Rehabilitation Act of 1973). The 1992 and 1998 amendments to the Rehabilitation Act, which will be discussed further, actually increased the emphasis on supporting those with significant disabilities in their employment. Furthermore, TASH defines people with "significant disabilities" as,

> Those who require ongoing support in one or more major life activities in order to participate in an integrated community and enjoy a quality of life similar to that available to all citizens. Support may be required for life activities such as: mobility, communication, self-care, and learning as necessary for community living, employment, and self-sufficiency. (www.tash.org, 2000)

For the purposes of this paper, when the term significant disabilities is used, it might be referring to students with varying disability classifications from intellectual disabilities, autism, traumatic brain injuries, multiple disabilities, etc. Regardless of the specific disability title, students with significant disabilities all possess the characteristics, due to their disabilities, mentioned in the TASH and Vocational Rehabilitation definitions above.

Work Characteristics of Students with Significant Intellectual Disabilities

It should come as no surprise that students with significant disabilities have more difficulty learning work skills than their peers without disabilities. Perhaps the main learning deficit for students with significant disabilities is the rate at which their learning occurs. Students with significant disabilities take much time to master even the most basic of skills. This is often due to limitations in their cognitive functioning skills. In addition, students with significant disabilities may learn less, be unable to generalize skills from one setting to the next, and have difficulty remembering what they have learned over time (Ryndak & Alper, 1996).

The learning characteristics of students with significant disabilities may lead people to believe that these students are not able to work. They may assume that students with significant disabilities are unable to learn the skills necessary to be effective on the job. Though it is true that students with disabilities will need more accommodations and supports to be successful, it is a misconception that they are incapable of working. To compensate for the unique work support needs of students with significant disabilities, legislative and policy supports have been enacted. These efforts were intended to increase and improve employment outcomes for those with significant disabilities.

Today there are a few common employment options available to students with significant disabilities after exiting high school. One employment option for students with significant disabilities is a sheltered workshop. In this work setting employees are paid less than minimum wage, have no opportunity for advancement, and work exclusively with their peers with disabilities (Flexer et al., 2008). A second employment option for this population is supported employment. Supported employment provides the employee with a disability with a permanent individual to assist him or her in any job activities that cannot be performed independently

(Flexer et al., 2008). Compensation and advancement opportunities in a supported employment set-up vary. An additional employment option available to students with significant disabilities is competitive employment. Competitive employment for students with significant disabilities may have temporary support; however, in this type of employment, the individual will eventually work independently with a pay rate of at least minimum wage, and will have the opportunity for advancement in his or her career (Simmons & Flexer, 2008).

Employment Barriers for Students with Significant Intellectual Disabilities

Despite the passage of the Americans with Disabilities Act and many other initiatives, competitive, integrated employment is still not the primary employment option for individuals with significant disabilities (Wehman, Revell, & Brook, 2003). There are normally two categories that individuals with significant disabilities who are not competitively working, fall into: unemployment or underemployment. An individual who is unemployed simply does not hold a job of any type. An individual who is underemployed often works in a location away from his or her peers without disabilities in a place sometimes called a "sheltered workshop" (Hughes, 2008). If he or she is compensated, pay is well below minimum wage, there are no benefits, and no opportunity for advancement.

There are three main barriers contributing to unemployment and underemployment for students and adults with significant disabilities. First of all, segregated work sites or "sheltered workshops," are not being utilized as they were intended (Wehman, 2011). Segregated work facilities for individuals with significant disabilities are supposed to be part of a service continuum for a student who just left or is about to leave school, to give them more time and practice to gain employment skills before going on to work in a less restrictive environment. However, instead of moving through this continuum of services, many students with significant

disabilities go into these programs and never progress to a new or less restrictive work environment.

A second barrier to competitive employment for students with significant disabilities is the low expectations that society has come to believe regarding the employability of these individuals (Johnson, 2004; Snell & Brown, 2006). There is not much in the research literature regarding the root of these beliefs, but perhaps by considering the history of disability as outlined in sections above, one can infer that much of society has not yet caught up with the advancements in the understanding, treatment, and right to equality for people with significant disabilities. Either way, research has repeatedly proven that individuals with significant disabilities are candidates for successful competitive employment, with or without various types of support (Certo et al., 2008; Cimera, 2009; Johnson, 2004). For example, in 2009 Cimera conducted a comparison study on the work behaviors of employees with and without disabilities. He found that individuals with intellectual disabilities (considered a significant disability, in most cases) were more reliable employees and held their positions for longer periods of time, as compared to their counterparts without disabilities.

The third barrier to competitive, integrated employment outcomes for students with significant disabilities is a lack of exposure to work experiences while still in high school. Though many researchers cite employment experiences in high school as the number one predictor of successful employment outcomes for students with significant disabilities (Certo et al., 2008; Hughes, 2008; Johnson, 2004), it is not well documented exactly what kinds or how many work experiences high school students with significant disabilities are receiving. The benefits that come from adequate work experiences in high school include job skill acquisition,

job interest and preference development, and identification of successful and unsuccessful student support strategies (Snell & Brown, 2006).

Though there are still barriers to optimal integrated competitive employment outcomes for individual with significant disabilities, there has been and continues to be legislation, policies, and funding in place to lessen the effect of these barriers. Much like the history of disabilities, improving employment outcomes for students with significant disabilities is an on-going process, and attempts at progress and improvement are continually being made. A summary of the legislation, policies, and funding related to the employment of individuals with significant disabilities is presented in the next section.

Employment Legislation and Program Funding for Students with Significant Intellectual Disabilities

State Departments of Vocational Rehabilitation are often the service providers that handle employment supports for students with disabilities, both as they leave high school and as adults. However, the process to obtain services from Vocational Rehabilitation is different from the process in which students with disabilities in school obtain their services. Vocational Rehabilitation is an eligibility driven agency, as compared to, special education which is an entitlement program. That is, all public school students with disabilities that impact their learning are required to receive special education services from birth through age 21.

To qualify for the provision of services from Vocational Rehabilitation, a student must (a) document the presence of a disability that constitutes a substantial impediment to employment, and (b) there must be a reasonable expectation that Vocational Rehabilitation's services will assist the individual in achieving an employment outcome (*Federal Register,* January 17, 2001). Students may apply to receive Vocational Rehabilitation services when they

reach an appropriate age for employment. Students are assessed to determine the types of services they may need and they may begin receiving services once their case is opened.

Vocational Rehabilitation helps those with disabilities, "achieve independence through employment" (Alabama Department of Vocational Rehabilitation, 2012). Vocational Rehabilitation is funded by the Rehabilitation Act. The Act has been amended many times and many of the amendments are specifically geared towards improving employment outcomes for individuals with significant disabilities. Some of these efforts are described below.

As mentioned earlier, the Rehabilitation Act was signed into law in 1973. Section 504 of this law was of great importance because it denied federal funding to any agencies that discriminated against individuals with disabilities. The 1973 Act, in relation to improving outcomes for those with significant disabilities, also required that all individuals receiving services from Vocational Rehabilitation have an Individualized Written Rehabilitation Plan (IWRP) (Snell & Brown, 2006). These plans, which would later become known as Individual Plans for Employment (IPE), were useful for those with significant disabilities because they specified employment goals, as well as the services needed to achieve the goals. The individualized nature of these plans would later enable specific supports to facilitate the integrated employment of individuals with significant disabilities.

The supports outlined for provision in the IPEs would become even more important for individuals with significant disabilities when the Rehabilitation Act was again authorized in 1986. The 1986 Amendments defined supported employment and stated that supported employment was a "reasonable outcome" for an individual with a significant disability (Revell, 1991). Supported employment was now defined as:

> competitive work in an integrated work setting with extended support services for individuals with severe disabilities for whom competitive employment has not traditionally occurred or has been interrupted or intermittent as a result of severe disabilities. (*Federal Register,* August 14, 1987, p. 30551, 363.7)

Five years later the Rehabilitation Act was amended again. The 1992 Amendments to the Rehabilitation Act (P.L. 102-569) first considered the importance of the Rehabilitation Agencies collaborating with schools to improve the outcome of transition-aged students. The main idea behind the collaboration was that students with disabilities should not have to experience a break in services as they leave high school and go on to apply for services through Vocational Rehabilitation (Button, 1996). This regulation for schools and Vocational Rehabilitation agencies is of great importance to students with significant disabilities, because students and their families may not know how to access adult services without the aid of school personnel. Also, school personnel have a great deal of valuable information about a student that could assist in his or her future employment. Without collaboration between these agencies critical information might not be shared as it should.

In addition to the requirement of schools and Vocational Rehabilitation agencies to collaborate, the 1992 Amendments to the Vocational Act also included another component that had a major impact on the future employment of students with significant disabilities. It added a new category of "most severe disability" (Martin, 2001). This new category of eligibility allowed more individuals with significant disabilities who had previously been denied VR services to receive services because now counselors could serve them with more service options and flexibility, because the definition only required that the VR user "benefit" from VR services (Martin, 2001).

The idea of "benefiting" from the provision of VR services was monumental in furthering the employment outcomes of students with significant disabilities, because prior to the 1992 Amendments eligibility for employment services was much more difficult to secure. Before the presumption of eligibility concept, one's "feasibility" for successful employment was the major determinant of the provision of Vocational Rehabilitation services (Snell & Brown, 2006, p. 576). If an individual seemed incapable of successful work outcomes based on a few evaluations, then it was concluded that the individual, usually with significant disabilities, should no longer receive any services from Vocational Rehabilitation. After the 1992 Amendments, the VR agency was required to conduct "extended evaluations" if the individual's needs seemed too severe to benefit from services, and then specify why if he or she was found ineligible (Martin, 2001).

Today, however, many more variables go into determining if an individual with a significant disability is capable of successful employment outcomes. As part of the presumption of eligibility, the 1992 amendments required that existing data is consulted to determine the employability success of an individual with a significant disability (Inge & Brooke, 1993). The existing data that may be consulted includes school records, family information, physician reviews, and most importantly, perhaps, information from previous employers.

After the 1992 amendments, the number of individuals with significant disabilities working in integrated and competitive jobs through supported employment services began to rise. For example, supported employment numbers increased quickly from 32,471 in fiscal year 1988 to 98,315 in 1996 (Foley, Butterworth, & Heller, 1999). Today, however, twenty years after the reforms in supported employment services, the number of individuals with significant disabilities in supported employment is about 118,000, whereas the number of individuals with

significant disabilities who are underemployed in segregated workshop-type settings is 365,000 (Rizzolo, Hemp, Braddock, & Pomeranz-Essley, 2004).

These numbers on supported employment participation are especially interesting when one considers the amendments to the Rehabilitation Act made in 2001. In 2001 Vocational Rehabilitation's definition of an "employment outcome" was changed. The new definition read:

> An integrated setting typically found in the community in which applicants or eligible individuals interact with non-disabled individuals, other than non-disabled individuals who are providing services to those applicants or eligible individuals, to the same extent that non-disabled individuals in comparable positions interact with other persons. (*Federal Register,* January 22, 2001, p. 4387)

In other words, sheltered segregated work was no longer an acceptable outcome for people with significant disabilities. Despite these changes, as the data above indicates many individuals with significant disabilities are still ending up in segregated, non-competitive, sheltered workshop-type jobs.

Perhaps the best way to change the frequency of students with significant disabilities achieving less than desirable employment outcomes is to consider the types of employment experiences and preparation programs that students are being exposed to while still in high school. As previously discussed, research demonstrates the power of employment experiences in determining student employment outcomes (Certo et al., 2008; Hughes, 2008; Johnson, 2004). Furthermore, of the three main barriers to competitive, integrated employment for students with significant disabilities, the lack of high school work experiences should most closely be considered by special education teachers. This barrier, unlike changing how the delivery of post-school services are set up or how society views the work abilities of students with significant

disabilities, can be directly changed by special education teachers. This subject and the most effective research-based practices involved in providing high school work experiences to students with significant disabilities will be discussed more in-depth below.

Effective Practices in Employment Preparation for Students with Significant Disabilities

Paid as well as unpaid employment experiences for students with significant disabilities while still in high school repeatedly have been found to lead to the best employment outcomes after high school (Blackorby & Wagner, 1996; Colley & Jamison, 1998; Luecking & Fabian, 2000). Employment and vocational training should begin as early as possible for students with significant disabilities. For example, students in elementary school can learn about responsibility and work ethic by completing classroom chores. In middle school, students with significant disabilities can benefit from learning about certain careers and social skills necessary for interacting with others on the job, but also in the larger community. As students become older and enter high school, more specific, job-based skills should be taught. By the time students with significant disabilities are in their final years of high school (often ages eighteen until their entitlement to services expires at age 21) they should be in the community, experiencing paid work opportunities. Teachers must focus on all of the years in-between and utilize as many work experiences as they can to prepare their students for the work in the final years of high school, as well as work throughout the adult years (Carter et al., 2011; Certo et al., 2009; Snell & Brown, 2006; Stuart & Smith, 2002).

A reasonable way to break down the work possibilities that teachers can provide to students with significant disabilities is to consider the different types of settings in which job skills can naturally progress and build upon one another. According to Rowe et al. (in progress) there are several different categories into which work experiences fall. The categories of: work

study programs, community work experiences, non-paid work experiences, paid work experiences, and other experiences, are explained more in detail as follows.

First, work study programs are programs within the school setting that provide a specific type of work skill instruction. The skills that are mainly taught in work study programs are proper work attitudes and behaviors. This type of work should primarily be reserved for the younger population of students with significant disabilities, specifically those under the age of fourteen (Snell & Brown, 2006). Snell and Brown (2006) explained that students younger than this age are typically not mature enough to handle a more demanding type of work experience, as well as the fact that they are too young to legally work.

Another facet of work study programs is the setting in which the lessons take place. This type of work preparation experience takes place within the school setting around peers without disabilities. There is a high level of support from staff accustomed to working with students with significant intellectual disabilities. Snell and Brown (2006) suggested that one of the best ways to utilize real life work study experiences is to have students work alongside school employees.

After students with significant disabilities have experienced work study experiences, they should be ready to enter the community. By this point, the students should have a set of foundational employment skills that have been learned from work study classes. The next step of work preparation, then would be community work experiences. In community work experiences students leave the school setting, but are still practicing the application of the skills learned in work study programs. They are not yet ready for actual work situations, but rather work simulations with much support from school staff. In community work experiences students with significant intellectual disabilities may or may not be learning alongside their peers without disabilities.

The learning characteristics of students with significant disabilities cause them to need much more time and practice when trying new things and gaining new skills. Community-based work not only presents a new set of skills to learn, but also may overwhelm students as they are in a new environment and around new people (Inge, 1997). The more time students have to get used to being away from school and learning new skills, the more time, as recommended in research-based literature, teachers and other service providers have to observe the types of accommodations and support strategies that are going to be most effective for the individual student. By following these strategies in the first step of community work experiences, students with significant disabilities are more prepared to go on to the next type of work experience: non-paid work.

Before going on to paid community-based work experiences, it may be appropriate to have students spend time in a non-paid, volunteer type work setting. It may also be necessary to have a student work as a volunteer, rather than being paid, due to his or her age and child labor laws (Steere, Rose, & Cavaiuolo, 2007). This type of setting allows students to practice what they have learned with the support of school personnel, if needed. This stage of work preparation may also serve as an opportunity to discover the types of supports and accommodations the students need to be successful when they progress to the next step-paid work.

All of the literature and transition curricula reviewed stressed the importance of real, integrated work experiences as a key factor in improving post-school employment outcomes for students with significant disabilities (Certo et al., 2011; Kohler & Field, 2003; National Alliance for Secondary Education and Transition, 2005). The community-based work experiences were most effective, because students received monetary compensation. Although it is important to

keep in mind, as Carter et al. (2010) found, both paid and unpaid, community-based work experiences allowed students with significant disabilities opportunities to develop a wider range of vocational skills while developing realistic career aspirations. Zimmer-Gembeck and Mortimer (2006) reiterated the social appropriateness of paid work experiences for students with significant disabilities, because paid work for these students, "mirrors typical adolescent patterns" (p. 540).

Finally, Snell and Brown (2006) and Inge (1997) not only advocated for the previously mentioned types of work experiences for students with severe disabilities, but they included the category of "other" in their literature. It is important to keep in mind that any type of work experience is helpful in preparing students for work after high school. Therefore, they suggested chores at home, work at church and other community-based organizations as good ways to expose students with significant disabilities to a wider array of vocational learning.

As these types of work experiences are being explored it is important to keep several things in mind. First of all, one should consider the importance of aligning students' strengths, weaknesses, interests, and preferences when selecting jobs (Johnson, 2004; Snell & Brown, 2006). Second, work experiences should be an accurate representation of real work experiences a student might encounter after high school (Snell & Brown, 2006). One more thing to consider when providing work experiences to students with significant disabilities is the makeup of the community in which the student lives, because this will ultimately play a large role in the actual job that he or she could obtain after high school (Carter et al., 2011).

Within the research findings concerning preparing students with significant disabilities for employment after high school, the majority of recommendations focus on providing students with work experiences of great quality and quantity while they are still in high school (Inge,

1997; Johnson, 2004; Snell & Brown, 2006). For example, Stuart and Smith (2002) suggested that "job sampling" begins as early as possible in high school for students with significant disabilities so that their skills, interests, and preferences have as long as possible to develop and evolve. This recommendation is general; as such, teachers need more guidance into the specifics involved in orchestrating these types of tasks. The final section of this paper will focus on how and why teachers of students with significant disabilities should go about incorporating work experiences into their classrooms.

Secondary Schools' Role in Employment Preparation for Students with Significant Disabilities

Teachers of secondary students with significant disabilities have many issues to focus on each day. For example, many teachers are kept busy with IEP paperwork and portfolio assessments, and may rarely have the time or energy to focus on preparing their students for work after high school. As common as this case may be, it is the legal and ethical duty of special education teachers of students with significant disabilities to incorporate work training into their students' curriculum as much as possible (Individuals with Disabilities Education Act, 2004). The next section of this paper will provide special education teachers of students with significant disabilities an in-depth look at the rationale behind and suggestions for providing a comprehensive set of employment experiences to their high school students.

Implications and Suggestions for Teachers of Students with Significant Disabilities

As discussed previously, the benefits of exposing students to work experiences is well documented (Carter, Austin, & Trainor, 2011;Certo et al., 2009; Flexer et al., 2008; Snell & Brown, 2006). There are many factors to consider when attempting to implement a new work program or even improve an existing one. A thorough review of literature on this subject was

conducted, examining research studies, reviews of demonstration projects, policy recommendations, and expert commentaries. Across these sources six components of high school work preparation programs were most commonly cited:

- student work skill and interest assessments;
- individualized, student-centered planning;
- family involvement;
- community partnerships;
- interagency collaboration; and
- possibilities of future program structures and policy changes.

The rationale and suggestions for optimal success in each area are outlined below.

It is important to note that research studies examining the effectiveness of the above mentioned practices are quite limited. There was an overall lack of research findings specifically concerning high school work preparation for students with significant disabilities. The majority of studies that were found focused on particularly limited subgroups, within the category of students with significant disabilities, such as those with Down Syndrome or Traumatic Brain Injuries, working on discrete work preparation skills, rather than all encompassing employment readiness skills. There were two particularly helpful studies that did focus on the employment experiences of students with significant disabilities, in general, but research was conducted during the summer months, rather than under the supervision of school personnel. The next few relevant studies focused on practices of employment of students with disabilities within the rehabilitation setting, again not in secondary schools, as is the main focus of the author's research. Therefore, the information synthesized below from the author's literature review

consists largely of non-experimental research studies, unless other types of empirical data were available.

Student Work Skill Assessments

The Individuals with Disabilities Education Improvement Act (2004) mandates that age-appropriate transition assessments, including assessments on a student's work skills, are conducted. These assessments provide those who work with students with significant disabilities a glimpse into the student's strengths and weaknesses in varying work domains. These assessments can also provide a transition team with valuable information in work curriculum planning. Furthermore, Sitlington, Neubert, and Le Conte (1997) explained that assessment data, "forms the basis for defining goals and services to be included in the individualized education program" (p. 70).

According to Flexer et al. (2008) and Steere et al. (2007), there are two main types of work skill assessments that can be used with students with severe disabilities to determine strengths and weaknesses. These two types of assessments are formal assessments and informal assessments. Formal assessments consist of standardized tests that compare a student's level of functioning to that of a similarly functioning group of their peers (Flexer et al., 2008). An informal assessment consists of more individualized measures of a student's functioning in a less structured manner (Steere et al., 2007).

Formal assessment instruments are rarely used to determine a student with a significant disability's job skills (Callahan & Garner, 1997; Flexer et al., 2008; Steere et al., 2007). This is mainly because these assessments consider the student in comparison to others. However, when assessing a student with a significant disability it is more effective to look at them as individuals, rather than comparing them to a normed group (Snell & Brown, 2006). Nonetheless, a strength

of formal assessments is their validity. For example, if a student shows strength in a certain skill domain on the test, than he or she should be able to demonstrate those skills on the job. Formal assessments are accurate in measuring and predicting what they intend to measure or predict.

Due to the fact that formal assessments are rarely used in work skill assessments, teachers and other service providers of those students with significant disabilities can focus on the use of informal and situational assessments to develop the student's vocational profile of work skill strengths and weaknesses. It is important to note, though, that formal assessment results can be an important supplement to the findings of informal assessments, creating a more holistic profile of a student (Flexer et al., 2008). Flexer et al. (2008) said, "The key in informal assessment is to accurately identify demands in future environments and to assess the student reflective of those demands" (p.118). There are several different types of informal assessments that can be used to examine the work skills of students with significant disabilities.

First of all, rating scales can be a useful informal assessment to use with students with significant disabilities. This type of assessment relies on the ratings of multiple raters with knowledge of the student's performance in various work situations. For example, a teacher, a parent, and another school employee might rate a student's ability to complete tasks in a timely manner. The three raters would score the student's ability with a number that would indicate if this skill was an area of strength or weakness for the student. A strength of rating scales, when completed by multiple people with knowledge about the student, is its ability to compare perceptions of the student's abilities among various team members.

Next, surveys or interviews can be used in assessing the work skills of a student with a significant disability. Surveys or interviews can be conducted, again, with parents, teachers, related service providers or even employers. Surveys and interviews may include information-

generating items that are not scored, but rather exist solely for the purpose of gathering information. Additionally, these items may be created as needed to gather any information not generated by other types of assessment methods. Survey and interview items may be created for individual students and situations or there are commercially published instruments that can be utilized (Snell & Brown, 2006).

A situational assessment is an additional method of assessing a student's work skills. In this type of assessment, a student's work behaviors are observed and analyzed to gather an idea of a student's abilities in certain situations (Steere et al., 2007). For example, one might observe a student in the following situations: getting along with a co-worker, following rules, accepting criticism, etc. Situational assessments are especially helpful because there may be behaviors or situations that are preventing a student from achieving optimal success and the deficits may not be identified through other modes of assessment. Additionally, situational assessments can occur in research environments or simulated settings at school if work environments are not available.

Finally, an additional and more specific type of work skill assessment for students with significant disabilities is the use of task analysis. To conduct a task analysis, the overall job task is broken down into small components or specific steps in the task necessary for its overall completion. This way one can determine the steps that are the most difficult or easiest for a student and address each of them individually as needed. Task analysis is an excellent assessment tool for students with significant disabilities, because it can be used with most any work task, and it allows for the instruction of specific skill sets, rather than generalized ones (Snell & Brown, 2006).

Job skill assessments are a critical element to ensuring a successful job in the future for students with significant disabilities. As Flexer et al. (2008) pointed out, "one of the most

important aspects of assessment…is that it should be ongoing and continuous" (p. 106). Not only do these assessments provide teachers, related service providers, and future employers with information about a student's work ability, but they also help the student to learn more about him or herself. This self-awareness and self-determination is a necessary element for optimal student-centered planning which will be discussed in the next section.

Individualized, Student-Centered Planning

The data gathered in assessments should be a foundation for student-centered planning. Besides knowing what skills a student has in place for a job, his or her interests and preferences must be taken into account. When it comes to individualized, student-centered planning for students with significant disabilities, it is important to remember that a long history of work experiences is most helpful. This is because without adequate exposure to a variety of work situations, settings, and skills, a student cannot accurately determine his or her interests or preferences.

Mount (1994) described student-centered planning as, "an approach that focuses on the desires and needs of the student and his or her family in helping the student achieve his or her dreams" (p. 105). She goes on further to list the three characteristics of this student-focused planning: (a) focusing on everyday activities when planning for the future, (b) focusing on family and community connections rather than services, and (c) not relying on a single person or agency to do everything (Mount, 1994). Although, Mount (1994) provided some suggestions on how to incorporate these characteristics into the planning process, there are two other student-centered planning approaches that are more comprehensive, while still following her guidelines (Snell & Brown, 2006).

The McGill Action Planning System (MAPS) is a student-centered planning tool that helps students with significant disabilities plan for their future with a specific focus on employment. The MAPS process begins by having the students select a support team to help them create their MAPS; oftentimes this may be the IEP team. The students then lead the team as they answer the eight key questions that will help guide the student-centered planning for their future. The questions are: (a) What is a MAP?, (b) What is your history or your life story?, (c) What are your dreams?, (d) What are your nightmares?, (e) Who are you?, (f) What are your strengths, gifts, and talents?, (g) What do you need?, and (h) What is the plan of action? Once these questions are answered, the team will have a clear picture of what the student desires for his or her life, and hopefully, can begin formulating a plan to achieve the desired outcomes.

The second person-centered planning process which is specifically helpful for students with significant disabilities is the Planning Alternative Tomorrows with Hope (PATH) method. PATH evolved from and often is best suited to supplement the MAPS process (Pearpoint, O'Brien, & Forest, 1993). The intent of the PATH process is to outline an employment "path" for the student in the upcoming school year or years. Like MAPS, there are eight questions pertaining to the student's future, specifically with employment, to answer as a team. The PATH planning questions to consider are: (a) What is the dream? (b) What is the goal – is it positive and possible? (c) What can be done now? (d) Who is involved? (e) How to build strength? (f) What can be done in the next three months? (g) What can be done in the upcoming month? and (h) How can we commit to the next steps?

A third individualized, student-centered planning method, which differs from the MAPS and PLAN systems, due to its administration by vocational rehabilitation personnel and its direct linkage to collaboratively funded adult support services is the Individualized Career Planning

Model. In addition to having the student plan for his or her future by considering strengths and interests, the Individualized Career Planning Model also includes a customized approach to finding employment based on an individual student's needs (Condon & Callahan, 2008). In the past five years of case study data collection, this model has been shown to be effective in assisting students with significant disabilities find employment upon high school graduation. In addition to finding employment, students are able to more effectively access Social Security Work Incentive programs due to their early on planning and linkages with adult agencies (Condon & Callahan, 2008).

There are many other individualized, student-centered planning methods available. No matter which method of student-centered planning is used, the most important thing to remember is that students with severe disabilities should not have to limit their dreams for the future, but rather should be able to fully explore as many options as possible to fully understand what will make them happiest in adulthood. While individualized, student-centered planning should be a major priority for students with significant disabilities, the success of it and many of the other elements involved in providing optimal work experiences for students with significant disabilities are hindered without family involvement and participation. In the following section factors related to family involvement will be discussed further.

Family Involvement

Turnbull and Turnbull (1997) found that the transitional periods of adolescence and the transition from school to adulthood are the two most difficult times for parents of students with significant disabilities. It is likely that students with significant disabilities may be with the same special education teacher for both of these transitions. Therefore, the special education teacher is responsible to do all that he or she can do to help ease the minds of the parents and other family

members when they can. Steere et al. (2007) offer some general suggestions for how special education teachers can decrease family anxiety over issues such as work experiences, and in turn, increase family involvement.

First, Steere et al. (2007) suggested that special education teachers build family trust by communicating and following through with commitments at all costs. Next, they explained that it is the duty of special education teachers to heighten families' awareness of the issues involved in transition planning. One way to get families involved in the early phases of transition planning is to ask them "guiding questions" that lead them to begin thinking about their child's future. The fourth suggestion Steere et al. (2007) provided as a method of increasing family participation is to provide parents with information on topics such as vocational rehabilitation and Medicaid waivers. If families seem to become overwhelmed during any of the transitional phases, Steere et al. (2007) suggested that special education teachers be ready to provide support and reassurance to the families themselves, and/or direct them to other individuals or groups that can ease their worries. Families of students with significant disabilities may already have resources available that will help their children as they transition from school; special education teachers need to be aware of how to help families locate and access these resources. Finally, Steere et al. (2007) suggested special education teachers increase family involvement by linking families to other sources of support in the cases that the special education teacher or the school is unable to meet the families' need.

Though Steere et al. (2007) provided many helpful suggestions to increase family involvement and decrease family anxiety, there are more specific topics that special education teachers need to be aware of as they work with families of students with significant disabilities. Some of the most commonly cited parental concerns of parents of students with significant

disabilities are: Medicaid waiver information, adult behavioral support, adult daily living support, housing options, long-term financial support, and, of course, employment options and support (Snell & Brown, 2006). Furthermore, parents often do not understand that when their children are still in school they are entitled to services, versus the fact that many adult services are eligibility based (Certo et al., 2009; Hughes, 2009). It is a daunting task for special education professionals to be able to take all of these steps to increase family participation, but these steps should yield greater student outcomes.

Interagency Collaboration

In order to have the most effective adult outcomes for students with significant disabilities there has to be collaborative planning on the national, state, and local levels among agencies that serve these students (Certo et al., 2008; Foley et al., 1999; Snell & Brown, 2006). When this type of collaboration takes place, teams with representatives from various agencies can get together and assess, monitor, and change their processes to meet the individual needs of each team. Furthermore, the information exchanged among agencies in this type of collaboration can be invaluable to improving the individual mission of each.

There may be many different agencies that should be part of a collaborative team based on each local, state, and national make-up. However, there are normally three main agencies to which schools serving students with significant disabilities need to be continually connected (Certo et al., 2008; Snell & Brown, 2006). These three agencies are: (a) Vocational Rehabilitation, (b) State Developmental Disability Agencies, and (c) State Centers for Medicaid and Medicare Services. The earlier and more frequently that these agencies join forces, the more prepared the agencies and the students are for the ongoing transition process that continues on into adulthood, long after high school (Stuart & Smith, 2002).

An example of successful interagency collaboration can be seen over the past fifteen years in Massachusetts. This "interagency, outcome-based employment service designed to assist people with the most significant disabilities to choose, obtain, and maintain employment is called the Community Based Employment Services Program (CBES)" (Hart, Zimbrich, & Ghiloni, 2001, p.146). The CBES has a network of over 90 local, state, and national service providers that assist students and adults with significant disabilities as they seek employment. Through the collaboration of all of these agencies, there have been two major accomplishments seen in the employment process for adults and students with significant disabilities: two agencies may support an individual at once, freeing up money for other needs, and the agencies have streamlined their goals, management, and definitions (Hart, Zimbrich, & Ghiloni, 2001). Though this interagency collaboration is clearly improving the possibilities in employment for those with significant disabilities, the authors did not provide any data on the number of people with significant disabilities' employment before or after the implementation of the CBES.

Community Partnerships

Successful collaboration depends heavily on the collaboration between students, families, schools, and adult service providers, but the community also plays a key role in producing optimal employment outcomes for students with significant disabilities. Research has repeatedly demonstrated the necessity and benefits of having students with significant disabilities receive much of their service delivery within the natural context of the community in which they will one day live and work (Brown et al., 2006; Carter et al., 2011; Certo et al., 2009; Snell & Brown, 2006). However, establishing community partnerships, especially those that are intended to provide work experience to students with significant disabilities, can be a difficult task.

The literature provides special education teachers with many suggestions on how to establish community partnerships that can provide work experiences for students with significant disabilities. Brooke, Inge, Armstrong, and Wehman (1997) suggested that stakeholders make ongoing assessments of the community's labor market to guide them in their search for community partners. This type of assessment can be done by contacting the local Chamber of Commerce, looking at classified ads in the newspapers, and talking to community members (Brooke et al., 1997). These types of inquiry for labor market analysis should reveal what type of jobs are available, who the major employers in the community are, and types of jobs that have been obtained by students with disabilities in the past (Brooke et al., 1997).

Snell and Brown (2006) and Inge, Dymond, and Wehman (1996) provided teachers with additional suggestions on how to establish community work sites after a local labor analysis has been conducted. First of all, based on possible work sites, teachers should identify the most appropriate work locations for their students, based on the students' strengths and interests. Next, teachers need to contact the personnel director at the desired sites and explain the components that will be involved for the employer, if they agree to partner with the school. Third, once a community employer has agreed to serve as a work training site for students with significant disabilities, the teacher and employer should get together and mutually identify and analyze appropriate and available duties for the students at the work site. Finally, once students, employers, teachers, parents, and all other transition team members feel comfortable with the work site, a schedule can be created for future community-based work experiences.

Two examples of how community partnerships not only benefit the students, but also the employers are seen in the follow-up evaluations of Project SEARCH and the Marriott Foundation's "Bridges" program, both community-based partnerships that provide long-term

internships to students with significant disabilities. One benefit seen in these programs is lower turnover rates in entry level positions; oftentimes the students are hired after the internships and maintain the positions for much longer times than their peers without disabilities (Rutkowski, Datson, Van Kuiken, & Riehle, 2006). Second, employers reported a "cultural shift" within their organizations as employees without disabilities are much more open to the idea of integrating students and other individuals with disabilities into their workplace (Rutkowski et al., 2006). In addition to these two benefits that come from schools' partnerships with those in the community, employers reported mostly positive feedback from their clientele concerning the presence of a diverse workforce (Rutkowski et al., 2006).

Possibilities for Future Program Structure and Policy Changes

Not very many people do well with change, especially when it comes to changes regarding one's job; this of course is true for teachers too. However, as was demonstrated in the history of disability and history of transition education, it is evident that change ultimately leads to better tomorrows. The future of preparing students with significant disabilities for work after school will have to include change in order to improve the current trends of unemployment and underemployment for this population of students. Special education teachers must be expectant of change and embrace it, whenever possible. Researchers in the field of employment for people with significant disabilities provide many suggestions on the type of changes and reforms that need to occur.

The most commonly cited set of suggestions for reforms in program structure and policy change can be seen in Certo et al.'s (2003) seamless transition process in their Transition Service Integration Model (TSIM) (Brown et al., 2006; Hughes, 2008; Johnson, 2004). The TSIM model calls for two major changes in order to improve the employment outcomes of students with

significant disabilities. Their recommendations for change are based on an analysis of post-school outcomes for students with significant disabilities, an assessment of the strengths and weaknesses of disability legislation, and lessons learned by the creators of the model over the past fifteen years (Certo et al., 2008). First, Certo et al. (2008) suggested that outcomes would improve if the IDEIA would require schools to contract with adult agencies that immediately place students with significant disabilities into jobs or training programs upon high school graduation. Second, Certo et al. (2008) suggested that amendments be made to the Developmental Disabilities Assistance and Bill of Rights Act to make adult services for students with significant disabilities based on entitlement, not eligibility. Five years of data from school sites implementing the TSIM model show that the seamless transition process within the model was effective in assisting students with significant disabilities in finding and maintaining employment after high school (Luecking & Certo, 2003).

Conclusion

The trend of poor employment outcomes for students with significant disabilities must be transformed. By examining the long past of disability and disability rights, one can see that advocates' efforts in the past have already transformed many other areas in the lives of people with disabilities. The transition education movement that began in the 1960s and is still continuing today has had perhaps the strongest potential to impact students with significant disabilities. Researchers and experts have given transition stakeholders the information and tools they need to overcome the roadblocks in achieving optimal employment outcomes for students with significant disabilities, but there must be follow-through with the implementation of these efforts. Though each stakeholder in the transition planning process for students with significant

disabilities plays a critical role, the role of the special education teacher was the focus of this paper.

Special education teachers of students with significant disabilities must be aware of the specific components involved in preparing their students for successful employment outcomes after high school. First of all, these students have learning differences that require them to spend much more time directly learning job skills than students without significant disabilities. In addition to the learning characteristics of students with significant disabilities, they also are faced with a number of other barriers in society that effect their achievement of optimal employment outcomes. These barriers include (a) the improper use of segregated work sites, (b) society's low expectations, and (c) a lack of work experiences prior to adulthood (Certo et al., 2008; Johnson, 2004; Snell & Brown, 2006; Wehman, 2011).

Legislation is in place that is intended to lessen the effect of these barriers to employment, but dismal outcomes continue to be the norm. There is much teachers can do in their own classrooms to help students with significant disabilities prepare for future employment. One of the most effective ways teachers can prepare students with significant disabilities for employment after high school is to expose them to a variety of work experiences before they exit school. This may be a tall order, but in addition to the suggestions of effective practices in preparing students with significant disabilities for employment after high school, the literature also gives many recommendations to teachers on how to enhance the work experiences and instruction that accompanies the implementation of effective practices.

If the United States Department of Education and IDEIA (2005) mandate that students with significant disabilities spend time with their peers without disabilities "to the maximum extent possible," in their school years, then this practice should not stop once students leave high

school. Students with significant disabilities deserve to work in a non-segregated, competitive employment setting with people without disabilities, if they so choose. In order to make this a reality, increased efforts by all stakeholders, but especially special education teachers, are required. With the proper implementation of effective practices in transition education, focusing on employment preparation for students with significant disabilities, the history of people with disabilities will again change.

CHAPTER III.METHODS

The past efforts of transition-focused education, as well as, present day research continue to highlight the need for employment preparation in high school for students with disabilities in order to improve their post-high school employment outcomes. Consequently, many special education teachers today are making efforts to more effectively prepare their students for successful employment upon graduation. The following study was conceived and designed to systematically gather and analyze information about special education teachers' efforts in providing employment preparation experiences to students with significant intellectual disabilities. Quantitative data on this topic was obtained from the study's survey. The researcher also analyzed qualitative data gathered from the survey's open-ended items.

This chapter begins with the research questions, instrumentation, and sampling procedures. It concludes with a description of the data analysis used in the study.

Research Questions

1. What is the nature of the work experiences students with significant intellectual disabilities in Alabama and Georgia participate in during their high school years?
    (a) Are they participating in work study programs, community work experiences, non-paid work experiences, or paid work experiences?
    (b) In what career clusters are the jobs focused?
    (c) How frequently do the experiences/jobs occur (daily, weekly, monthly)?

2. Which of the following variables affect the type of work experiences students with significant disabilities participate in: Geographic Location, Perceived Support, Experience/ Training of Teacher, Type of Teacher Certification, and Teacher Perceptions of Importance of Work Experiences.

3. What advice would teachers currently providing work experiences to their students, suggest for teachers who wish to implement similar programs?

Instrumentation

Survey Conceptualization

This study's ultimate goal was to generate data on special education teachers' efforts toward providing employment preparation experiences to students with significant intellectual disabilities. Both quantitative and qualitative data were examined to determine the kinds of employment experiences provided to high school students with significant disabilities, as well as to glean teachers' ideas regarding improving employment preparation practices for interested special education teachers in the future. The research questions, identified previously, were developed to meet these purposes.

Survey Item Development

A survey blueprint was developed in order to ensure that the sufficient number and type of items were provided to thoroughly address each topic in the research questions. The survey blueprint was driven by topics and themes repeatedly seen in related literature. For example, variables such as frequency of student participation in work, career clusters of employment experiences, and setting of work are all commonly considered (Carter et al., 2010; Johnson, 2004). The survey blueprint included the following breakdown of topics, question format, and number of items regarding each:

TOPIC	Number of Items	Type of Items
Work Study Programs	4	Closed-ended-2 Likert–type-1 Open-ended-1
Community Work Experiences	4	Closed-ended-2 Likert–type-1 Open-ended-1
Non-Paid Work Experiences	4	Closed-ended-2 Likert–type-1 Open-ended-1
Paid Work Experiences	4	Closed-ended-2 Likert–type-1 Open-ended-1
Other Work Experiences	2	Closed-ended-0 Likert–type-0 Open-ended-2
Student Demographics	2	Closed-ended-2 Likert–type-0 Open-ended-0
Teacher Perceptions	3	Closed-ended-0 Likert–type-3 Open-ended-0
Teacher Training	3	Closed-ended-2 Likert–type-0 Open-ended-1
Teacher Demographics	3	Closed-ended-2 Likert–type-0 Open-ended-1

Likert scale and close-ended questions. The study's survey included eight Likert-type questions. All of these questions measured teacher perceptions/participation on topics related to work experiences of high school students with significant disabilities. For example, a respondent was asked to rate their perceived importance of each of the work experiences on a 5-point scale from Not Important to Extremely Important. Other topics included students' participation in specific types of employment programs, the career cluster of the jobs, and the frequency of student participation in the programs.

The majority of the closed-ended items in the study's survey were related to teacher demographics. For example, the researcher asked if the respondent taught in the state of Georgia or Alabama, teachers from no other states were surveyed. Other demographics that the researcher was interested in were teacher certification, years of experience teaching, and additional training on teaching transition-focused education.

Open-ended questions. There were nine open-ended items in the study's survey. These items related to suggestions for work experience program development and suggestions on improving existing programs. This type of question format was chosen because it adds to the richness of the data the researcher gains. As Andres (2012) pointed out, open-ended questions may raise issues not previously considered by the researcher, but still important. Due to the fact that there is not a wealth of research currently available on this topic, the researcher also intended to use open ended question data to formulate future areas in need of research related to this study's topic.

Survey Format

The researcher exclusively used a world wide web survey format. This format was chosen because this mode allows for quick and convenient administration and response format (Andres, 2012). The researcher addressed the most common problems in email surveys, such as formatting incompatibilities by employing *Qualtrics,* an online survey administering program. Furthermore, as Sue and Ritter (2007) found, web surveys and online survey administering programs increase the response rate of the survey because the participant perceives this format as one providing much protection and anonymity.

Reliability

The operational definitions of each type of work program presented in the introduction of the survey were taken from a 2013 Delphi study (Rowe et al., in progress). These definitions ensured that all respondents could decipher one type of program from another since it is common for terminologies to differ from location to location. Furthermore, the repeated usage of these definitions in future research will increase the likelihood of similar findings.

Validity

The researcher took specific measures to ensure the representativeness of the participants as well as the appropriateness of the respondents for the survey to increase its external validity. The population of teachers of students with significant intellectual disabilities is small in comparison to the total number of special education teachers. To make sure that only special education teachers of students with significant intellectual disabilities, and not teachers of students with milder disabilities, completed the survey, special education supervisors were initially contacted. The supervisors then identified those teachers in their school system teaching students with significant intellectual disabilities. To address the issue of representativeness of the sample, special education coordinators/supervisors in every school system in Alabama and Georgia were contacted so that the responses from teachers in systems of different sizes, locations, and types would be represented.

Content validity of the survey can be supported in the development of the survey. A survey blueprint was developed. This allowed the researcher to determine the depth and breadth of each domain assessed. Based on discussions with an expert panel of university faculty, peers in a survey development class, and currently practicing high school special education teachers, it

was decided that there were the correct number and type of items within the survey to provide the researcher with the desired information on the research topic.

Next, to further ensure face validity of the instrument, and proper perception of survey items, three rounds of pilot surveying took place. Based on the feedback from the three groups of respondents (peers in a survey development class, special education co-workers, and university faculty) and the guidelines Dillman (2000) provided regarding survey item construction, the survey items were edited as needed. The main changes following the pilot surveys were related to consistency in definitions of terms and item formatting (to simplify data analysis).

The researcher was unable to measure the criterion related validity of the survey instrument. After a through literature review of similar studies, there was no study found that measured these concepts from a teacher's perspective. Furthermore, there was no survey instrument developed, previously, on this topic.

Sampling Procedures

Population

The sample for this study was derived from public high schools in Alabama and Georgia. For this research, only special education teachers of students in grades 9–12 who participate in alternative standardized assessments were surveyed. This population of special education teachers was chosen because they are the ones working with students with significant intellectual disabilities and should be most familiar with the types of work experiences in which these students participate.

Recruitment

Recruitment letters were emailed to special education supervisors in 226 school systems throughout Alabama and Georgia. If special education supervisors consented to their system's participation in the survey, the supervisor was asked to either: (a) forward the electronic survey and information letter to the target participants, or (b) provide the principal investigator with email addresses of their teachers meeting sample criteria. All electronic surveys were distributed by special education supervisors. No direct contact for possible participants was provided to the principal investigator. An information letter specific to special education teachers that stated the requirements for participation in the study was included within the survey body (see Appendix 3).

Response Rate

The current study was web-based. Cook et al. (2000) noted that web-based surveys normally only have a 25–30% response rate, even after reminders. Although this rate is lower than most pencil and paper surveys, due to the fact that the rewards for completing web-based surveys are quite minimal. Cook et al. (2000) suggested the lower response rate is acceptable when the sample is representative of the desired population. In this study, 100% of respondents who reported type of certification (n = 38) disclosed that they were certified special education teachers teaching the specified student population. There was missing data from ten respondents on this question. It is unknown whether these teachers were certified in the area in which they were teaching.

It was hoped that, ideally, teachers in 40% of the counties, or 125 participants, among Alabama and Georgia, combined, would complete the study's survey. The researcher allowed for twelve weeks of total response time. The first round of surveys were distributed on May 1,

2013. Following the initial distribution, reminder emails were sent to special education supervisors every two weeks, for a total of six reminder/follow up emails, with the fifth reminder email generating the most responses. On July 15, 2013 the survey was closed to further responses so data analysis could begin.

Following the twelve weeks of response time, 48 surveys were completed. This led to a 21% response rate, which is low, but acceptable according to the findings of Cook et al.'s (2000) meta-analysis of response rates on web-based surveys. Though this number of participants was much lower than expected at the study's conception, there was enough data generated for the researcher to draw conclusions.

Data Analysis

Data analysis for this study included both quantitative and qualitative measurement procedures. Quantitative data was analyzed using IBM's Statistical Package for the Social Sciences (SPSS) software program. Qualitative data was analyzed manually, as the researcher reviewed open-ended questions for patterns and themes. Further discussion of data analysis for each research question is below.

To answer research question number one, descriptive statistics were calculated to examine work experiences of high school students with significant intellectual disabilities. Means were generated for each question and analyzed to describe the gathered quantitative data. Table 2 breaks down each type of work experience and displays its characteristics.

Research question number two involved the use of two different data analysis procedures to identify relationships between teacher demographics (Independent Variable) and work experiences for students with significant intellectual disabilities (Dependent Variable). Multiple chi-square (x^2) analyses were performed to examine relationships between geographic location,

and type of teacher certification and the independent variables. Spearman rank order correlation (r_s) coefficients indicated the strength and direction of present relationships among the variables of perceived support, experience of the teacher, and teacher perceptions of program importance to the four types of work experiences.

Research question number three was analyzed through qualitative data analysis. The researcher carefully examined each of the open-ended answers provided, regarding advice special education teachers would give to others. A manual notecard coding system and data tabulation process was used (Creswell, 2012). This process consisted of the researcher discovering themes in the data and then tallying the number of times the theme reappeared. Tables 5–9, in the following chapter, were created listing the most commonly seen pieces of advice in the data analysis.

Summary

This chapter has provided information on how the study and its instruments were established as well, as information on how collected information was used by the researcher. A more in-depth discussion of data analysis procedures and the results of the above described analyses can be found in the next chapter. Additionally, data tables are displayed.

CHAPTER IV. RESULTS

This chapter discusses the findings of a survey designed to measure special education teachers' role in exposing high school students with significant disabilities to employment preparation programs. This chapter begins with a look at the respondents demographic data (Table 1). Next, the findings of each of the study's three research questions are presented. The chapter concludes with a summary of the findings of the study.

Table 1 highlights the demographic information from the survey respondents. Forty-six percent (n = 22) of survey respondents were from Alabama, while 33% (n = 16) were from Georgia. Twenty-one percent (n = 10) of the respondents did not provide demographic information related to location. Thirty-four percent of the teachers had taught ten or fewer years, whereas 29% had taught 16 years or more. Additionally, 48% (n = 23) of special education teacher respondents had received some type of specialized training in transition-focused education.

Table 1

Demographic Information of Survey Respondents (N = 48)

Demographic	n	%
Location		
Alabama	22	46
Georgia	16	33
Missing Data	10	21
Teaching Certification		
Special Education Certificate	38	79
Other Certificate Type	--	--
Missing Data	10	21
Total Years of Teaching Students with Significant Intellectual Disabilities		
1–5	8	17
6–10	8	17
11–15	2	4
16–20	7	15
21–25	4	8
>25	3	6
Missing Data	16	33
Additional Training in Secondary Transition		
Yes	23	48
No	9	19
Missing Data	16	33

Research Questions and Findings

Research Question 1: What is the nature of the work experiences students with significant intellectual disabilities in Alabama and Georgia participate in during their high school years?

(a) Are they participating in work study programs, community work experiences, non-paid work experiences, or paid work experiences?

(b) In what career clusters are the jobs focused?

(c) How frequently do the experiences/jobs occur (daily, weekly, monthly)?

To analyze data in question one, descriptive statistics were calculated. According to the responses provided by survey respondents, the majority of students with significant intellectual disabilities were participating in work study programs (52%). The fewest number of students participated in paid work experiences (13%). Across all four types of work experiences, the majority of work experiences required student participation two to three times per week. The top three career clusters in which experiences fell for all of the four types of work experiences were: (a) Agriculture, Food, and Natural Resources, (b) Hospitality and Tourism, and (c) Human Services (For more information on career clusters, see Appendix 5). Additionally the particular program participation reported by individual respondents is shown. More in depth findings on each type of employment experience are shown in Table 2.

Table 2

Characteristics of Programs

	Work Study Programs	Community Work Programs	Non-Paid Work Experience	Paid Work Experience
Participation				
Yes	52% (*N* = 25)	48% (*N* = 22)	33% (*N* = 15)	13% (*N*=6)
No	48% (*N* = 23)	52% (*N* = 24)	67% (*N* = 30)	87% (*N*=39)
Career Cluster				
Agriculture, Food, & Natural Resources	27.1%	28.8%	24%	15.4%
Architecture & Construction	4.2%	1.9%	----	7.7%
Arts, A/V Technology & Comm.	2.1%	----	2.2%	----
Business Management & Admin.	2.1%	1.9%	4.4%	----
Education & Training	10.4%	5.8%	15.6%	7.7%
Finance	2.1%	----	----	----
Government & Public Administration	----	1.9%	----	----
Health Science	6.3%	----	4.4%	15.4%
Hospitality & Tourism	22.9%	19.2%	17.8%	23.1%
Human Service	10.4%	15.4%	4.4%	15.4%
Information Technology	2.1%	1.9%	4.4%	----
Law, Safety, Corrections, & Security	----	1.9%	4.4%	----
Manufacturing	4.2%	7.7%	4.4%	----
Marketing	4.2%	7.7%	6.7%	15.4%
Science, Engineering, Tech. & Math	----	1.9%	----	----
Transportation, Distribution, & Log.	2.1%	3.8%	6.7%	----
Frequency of Participation				
Less than once a month	----	5%	13%	17%
Once a month	8%	27%	13%	----
Two to three times per month	4%	9%	----	----
Once a week	29%	14%	13%	16%
Two to three times per week	50%	36%	34%	50%
Daily	8%	9%	27%	17%

Table 3

Program Participation by Respondent

Respondent Number	Work Study Programs	Community-Based Work Programs	Non-Paid Employment Experience	Paid Work Experience
1	X	X	X	
2	X	X	X	
3	X	X	X	X
4	X	X		X
5	X	X	X	
6				
7	X			
8				X
9	X	X	X	
10	X	X		
11	X			
12	X	X		
13			X	
14	X	X	X	
15				
16	X			
17	X	X		
18				
19	X	X		
20	X		X	
21	X			
22				
23		X		
24		X	X	
25	X			
26		X	X	X
27				
28				
29				
30				
31	X	X	X	
32	X	X		

Respondent Number	Work Study Programs	Community-Based Work Programs	Non-Paid Employment Experience	Paid Work Experience
33			X	
34	X	X	X	X
35				
36				
37				
38	X			
39				
40	X			
41		X	X	X
42	X			
43				
44	X	X		
45				
46	X	X	X	
TOTAL	25	22	15	6

Research Question 2: Which of the following variables affect the type of work experiences students with significant disabilities participate in: Geographic Location, Perceived Support, Experience/Training of Teacher, Type of Teacher Certification, and Teacher Perceptions of Importance of Work Experiences.

Research question number two involved the use of two different data analysis procedures to identify relationships between teacher demographics and work experiences for students with significant intellectual disabilities. Multiple chi-square (x^2) analyses were performed to examine relationships between geographic location, and type of teacher certification and the dependent variables. Spearman rank order correlation (r_s) coefficients indicated the strength and direction of present relationships among the variables of perceived support, experience of the teacher, and teacher perceptions of program importance to the four types of work experiences.

Geographic location. Participants of this study only taught in the states of Alabama and Georgia. The geographic location of a teacher was not related to a student's participation in either of the four work preparation programs. Geographic location was not a variable that affected participation in any of the four work experiences.

Perceived support. The study's results indicated that perceived support and participation in work experiences are directly related. Respondents were asked to rate their level of agreement with statements reflecting their level of agreement with perceptions of support from their local school and their school district's administration. Local school support refers to the support a special education teacher receives on a daily basis from co-workers, assistant principals, principals, and others that teachers and their students interact with on a daily basis. District support refers to those administrators and policy makers that work outside of their school, a special education coordinator/supervisor, for example.

Community work participation and non-paid work program participation are most strongly related to perceived support by the local school; however, all four types of work experiences impact employment program participation. Community work participation was found to have a moderate to low correlation ($\rho = .493$, $p = .001$). Next, non-paid work participation was also found to have the second strongest moderate to low correlation ($\rho = .486$, $p = .001$). Additionally, levels of correlation that were moderate to low were found for non-paid work experiences and paid work experiences were also moderate to low, respectively. See Table 3 for further findings.

It was found that the variable of perceived administrative support is directly related to student participation in all four of the employment preparation programs as well. That is, high levels of perceived administrative support increase participation in each of the four types of

programs. Work study participation is most strongly related to perceived district support at a level described as moderate ($\rho = .550$, $p = .001$). Next, another moderate correlation existed between community work program participation and perceived administrative support ($\rho = .523$, $p = .01$). At the same time, perceived administrative support was correlated to non-paid and paid work experiences at a moderate to low level.

Table 4

Perceived Support Correlations

	Work Study	Community Work	Non-Paid Work	Paid Work
Perceived District Support				
Spearmans Rho	.523**	.550**	.419**	.362*
Sig. (2 tailed)	p<.001	p<.001	.005	.016
N	44	43	44	44
Perceived Local School Support				
Spearmans Rho	.420**	.493**	.486**	.375*
Sig. (2 tailed)	.005	.001	.001	.003
N	43	42	43	43

Experience/Training of Teacher

There was only one area of teacher experience that was related to student participation in work experiences. Student participation in community work programs was related to how long a teacher had taught. Through correlation analysis, it was found that the longer a teacher had

taught, the more likely their students were to participate in non-paid work experiences ($\rho = .388$, $p = .016$).

Table 5

Teacher Experience Correlations

	Work Study	Community Work	Non-Paid Work	Paid Work
Teacher Experience				
Spearmans Rho	.080	-.039	.388	.160
Sig. (2 tailed)	.632	.817	.016	.336
N	38	37	38	38

Teacher Certification

Due to the fact that 100% of respondents were certified to teach special education the researcher was unable to draw any conclusions regarding how teacher certification affects the work experiences of students with significant disabilities. It is important to note that there were 10 respondents who did not provide an answer to this question. However, to gain further information on more specific teacher certification, respondents were asked if they had received specialized training in secondary transition. Of the 31 survey respondents who answered this question, 68% (n = 21) reported participating in some type of secondary transition training. The additional training, however, was not related to the types of work experiences in which the teachers' students participated.

Perception of Importance of Work Experiences

Respondents' perceptions of the importance of each type of work experience was not related to a student's participation in employment preparation programs. Nor did the perception of the importance of respective programs correlate with student participation in these programs.

Research Question 3: What advice would teachers currently providing work experiences to their students, suggest for teachers who wish to implement similar programs?

Survey participants were asked how their work preparation programs were established and what suggestions teachers with students currently participating in these programs would give to a teacher that wanted to implement each type of program in the future. The most commonly cited answers were coded by theme and tallied using note cards (Creswell, 2012). An exhaustive list of all advice given is listed in Appendix 4.

Table 6

Suggestions for Work Study Program Development

(n=16)

Develop jobs by taking an inventory of the needs of those around the school. (Cited 3 times)
Teach students to generalize skills from one setting to another. (Cited 2 times)
Ensure that students are interested in the job experiences/trainings at hand. (Cited 2 times)

Table 7

Suggestions for Non-Paid Work Program Development

(n=10)

Assess student needs and be sure that a good job match is made. (Cited 2 times)

Teachers must form relationships with the student's employers and help them to understand the characteristics of the particular student's disability. (Cited 4 times)

Table 8

Suggestions for Community Work Program Development

(n=16)

Contact community businesses personally. (Cited 3 times)
Develop a list of willing community partners. (Cited 2 times)
Be able to explain the benefits the community partner will gain from allowing students to learn there. (Cited 2 times)
Assess the needs of the community when planning/looking for jobs. (Cited 2 times)
Start with business located near the school. (Cited 2 times)

Table 9

Suggestions for Paid Work Program Development

(n=4)

Have parents and Vocational Rehabilitation get involved. (Cited 1 time)
Ensure job is realistic. (Cited 2 times)

Teachers were also asked to provide other general comments on how employment preparation programs could be improved. The following suggestions were identified by at least two or more respondents. The list begins with the most frequently cited suggestions and those seen less are in descending order. A full list of all suggestions and comments can be seen in Appendix 3.

Table 10

General Comments on Improving Employment Preparation Programs for Students with Significant Disabilities

(n=28)

Improve students' social skills for employment settings. (Cited 6 times)
Find ways to fund and locate transportation. (Cited 3 times)
Improve communication and partnerships with parents. (Cited 3 times)
Enhance transition planning and activities early and often. (Cited 2 times)
If students cannot work in community settings use "work boxes" or activities similar to those in a work environment. (Cited 2 times)

Summary of Findings

Forty eight special education teachers took part in this survey. They were asked about their students' participation in work preparation programs. Based on the data collected in the survey, one can see that the majority of their students with significant intellectual disabilities participated in work study programs in the Agriculture, Food, and Natural Resources career cluster, two to three times per week. It was also found that the amount of support that a teacher perceives is related to whether or not a teacher's students are exposed to all four types of employment preparation programs. Additionally, it was found that the longer a special education teacher had taught, the more likely his or her students were to participate in non-paid work programs only. Finally, the variables of geographic location, teacher certification, and perception of importance of work preparation programs had no effect on a student's participation in work preparation programs.

CHAPTER V. DISCUSSION

Discussion

This study's purpose was to examine the role high school special education teachers play in exposing students with significant intellectual disabilities to employment preparation experiences. The researcher wanted to examine the extent to which students in Alabama and Georgia took part in high school employment preparation experiences, an evidence-based practice in the education of students with significant intellectual disabilities. A second purpose of the study was to gather information regarding the variables that affected student exposure to each type of work experience. Finally, the researcher attempted to gather advice, suggestions, and other information from the survey respondents, which might help improve the programs for other interested teachers.

Research Question 1—Employment Preparation Programs in Alabama and Georgia

Student participation in any type of work experience while in high school increases the likelihood of employment after high school for students with significant intellectual disabilities (Carter, Austin, & Trainor, 2011; Certo et al., 2009; Snell & Brown, 2006; Stuart & Smith, 2002). Among other reasons high school work experiences are so important, Zimmer-Gembeck and Mortimer (2006) found the social appropriateness of paid work experiences for students with significant disabilities are needed, because these experiences "mirror typical adolescent patterns" (p. 540). Research Question 1, was intended to investigate the nature of the work experiences

students with significant intellectual disabilities in Alabama and Georgia participate in during their high school years.

As research has found, the four types of employment experiences build upon one another. This is because crucial lessons and skills learned in each type must be mastered before progressing to more complex work settings and situations (Rowe et al., in progress; Certo et al., 2008). Therefore, it is most ideal for the four employment preparation programs to be presented as a continuum of services. For example, following a simple work schedule might be a skill taught in a work study program within the school classroom. If this student is unable to follow a schedule, and a community-based work experience requires the skill, he or she should continue improving the skill in the work study program setting before progressing to community-based work.

Additionally, studies have found that mastering skills, such as problem-solving and communication, can take much longer for students with significant disabilities (Ryndak & Alper, 1996). It is not uncommon for students with significant intellectual disabilities to have great difficulty transferring the set of skills learned in one setting to another (Snell & Brown, 2006). By exposing and observing students in multiple types of settings working on a variety of skill sets these types of problems can be identified (Johnson, 2004). Early identification of the problems of social skill deficits, for example, the special education teacher can identify and provide the needed supports a student may need to bridge these gaps and be successful in the employment experience.

The data in the study revealed that only two respondents (4%) were providing the continuum of all four work preparation programs to their students. Nine percent (N = 7) of respondents were providing a continuum of services ranging from work study programs up to

non-paid work experiences; however, no paid work experiences were provided. While 30% of respondents (N = 14) were providing no type of employment program at all to their students. The remainder and majority of respondents (N = 24; 53%) were providing at least one of the four employment preparation programs to their students in a random sequence and 2 respondents (4%) did not provide responses to all of the questions regarding participation in the types of work experiences.

Without consideration to the continuum of experiences, the study found, more than half of teachers (52%, N = 25) of students with significant intellectual disabilities are exposing their students to work study programs. While this is a positive finding, it is important to keep in mind that work study programs take place within the school setting only. While work study programs are intended to develop necessary work skills and attitudes while in a mutually supportive environment, work study programs do not always expose students to their peers without disabilities, nor do they give students with disabilities an opportunity to learn things in an unfamiliar setting with unfamiliar people (Rowe et al., in progress).

Studies show that paid, as well as unpaid, employment experiences for students with significant disabilities while still in high school have repeatedly been found to lead to the best employment outcomes after high school (Blackorby & Wagner, 1996; Colley & Jamison, 1998; Luecking & Fabian, 2000). However, the strongest indicator of successful employment after high school for students with significant disabilities was participation in paid work experiences (Certo et al., 2008; Carter, Austin, & Trainor, 2011). The data generated in this study show that paid work experiences are not happening often in Alabama and Georgia. Only 13% (N = 6) of special education teacher respondents reported that their students participated in paid employment experiences.

When students with significant intellectual disabilities leave high school, they enter a world with many unfamiliar people, settings, and employment situations. It is up to special education teachers to ensure that students have access to experiences that prepare students with significant intellectual disabilities to navigate the world of employment. It is for this reason, that work study programs alone, which are the programs that most commonly took place in Georgia and Alabama, cannot be considered a solely sufficient practice in preparing these students for employment after high school.

Research Question 2—Variables Affecting Types of Work Experiences

The findings of Research Questions 2, related to variables affecting participation in work preparation programs. The data gathered regarding these variables may further explain the lower levels of participation in community work programs, non-paid work experiences, and paid work experiences. The study's findings revealed that location, perceived importance of programs by the teacher, and teacher certification was not related to participation in each type of work program. However, there was a relationship between the type of administrative support that special education teachers perceived and the length of time a teacher had taught effected whether or not his or her students participated in work preparation programs.

There is a great deal of research that supports the findings regarding the necessity of administrative support in special education employment preparation programs (Certo et al., 2008; Foley et al., 1999; Snell & Brown, 2006). In order to have the most effective adult outcomes for students with significant disabilities there has to be collaboration among teachers and administration at the local and district level (Certo et al., 2008; Foley et al., 1999; Snell & Brown, 2006). Furthermore, there are factors of employment preparation programs such as field trip planning, fundraising, and teacher supervision among others that require administrative

support, as well as approval, in many cases before employment preparation programs can even become established.

The data gathered from Research Question 2 also found that the longer a teacher had taught, the more likely his or her students were to participate in non-paid work experiences. There was no existing data found that explained why student participation was higher in non-paid work experiences than other types of experiences. However, it has been found that teachers with at least one year of experience teaching students with disabilities report that social skills negatively affect a student's progress in gaining employment skills (Murray & Doren, 2012). This belief may be leading seasoned teachers to expose their students to more actual job experiences to increase social skills. Another reason teacher experience may play a role in student exposure to non-paid work experiences is the amount of time and planning that goes into establishing and/or maintaining programs. It might take new teachers time to develop such programs and establish the necessary relationships with school personnel and community businesses.

Research Question 3—Teacher Recommendations for Work Experience Programs

The researcher developed this study with the hopes of producing advice on how to implement and/or improve employment preparation programs for students with significant intellectual disabilities. This was done by collecting data regarding the current state of employment preparation programs for students with significant intellectual disabilities. Next, data was gathered to identify variables that affect teacher implementation of these programs. One of the main hopes of this study was for it to be used as an information sharing tool for interested teachers and other stakeholders.

One of the most commonly seen themes when respondents were asked to share their advice on establishing each of the four types of employment preparation programs was related to collaboration among students, school personnel, and community. Respondents were also asked to provide suggestions on how to improve existing employment preparation programs. Improving students' social skills was the most commonly seen answer, but again, collaboration was a repeated theme within data. The raw data that was obtained from these open-ended questions is available in Appendix 3.

Implications for Practice

Participation in all four types of employment preparation programs must increase in order for students with significant intellectual disabilities to achieve more acceptable post-school employment outcomes. The results of this study revealed that 30% (n = 14) of special education teachers did not expose their students with significant intellectual disabilities to any employment preparation programs at all. While at the same time, research shows that paid experiences are the number one predictor of successful employment outcomes for those with significant intellectual disabilities but only 13% (n = 46) of respondents reported exposing their students to these programs (Certo et al., 2008; Carter, Austin, & Trainor, 2011). While a systematic continuum of employment experiences is most effective, any amount of participation at all will lead to better employment outcomes, than overall non-participation in employment preparation programs.

The suggestions, advice, and information provided by survey respondents clarify some of the reasons that work study programs, alone, are the most prevalent type of work preparation programs taking place in Alabama and Georgia high schools. In turn data were gathered that highlights specific barriers and solutions related to increasing student work experience participation. For example, the data can serve as a starting point for discovering solutions and

preventing pitfalls associated with employment program implementation such as lack of transportation and availability of community resources. Due to the fact that teachers of students with significant intellectual disabilities make up such a small, and often secluded population of special education teachers, idea sharing and communication are critical to improving their practice. The data gathered in this study may serve as a tool toward this purpose.

Limitations of Study

There are some limitations that should be considered when interpreting the results of this study. First of all, being an electronically distributed survey (via email), there was a small survey response rate. In a 2000 meta-analysis of web-based survey response rates, Cook, Heath, and Thompson (2000) found that a 25% to 30% response rate for an electronic survey should be expected. The current study had a 21% response rate which is low, but acceptable, according to Cook et al. (2000). Increased participation would have strengthened the study's reliability. Next, the survey participants were only teachers in the states of Alabama and Georgia. Therefore, the results of this study may not be generalizable to other states in the country. These factors should be considered when planning and interpreting future research on this topic.

Next, a lack of prior preparation foundational employment experiences could be a reason the participation numbers were so low in community-based, non-paid, and paid work experiences. If teachers are following the research-based practice of presenting work experiences in a stepwise continuum, teachers may not be ready to implement other types of experiences. Additionally, the researcher did not take into account the age groups that teachers taught, and with this population students may be as young as twelve. The maturity that comes with age may also be a factor in implementation of work experiences.

This study did measure the career cluster into which each type of work experience fell, but it did not consider how closely aligned the type of work was with student interests and preferences. Ensuring that a student with significant intellectual disabilities is interested in the job experience and has skills that match the job description greatly increases the chances of him or her being successful and maintaining participation in the training experience or job (Mount, 1994). This could have been responsible for some of the lower rates of participation if some students did not desire to participate in work preparation programs.

Suggestions for Future Research

Due to the fact that there were no previous studies that focused solely on the extent to which special education teacher expose students with significant intellectual disabilities to work experiences, many of the findings of this study simply serve as a baseline for future similar studies. It is the duty of the special education teacher, who is responsible for ensuring the mastery of IEP goals related to transition and employment preparation, to organize and implement the student's participation in work experience programs. Therefore, there is a need for future research related to how special education teachers of students with significant intellectual disabilities can best prepare their students for employment after high school via the implementation of work experience programs. Some more specific suggestions generated from this study are discussed below.

Although the variable of geographic location was examined in this study, a more precise measurement of location could generate useful information. The researcher only had respondents identify their state and county to help protect their anonymity. This is because, oftentimes, small school districts may only have one teacher that teaches students with significant intellectual disabilities. Perhaps larger school districts with multiple special

education teachers with the desired qualifications could identify themselves more. The researcher should attempt to find trends of employment experience preparation by school district.

The collection of demographic data on the teacher's students participating in the employment preparation programs is another area a future researcher may want to investigate. As mentioned earlier, something as simple as a student's age may be stopping a teacher from exposing them to work experiences. The student's level of familial support, prior experience, and level of motivation may play a role in a teacher's decision to implement employment preparation programs.

Finally, future researchers should increase the response rate in similar studies. Although, a web-based survey was the most convenient, economical, and effective way to reach the sampled population, future researchers might consider providing a desirable incentive to increase participation and survey completion. Perhaps, passing out pen and paper surveys at a conference catering to special education teachers with desired qualifications could increase study participation.

Conclusion

Students with significant intellectual disabilities in Alabama and Georgia are being exposed to work study employment preparation programs more than any other type of employment preparation program. While it is positive to see that this is happening, the rates of participation in the more complex employment preparation programs need to increase. The study revealed that one way to do this is to increase the amount of administrative support that special education teachers feel.

This study was intended to be an informational sharing tool primarily for practicing special education teachers, but also for other agencies that must collaborate when planning for

the future of students with significant intellectual disabilities. While interpreting the results of the study a few things need to be kept in mind. First, these students need to be engaged in work preparation experiences that are aligned with their strengths and interests. Next, future studies on this topic should strive to increase the response rate to generate additional data on the covered topics.

This study revealed that special education teachers in Georgia and Alabama are making efforts to improve the employment outcomes of students with significant intellectual disabilities. However, there are problems that must be improved in order to keep this trend in moving upward. Continued research and information sharing on this topic is necessary. Although past employment outcomes of those with significant intellectual disabilities may have been dismal, there is a bright future ahead for this population.

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APPENDIX 1

SURVEY INSTRUMENT

❍ YES, I want to participate in the survey (1)
❍ NO, I do not wish to participate in the survey (2)

If NO, I do not wish to partic... Is Selected, Then Skip To End of Survey

Q1 How important do you think each of the following are in preparing students with significant disabilities for employment after high school? Definitions of each are provided below:

WORK STUDY PROGRAMS- are programs [within the school setting] that provide a specified sequence of work skill instruction and experiences designed to develop students' work attitudes and general work behaviors by providing students with mutually supportive and integrated academic and vocational instruction

COMMUNITY WORK EXPERIENCES- are activities occurring outside of the school setting, supported with in-class instruction, where students apply academic, social, and/or general work behaviors and skills

NON-PAID WORK EXPERIENCES-are any activities that place the students in an authentic workplace, and could include: work sampling, job shadowing, internships, apprenticeships, [however, the student is not monetarily compensated for work]

PAID WORK EXPERIENCES- are any activities that place the students in an authentic workplace, and could include: work sampling, job shadowing, internships, apprenticeships, the student is monetarily compensated for work

(Definitions derived from experts in the field through a Delphi study (Rowe et al., in progress) along with the National Post-school Outcomes Center & The National Secondary Transition Technical Assistance Center)

	Not Important (1)	Somewhat Important (2)	Important (3)	Very Important (4)	Extremely Important (5)
Work Study Programs (1)	❍	❍	❍	❍	❍
Community Work Experiences (2)	❍	❍	❍	❍	❍
Non-Paid Work Experiences (3)	❍	❍	❍	❍	❍
Paid Work Experiences (4)	❍	❍	❍	❍	❍

Q2 Do the students with significant disabilities, that you currently teach, participate in work study programs?

(Work Study Programs- are programs [within the school setting] that provide a specified sequence of work skill instruction and experiences designed to develop students' work attitudes and general work behaviors by providing students with mutually supportive and integrated academic and vocational instruction.)

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To Do the students with significant di...

Q3 How often do these students participate in work study programs?

- ❍ Less than Once a Month (1)
- ❍ Once a Month (2)
- ❍ 2-3 Times a Month (3)
- ❍ Once a Week (4)
- ❍ 2-3 Times a Week (5)
- ❍ Daily (6)

Q4 Please select the job/program description(s) that best describe the work study programs your students are involved in:

- ☐ Agriculture, Food, & Natural Resources (1)
- ☐ Architecture & Construction (2)
- ☐ Arts, A/V Technology, & Communication (3)
- ☐ Business Management & Administration (4)
- ☐ Education & Training (5)
- ☐ Finance (6)
- ☐ Government & Public Administration (7)
- ☐ Health Science (8)
- ☐ Hospitality & Tourism (9)
- ☐ Human Services (10)
- ☐ Information Technology (11)
- ☐ Law, Public Safety, Corrections, & Security (12)
- ☐ Manufacturing (13)
- ☐ Marketing (14)
- ☐ Science, Engineering, Technology, & Mathematics (15)
- ☐ Transportation, Distribution, & Logistics (16)

Q5 What suggestions would you give to another teacher of students with disabilities wanting to begin/improve a work study program for their students?

Q6 Do the students with significant disabilities, that you currently teach, participate in community work experiences?

(Community Work Experiences-are activities occurring outside of the school setting, supported with in-class instruction, where students apply academic, social, and/or general work behaviors and skills)

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To Do the students with significant disa...

Q7 How often do these students participate in community work experiences?

- ❍ Less than Once a Month (1)
- ❍ Once a Month (2)
- ❍ 2-3 Times a Month (3)
- ❍ Once a Week (4)
- ❍ 2-3 Times a Week (5)
- ❍ Daily (6)

Q8 Please select the job/program description(s) that best describe the community work experiences your students are involved in:

- ❑ Agriculture, Food, & Natural Resources (1)
- ❑ Architecture & Construction (2)
- ❑ Arts, A/V Technology, & Communication (3)
- ❑ Business Management & Administration (4)
- ❑ Education & Training (5)
- ❑ Finance (6)
- ❑ Government & Public Administration (7)
- ❑ Health Science (8)
- ❑ Hospitality & Tourism (9)
- ❑ Human Services (10)
- ❑ Information Technology (11)
- ❑ Law, Public Safety, Corrections, & Security (12)
- ❑ Manufacturing (13)
- ❑ Marketing (14)
- ❑ Science, Engineering, Technology, & Mathematics (15)
- ❑ Transportation, Distribution, & Logistics (16)

Q9 What suggestions would you give to another teacher of students with disabilities wanting to begin/improve community work experiences with their students?

Q10 Do the students with significant disabilities, that you currently teach, participate in non-paid work experiences?

(Non-paid work experiences-are any activities that place the students in an authentic workplace, and could include: work sampling, job shadowing, internships, apprenticeships, [however, the student is not monetarily compensated for work].)

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To Do the students with significant di...

Q12 How often do these students participate in non-paid work experiences?

- ❍ Less Than Once a Month (1)
- ❍ Once a Month (2)
- ❍ 2-3 Times a Month (3)
- ❍ Once a Week (4)
- ❍ 2-3 Times a Week (5)
- ❍ Daily (6)

Q13 Please select the job/program description(s) that best describe the non-paid work experiences your students are involved in:

- ❑ Agriculture, Food, & Natural Resources (1)
- ❑ Architecture & Construction (2)
- ❑ Arts, A/V Technology, & Communication (3)
- ❑ Business Management & Administration (4)
- ❑ Education & Training (5)
- ❑ Finance (6)
- ❑ Government & Public Administration (7)
- ❑ Health Science (8)
- ❑ Hospitality & Tourism (9)
- ❑ Human Services (10)
- ❑ Information Technology (11)
- ❑ Law, Public Safety, Corrections, & Security (12)
- ❑ Manufacturing (13)
- ❑ Marketing (14)
- ❑ Science, Engineering, Technology, & Mathematics (15)
- ❑ Transportation, Distribution, & Logistics (16)

Q14 What suggestions would you give to another teacher of students with disabilities wanting to begin/improve their students' exposure to non-paid work experiences?

Q15 Do the students with significant disabilities, that you currently teach, participate in paid work experiences?

(Paid Work Experiences- are any activities that place the students in an authentic workplace, and could include: work sampling, job shadowing, internships, apprenticeships, the student is monetarily compensated for work.)

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To Please specify any other type of empl...

Q16 How often do these students participate in paid work experiences?

- ❍ Less than Once a Month (1)
- ❍ Once a Month (2)
- ❍ 2-3 Times a Month (3)
- ❍ Once a Week (4)
- ❍ 2-3 Times a Week (5)
- ❍ Daily (6)

Q18 Please select the job/program description(s) that best describe the paid work experiences your students are involved in:

- ❑ Agriculture, Food, & Natural Resources (1)
- ❑ Architecture & Construction (2)
- ❑ Arts, A/V Technology, & Communication (3)
- ❑ Business Management & Administration (4)
- ❑ Education & Training (5)
- ❑ Finance (6)
- ❑ Government & Public Administration (7)
- ❑ Health Science (8)
- ❑ Hospitality & Tourism (9)
- ❑ Human Services (10)
- ❑ Information Technology (11)
- ❑ Law, Public Safety, Corrections, & Security (12)
- ❑ Manufacturing (13)
- ❑ Marketing (14)
- ❑ Science, Engineering, Technology, & Mathematics (15)
- ❑ Transportation, Distribution, & Logistics (16)

Q19 What suggestions would you give to another teacher of students with disabilities wanting to begin/improve their students' exposure to paid work experiences?

Q20 Please specify any other type of employment preparation/programs, not previously mentioned, and specify how and why you think they are important in preparing students with significant disabilities for employment after high school.

Q26 Please take a moment to explain anything else you feel is crucial to preparing high school students with disabilities for employment.

Q22 Please indicate your agreement with the following statements regarding employment preparation for high school students with significant disabilities:

	Strongly Agree (1)	Agree (2)	Neither Agree nor Disagree (3)	Disagree (4)	Strongly Disagree (5)
My school district supports my efforts to provide work experiences to students with significant disabilities. (1)	❍	❍	❍	❍	❍
My local school supports my efforts to provide work experiences to students with significant disabilities. (2)	❍	❍	❍	❍	❍
I provide my students with sufficient work experiences to prepare them for employment after high school. (3)	❍	❍	❍	❍	❍

Q33 How many students with significant disabilities, that you have taught/provided work experiences to, have graduated in the last five years?

Q21 If you know the current employment status of any of your former students (within the last 5 years), please indicate how many of them are in the following categories:

_____ Unemployed (1)
_____ Volunteerism (2)
_____ Day Activity Center/Training Facility/Sheltered Workshop (3)
_____ Part-Time Competitive Employment (with or without support) (4)
_____ Full-Time Competitive Employment (with or without support) (5)

Q23 How many years have you taught high school students with significant disabilities?

Q24 Are you certified to teach special education?

- ❍ Yes (1)
- ❍ No (2)

Q25 Have you had special training in preparing students with disabilities for employment after high school (college coursework, for example)? If so, please provide a brief description of this training.

Q29 Please select the state in which you teach:

- ❍ Alabama (1)
- ❍ Georgia (2)

Answer If Please select the state in which you teach: Alabama Is Selected

Q31 In which county of Alabama do you teach?

- ❍ Autauga (1)
- ❍ Baldwin (2)
- ❍ Barbour (3)
- ❍ Bibb (4)
- ❍ Blount (5)
- ❍ Bullock (6)
- ❍ Butler (7)
- ❍ Calhoun (8)
- ❍ Chambers (9)
- ❍ Cherokee (10)
- ❍ Chilton (11)
- ❍ Choctaw (12)
- ❍ Clarke (13)
- ❍ Clay (14)
- ❍ Cleburne (15)
- ❍ Coffee (16)
- ❍ Colbert (17)
- ❍ Conecuh (18)
- ❍ Coosa (19)
- ❍ Covington (20)
- ❍ Crenshaw (21)
- ❍ Cullman (22)
- ❍ Dale (23)
- ❍ Dallas (24)
- ❍ Dekalb (25)
- ❍ Elmore (26)
- ❍ Escambia (27)
- ❍ Etowah (28)
- ❍ Fayette (29)
- ❍ Franklin (30)
- ❍ Geneva (31)
- ❍ Greene (32)
- ❍ Hale (33)
- ❍ Henry (34)
- ❍ Houston (35)
- ❍ Jackson (36)
- ❍ Jefferson (37)
- ❍ Lamar (38)
- ❍ Lauderdale (39)
- ❍ Lawrence (40)
- ❍ Lee (41)
- ❍ Limestone (42)
- ❍ Lowndes (43)
- ❍ Macon (44)
- ❍ Madison (45)
- ❍ Marengo (46)
- ❍ Marion (47)
- ❍ Marshall (48)
- ❍ Mobile (49)
- ❍ Monroe (50)
- ❍ Montgomery (51)
- ❍ Morgan (52)
- ❍ Perry (53)
- ❍ Pickens (54)
- ❍ Pike (55)
- ❍ Randolph (56)
- ❍ Russell (57)
- ❍ St. Clair (58)
- ❍ Shelby (59)
- ❍ Sumter (60)
- ❍ Talladega (61)
- ❍ Tallapoosa (62)
- ❍ Tuscaloosa (63)
- ❍ Walker (64)
- ❍ Washington (65)
- ❍ Wilcox (66)
- ❍ Winston (67)
- ❍ Click to write Choice 68 (68)

Answer If Please select the state in which you teach: Georgia Is Selected

Q32 In which county of Georgia do you teach?

- ❍ Appling (1)
- ❍ Atkinson (2)
- ❍ Bacon (3)
- ❍ Barker (4)
- ❍ Baldwin (5)
- ❍ Banks (6)
- ❍ Barrow (7)
- ❍ Bartow (8)
- ❍ Ben Hill (9)
- ❍ Berrien (10)
- ❍ Bibb (11)
- ❍ Bleckley (12)
- ❍ Brantley (13)
- ❍ Brooks (14)
- ❍ Bryan (15)
- ❍ Bulloch (16)
- ❍ Burke (17)
- ❍ Butts (18)
- ❍ Calhoun (19)
- ❍ Camden (20)
- ❍ Candler (21)
- ❍ Carroll (22)
- ❍ Catoosa (23)
- ❍ Charlton (24)
- ❍ Chatham (25)
- ❍ Chatahoochee (26)
- ❍ Chatooga (27)
- ❍ Cherokee (28)
- ❍ Clarke (29)
- ❍ Clay (30)
- ❍ Clayton (31)
- ❍ Clinch (32)
- ❍ Cobb (33)
- ❍ Coffee (34)
- ❍ Colquitt (35)
- ❍ Columbia (36)
- ❍ Cook (37)
- ❍ Coweta (38)
- ❍ Crawford (39)
- ❍ Crisp (40)
- ❍ Dade (41)
- ❍ Dawson (42)
- ❍ Decatur (43)
- ❍ Dekalb (44)
- ❍ Dodge (45)
- ❍ Dooley (46)
- ❍ Dougherty (47)
- ❍ Douglas (48)
- ❍ Early (49)
- ❍ Echols (50)
- ❍ Effingham (51)
- ❍ Elbert (52)
- ❍ Emanuel (53)
- ❍ Evans (54)
- ❍ Fannin (55)
- ❍ Fayette (56)
- ❍ Floyd (57)
- ❍ Forsyth (58)
- ❍ Franklin (59)
- ❍ Fulton (60)
- ❍ Gilmer (61)
- ❍ Glascock (62)
- ❍ Glynn (63)
- ❍ Gordon (64)
- ❍ Grady (65)
- ❍ Greene (66)
- ❍ Gwinnett (67)
- ❍ Habersham (68)
- ❍ Hall (69)
- ❍ Hancock (70)
- ❍ Haralson (71)
- ❍ Harris (72)
- ❍ Hart (73)
- ❍ Heard (74)
- ❍ Henry (75)
- ❍ Houston (76)
- ❍ Irwin (77)
- ❍ Jackson (78)

- Jasper (79)
- Jeff Davis (80)
- Jefferson (81)
- Jenkins (82)
- Johnson (83)
- Jones (84)
- Lamar (85)
- Lanier (86)
- Laurens (87)
- Lee (88)
- Liberty (89)
- Lincoln (90)
- Long (91)
- Lowndes (92)
- Lumpkin (93)
- Macon (94)
- Madison (95)
- Marion (96)
- McDuffie (97)
- McIntosh (98)
- Meriwether (99)
- Miller (100)
- Mitchell (101)
- Monroe (102)
- Montgomery (103)
- Morgan (104)
- Murray (105)
- Muscogee (106)
- Newton (107)
- Oconee (108)
- Oglethorpe (109)
- Paulding (110)
- Peach (111)
- Pickens (112)
- Pierce (113)
- Pike (114)
- Polk (115)
- Pulaski (116)
- Putman (117)
- Quitman (118)
- Rabun (119)
- Randolph (120)
- Richmond (121)
- Rockdale (122)
- Schley (123)
- Screven (124)
- Seminole (125)
- Spalding (126)
- Stephens (127)
- Stewart (128)
- Sumter (129)
- Talbot (130)
- Taliaferro (131)
- Tattnall (132)
- Taylor (133)
- Telfair (134)
- Terrell (135)
- Thomas (136)
- Tift (137)
- Toombs (138)
- Towns (139)
- Treutlen (140)
- Troupe (141)
- Turner (142)
- Twiggs (143)
- Union (144)
- Upson (145)
- Walker (146)
- Walton (147)
- Ware (148)
- Warren (149)
- Washington (150)
- Wayne (151)
- Webster (152)
- Wheeler (153)
- White (154)
- Whitfield (155)
- Wilcox (156)
- Wilkes (157)
- Wilkinson (158)
- Worth (159)

APPENDIX 2

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

Consent letter included in email

Please add this

→ Department Letterhead Information

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

INFORMATION LETTER
for a Research Study entitled
"Employment Preparation for High School Students with Significant Intellectual Disabilities"

You are invited to participate in a research study to investigate the work experiences of students with significant disabilities. The data gained from the research will assist special education high school work preparation programs in improving employment outcomes for students with significant disabilities. The study is being conducted by Jennifer Moon, Graduate Student, under the direction of Dr. Caroline Dunn, Professor, in the Auburn University Department of Special Education, Rehabilitation, and Counseling. You were selected as a possible participant because you are a teacher of high school students who have significant intellectual disabilities, assessed via the Alabama Alternate Assessment or Georgia Alternate Assessment, and you are age 19 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an anonymous online survey regarding the work experiences of students with significant disabilities that you teach. Your total time commitment will be approximately ten minutes or less.

Are there any risks or discomforts? There are no foreseeable risks or discomforts associated with participation in this study.

Are there any benefits to yourself or others? If you participate in this study, you will have the opportunity to access survey results in the form of written reports and/or conference presentations. The study's findings will be compared and contrasted to the evidence-based best practices in empirical literature on work experiences for high school students with significant disabilities. The findings should assist interested teachers and other special education professionals in evaluating or improving their professional practices concerning work experiences for their students in order to improve students' post-school employment outcomes. We/I cannot promise you that you will receive any or all of the benefits described. Benefits to others may include increased knowledge regarding efforts currently being taken in the state to prepare students with significant disabilities for employment after high school.

The Auburn University Institutional Review Board has approved this document for use from 4/24/13 to 4/23/16
Protocol # 13-156 EX 1304

Will you receive compensation for participating? No.

Are there any costs? There are no costs involved in participation in this study.

If you change your mind about participating, you can withdraw at any time by closing your internet browser window. Survey responses will be collected anonymously. Therefore, once you've submitted the survey responses, they cannot be withdrawn since they will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the Department of Special Education, Rehabilitation, and Counseling.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by using online survey software with high levels of privacy standards. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional conference.

If you have questions about this study, please contact Jennifer Moon at mcclejl@auburn.edu or Dr. Caroline Dunn at dunnca1@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.
YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Jennifer Moon 2-5-13

Investigator Date

Co-Investigator Date

The Auburn University Institutional Review Board has approved this document for use from 4/24/13 to 4/23/16 Protocol # 13-156 EX 1304

add this info

The Auburn University Institutional Review Board has approved this document for use from _____ to _____, Protocol #_____

LINK TO SURVEY ← return updated letter to IRB with live link.

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:** hsubjec@auburn.edu **Web Address:** http://www.auburn.edu/research/vpr/ohs/

Revised 03.26.11 – DO NOT STAPLE, CLIP TOGETHER ONLY.

Save a Copy

1. **PROPOSED START DATE of STUDY:** May 1, 2013

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

2. **PROJECT TITLE:** Employment Preparation for High School Students with Significant Intellectual Disabilities

3. Jennifer Moon	Doctoral Student	SERC	256-476-1208	mcclejl@auburn.edu
PRINCIPAL INVESTIGATOR	TITLE	DEPT	PHONE	AU E-MAIL
78 Bayou Ridge Lane Talladega, AL 35160		334-844-7677		jenmoon05@yahoo.com
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:**

6. **GENERAL RESEARCH PROJECT CHARACTERISTICS**

6A. Mandatory CITI Training

Names of key personnel who have completed CITI:
Jennifer Moon ✓ Caroline Dunn ✓

CITI group completed for this study:
✓ Social/Behavioral Biomedical

PLEASE ATTACH TO HARD COPY *ALL* CITI CERTIFICATES FOR *EACH* KEY PERSONNEL

6B. Research Methodology

Please check all descriptors that best apply to the research methodology.

Data Source(s): ✓ New Data Existing Data
Will recorded data directly or indirectly identify participants? Yes ✓ No
Data collection will involve the use of:
___ Educational Tests (cognitive diagnostic, aptitude, etc.)
Interview / Observation
Physical / Physiological Measures or Specimens (see Secti
✓ Surveys / Questionnaires
Internet / Electronic
Audio / Video / Photos
Private records or files

The Auburn University Institutional Review Board has approved this document for use from 4/24/13 to 4/23/14. Protocol # 13-156 EX 1304

6C. Participant Information

Please check all descriptors that apply to the participant population.
✓ Males ✓ Females AU students
Vulnerable Populations
Pregnant Women/Fetuses ___ Prisoners
Children and/or Adolescents (under age 19 in AL)
Persons with:
Economic Disadvantages Physical Disabilities
Educational Disadvantages Intellectual Disabilities
Do you plan to compensate your participants? ___ Yes ✓ No

6D. Risks to Participants

Please identify all risks that participants might encounter in this research.
Breach of Confidentiality* Coercion
Deception Physical
Psychological Social
✓ None Other:

*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.

Received APR 15 2013 Research Compliance

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

FOR OHSR OFFICE USE ONLY

DATE RECEIVED IN OHSR: 4.15.13 **by** GD
DATE OF IRB REVIEW: 4/24/13 **by** CC
DATE OF IRB APPROVAL: _____ **by** _____
COMMENTS:

PROTOCOL # 13.156 EX 1304
APPROVAL CATEGORY: 45 CFR 46.101 (b)(2)
INTERVAL FOR CONTINUING REVIEW: 3 years

7. PROJECT ASSURANCES

PROJECT TITLE: Employment Preparation for High School Students with Significant Intellectual Disabilities

A. PRINCIPAL INVESTIGATOR'S ASSSURANCES

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.

Jennifer Moon	Jennifer Moon	4-15-13
Printed name of Principal Investigator	**Principal Investigator's Signature** (SIGN IN BLUE INK ONLY)	**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

Caroline Dunn	Caroline Dunn	4/15/2013
Printed name of Faculty Advisor / Sponsor	**Signature (SIGN IN BLUE INK ONLY)**	**Date**

C. DEPARTMENT HEAD'S ASSSURANCE

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.

E. Davis Martin	E. Davis Martin	4/15/2013
Printed name of Department Head	**Signature (SIGN IN BLUE INK ONLY)**	**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. A major focus of special education over the past fifty years has been on improving the post-school outcomes of students with disabilities. These efforts have made small improvements, overall, but the outcomes for students with more significant intellectual disabilities are still not comparable to those with milder disabilities or those without disabilities. This inequality in post-school outcomes can be best observed in the area of employment for students with significant disabilities. Take the following statistics for example: only eight percent of those with significant disabilities are currently employed as compared to 81% of those without disabilities. Of the eight percent employed the majority of them work in segregated, facility-based, non-competitive employment, and adults with significant disabilities are three times more likely than others to live in poverty (Harris & Associates Inc, 2000).

II. Special education researchers agree one of the best ways to ensure optimal employment outcomes for students with significant disabilities is to provide them with much work experience during the high school years (Beyer, Brown, Akandi, & Rapley, 2010; Carter, Austin, & Trainor, 2011; Certo et al., 2008). My research will consist of conducting a survey with special education teachers, concerning the extent to which their students with significant disabilities are participating in work experiences while in high school.

III. The expected and/or possible outcomes of this research are to obtain information on special education teachers' level of alignment to research-based best practices as they prepare students with significant disabilities for work after high school through work experiences.

IV. The results of this research will provide special education professionals with an assessment of their strengths and weaknesses in the area of employment preparation for students with significant intellectual disabilities. Hopefully, this information will serve as a guide for current employment preparation program improvement and/or future employment preparation program development for students with significant intellectual disabilities.

9. **PURPOSE.**

a. Clearly state all of the objectives, goals, or aims of this project.
This project will investigate the employment preparation and work experiences of students with significant intellectual disabilities. The data gained from the research will assist special education work preparation programs in improving their quality of service delivery and employment outcomes for students with significant intellectual disabilities.

b. How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)
The results of this project will be used in a dissertation, as well as be presented at conferences, such as the Alabama Transition Conference.

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 Jennifer Moon **Title:** Doctoral Student **E-mail address** mcclejl@auburn.edu
Dept / Affiliation: SERC

Roles / Responsibilities:
Prepare and administer survey; record and interpret data; compose and present results

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

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:

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/ohs/sample.htm)
Research will take place through the use of Qualtrics survey software to send survey instruments to participants in school systems in Alabama and Georgia.

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 is special education teachers of students with significant intellectual disabilities, in 9th-12th grade, in public schools in Alabama and Georgia. For this research, only special education teachers of students in grades 9th-12th who participate in Alternative Standardized Assessments will be surveyed. The Alabama Alternative Assessment and the Georgia Alternative Assessments are annual standardized assessment for students with significant disabilities. A student is assessed with an alternative assessment if their IQ is 55 or below.

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

This population of special education teachers should be aware of the importance of providing work experiences to students with significant intellectual disabilities. The Individuals with Disabilities Education Improvement Act (2004) mandates that special education services prepare a student for "movement from school to post-school activities," such as employment.

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/vpr/ohs/sample.htm.)

1. Recruitment letters will be emailed to special education supervisors in school systems throughout Alabama and Georgia.
2. If special education supervisors consent to their system's participation in the survey, the supervisor will be asked to either: (a) forward, by email, the electronic survey and information letter to the target participants or (b) provide the principal investigator with email addresses of their teachers meeting sample criteria.
3. Electronic surveys will be distributed, either by principal investigator or special education supervisors, with an information letter, specific to special education teachers, attached to the emailed survey.

What is the minimum number of participants you need to validate the study? 125

Is there a limit on the number of participants you will recruit? ☑ **No** ☐ **Yes – the number is** _____

Is there a limit on the number of participants you will include in the study? ☑ **No** ☐ **Yes – the number is** _____

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.)**
A cover letter, in the email with the survey link, will explain participation in the survey implies consent.

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.*)

1. Possible participants of 9th-12th grade special education teachers will be generated through school district's special education supervisors. A letter explaining the purpose of the study, possible risks and benefits will be included.
2. An anonymous survey link will be sent to the teachers meeting participant criteria, along with an IRB approved information letter explaining the purpose of study, possible risks, and benefits.
3. Consenting teachers will complete a survey consisting questions regarding the work experiences of students with significant disabilities in their schools. Questions that will be included are concerned with the types of work experiences students have, the amount of time students participate in the work experiences, how work experiences were obtained, and the demographics of the teachers providing the work experiences. The survey should not take more than ten minutes to complete.
4. After allowing survey respondents four weeks to complete the survey, data analysis and interpretation will begin if there are at least 125 survey responses, spanning at least 40% of counties, returned.
5. A minimum of one and maximum of three survey follow-ups will be made to solicit participation (response to the online survey), will take place until at least 125 survey responses, spanning at least 40% of counties, are gathered .
6. Once a sufficient number of survey responses are obtained (at least 125 responses or 40% of counties in AL and GA), data analysis and interpretation will begin.

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.)
-"Employment Preparation for High School Students with Significant Intellectual Disabilities" Survey Instrument. The items comprising the survey were developed based on a review of the literature on effective employment practices for students with significant intellectual disabilities.

d. Data analysis: Explain how the data will be analyzed.
IBM's SPSS statistical software will be used to analyze quantitative data. ATLAS.ti will be used to analyze the qualitative data included in my open-ended survey questions.
Furthermore, descriptive statistics and correlational analysis will be conducted using SPSS. Open-ended responses will be content-analyzed to determine the primary themes. All data will be anonymous and all findings will be reported in aggregate form to ensure individual confidentiality.

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.)*
N/A

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.***

N/A

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.)

From www.qualtrics.com:
Qualtrics has SAS 70 Certification and meets the rigorous privacy standards imposed on health care records by the Health Insurance Portability and Accountability Act (HIPAA). All Qualtrics accounts are hidden behind passwords and all data is protected with real-time data replication.

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.

Survey data will be reported upon project completion; interested teachers may access this information. The study's findings will be compared and contrasted to the evidence-based best practices in empirical literature on work experiences for high school students with significant disabilities. The findings should assist interested teachers and other special education professionals in evaluating or improving their professional practices concerning work experiences for their students in order to improve students' post-school employment outcomes.

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

The general population should be concerned with employment outcomes for students with significant disabilities, because it effects the social and economic well-being of their state and country. The findings of the study will inform them on the efforts currently being taken to prepare students with significant intellectual disabilities for employment after high school.

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.**
The data will be stored electronically using the Qualtrics data security system. To access the data a strong password will be required. Only the principal investigator and the faculty advisor will know the password. IRB approved forms will be stored in a locked filing cabinet in the SERC office for up to three years after the study ends.

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.*)
-Principal investigator and faculty advisor

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.)*

APPENDIX 3

SUPERVISOR EMAIL RECRUITMENT LETTER

Dear Special Education Supervisors and Coordinators,

My name is Jennifer Moon. I am a doctoral student at Auburn University in the Department of Special Education, Rehabilitation, and Counseling. I am writing to ask you to invite your special education teachers to participate in a research study about the work experiences of students with significant intellectual disabilities. Survey respondents must primarily teach students in the 9^{th}-12^{th} grades who are assessed via the Alabama Alternate Assessment (AAA) or the Georgia Alternate Assessment (GAA) and also follow a curriculum that has goals modified from grade-level standards. If the teachers in your district are interested in participating, please read more about the study below.

Special education researchers agree, one of the best ways to ensure optimal employment outcomes for students with significant disabilities is to provide them with many work experiences during the high school years. My research will consist of a conducting a survey with special education teachers, concerning the nature of the work experiences that their students with significant disabilities participate in while in high school. Hopefully, this information will serve as a guide for current employment preparation program improvement and/or future employment preparation program development for students with significant disabilities.

There are minimal risks involved in this research project. The ten minute survey will be conducted online and all information will be completely anonymous. To minimize this risk a letter explaining that participation is completely voluntary will accompany the survey. Participants in the study will benefit, because their participation will help special education teachers assess and improve the work experiences they provide for their students. Your district's participation is completely voluntary and refusal to participate will not jeopardize your relations with Auburn University.

If you would like for teachers in your district that meet the criteria (primarily teach 9^{th}-12^{th} grade students assessed via AAA or GAA) to participate, please forward the survey link and attached information letter to them or send me a list of email addresses of teachers who should receive the survey. If you have questions, please contact me at (256) 476-1208, or my advisor Caroline Dunn at (334)844-2086. Otherwise, please reply in the desired manner to mcclej@auburn.edu.

Thank you,

Jennifer Moon

Department Letterhead Information

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

INFORMATION LETTER
for a Research Study entitled
"Employment Preparation for High School Students with Significant Intellectual Disabilities"

You are invited to participate in a research study to investigate the work experiences of students with significant disabilities. The data gained from the research will assist special education high school work preparation programs in improving employment outcomes for students with significant disabilities. The study is being conducted by Jennifer Moon, Graduate Student, under the direction of Dr. Caroline Dunn, Professor, in the Auburn University Department of Special Education, Rehabilitation, and Counseling. You were selected as a possible participant because you are a teacher of high school students who have significant intellectual disabilities, assessed via the Alabama Alternate Assessment or Georgia Alternate Assessment, and you are age 19 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an anonymous online survey regarding the work experiences of students with significant disabilities that you teach. Your total time commitment will be approximately ten minutes or less.

Are there any risks or discomforts? There are no foreseeable risks or discomforts associated with participation in this study.

Are there any benefits to yourself or others? If you participate in this study, you will have the opportunity to access survey results in the form of written reports and/or conference presentations. The study's findings will be compared and contrasted to the evidence-based best practices in empirical literature on work experiences for high school students with significant disabilities. The findings should assist interested teachers and other special education professionals in evaluating or improving their professional practices concerning work experiences for their students in order to improve students' post-school employment outcomes. We/I cannot promise you that you will receive any or all of the benefits described. Benefits to others may include increased knowledge regarding efforts currently being taken in the state to prepare students with significant disabilities for employment after high school.

Will you receive compensation for participating? No.

Are there any costs? There are no costs involved in participation in this study.

If you change your mind about participating, you can withdraw at any time by closing your internet browser window. Survey responses will be collected anonymously. Therefore, once you've submitted the survey responses, they cannot be withdrawn since they will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the Department of Special Education, Rehabilitation, and Counseling.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by using online survey software with high levels of privacy standards. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional conference.

If you have questions about this study, please contact Jennifer Moon at mcclejl@auburn.edu or Dr. Caroline Dunn at dunnca1@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.
YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Jennifer Moon 2-5-13

_____

Investigator Date

_____

Co-Investigator Date

The Auburn University Institutional Review Board has approved this document for use from _____ to _____. Protocol #_____

LINK TO SURVEY

APPENDIX 4

OPEN-ENDED QUESTION DATA

Suggestions for Establishing Work Study Programs

-Establish a good community base of companies/businesses that are willing to allow SWD the opportunity to use skills used in settings other than the self-contained classroom. Develop a set of basic skills that students can 'start' with in an on-campus setting and then generalize those skills outside the school setting in a work place environment.

-Use businesses near the school as these businesses are in the students immediate community and can provide a good community bond.

-Make sure directions are clear, concise....use the least amount of language that you can and have a goal for complete independence as far as the work that is to be done each time.

-Start by sorting every duty of school employees into activities that students can physically do or with which they can assist. Next have open and honest communication with all service and academic departments and get them excited and on board for inclusive work study.

-By work study, I assume this means the student going to their job each day and getting paid for it. I am not assuming that CBVI is considered work study so my advice would be to establish good relationships with employers and co-ops.

-I would suggest that they have basic information to provide to the person in charge of an area of the school where you would like to work. I would suggest that you explain how they could benefit from your students helping out and how it will help the students learn valuable skills they can transfer into the community. I would also explain any accommodations that the students may need.

-Acknowledge their ability not disability.

-Whatever you put in you will get out of the program. You need to work alongside of the students to show that you are in this with them.

-While interest is key to motivation, a lot of our students only show interested in what they've been exposed to. It's important to create opportunities to branch out so that they can see if their interests lie within anything other than just what they have done before or seen others (especially family members) do.

-Find a co-worker to help with the program make sure you have administration support

-Find jobs around the school (library, office work). Start a school garden--it provides opportunities for vocational training in areas such as horticulture, landscaping, nutrition, etc.

-Give students as much real life experience as possible.

-Make sure that Data Collection is Top Priority. Make sure that the student has a complete knowledge of what the expectations are for that student. Also, there needs to be an understanding that salary would be include if standards are being met. Build the program in an area of interest that the student has expressed.

-Large corporations are not as accepting of the work program. Go to locally owned businesses.

-Have the teaching of skills align to the needs of the community.

-Check with teachers in the school to see what the needs are and create jobs based on the local school-specific needs.

Suggestions for Establishing Community-Based Work Programs

- I suggest that the teacher prepare the students for the community work experience. The teacher should simulate the job tasks in the classroom. When the student becomes independent in the job task and the teacher is comfortable, the teacher should back off of the student. The teacher should not hover around the student or they will have a harder time learning to do the task independently.
- Use community sources near to where the students live.
- Plenty of interaction with management of workplace.....make sure other employees understand how to interact with students and what the expectations are.....ask management to consider being part of the redirection that occurs so it's not the teacher each time. Don't smile until Christmas.
- They should personally contact small businesses and acquaintances and explain the benefits to both the business and the students that participate in community work experiences. Also, check with other schools in the district that could benefit from services of a community work program (cafeterias, office work, guidance departments, custodial services, school supply stores). Many businesses would not be opposed to the program; they just haven't thought about it before.
- Establish good relationships with businesses that allow you to come in
- I would suggest that they have basic information to provide to the employees and explain to them how it will help them as well as the students. I would offer suggestions on what kind of jobs your students could perform and what kind of accommodations might be needed to complete various jobs at their work site.
- These sites take time to develop. Do not give up if you get turned down. Also, the first time you go and ask make it in person.
- Think outside of the box!
- I suggest teachers look within their communities for potential job site that are small communities and can support learning various job skills for example, a hospital. Working in a hospital can provided entry level jobs or jobs that are more complex in nature. This allows students to learn job skill up to their capabilities.
- All students can learn. No matter the disability, students can learn and work with assistance.
- Find a source of funding (grants, business sponsorships, etc.) to cover the cost of transportation, which is becoming prohibitive, especially for small classes.
- It is important that the planning is completed with detail. Businesses may need some early knowledge of the visit. Reinforce the visit with lessons and discussions about what is going to occur. After the visit, generate a follow-up activity to review the visit as a form of documentation.
- It takes a lot of work to generate businesses willing to open their doors to our students. It usually takes personal contact with businesses as opposed to contact by phone for a successful sight to be secured. Contact businesses the summer before school starts to have business sights ready for the beginning of the school year. Some businesses change their mind about hosting over the summer or could give your spot away to a different school or organization so it is important to keep in contact with them throughout the summer to ensure their sights will be available.
- Make good connections with community members so they will be willing to help students have the most opportunities.
- Make sure the employer WANTS the students there.
- Arrange for several field trips, meetings with community members, encourage the students for job shadowing.

Suggestions for Establishing Non-Paid Work Programs

-When starting a non-paid work experience, the teacher should make sure that the job is appropriate for that student and their needs. One of the most important components of a non-paid work experience is natural support from the other employees. The teacher should try to make a personal connection to a person that works there. The teacher should explain to the natural support what the expectations of the student are. Once the student has learned how to do their job, the teacher needs to check on that student periodically. If the student is coming to class at any time, the teacher should be reinforcing the soft skills (social skills, basic employability skills, conflict resolution.)

-Have other incentives that the students can earn besides money so that they stay motivated to do efficient work.....explain to others on job-site who are not related with the school the nature of language disabilities and how these students often do not understand nonverbal cues. They must be very intentional when explaining directions or expectations. When something is not appropriate and they want to relay that to student workers, their facial cues have to match their words. Otherwise, the student does not understand that the person is serious and does not want to see it occur again. I would like for the community people we work with to take more of an initiative in interacting with students and appraising their work so that students can generalize good work habits and transfer those skills from one environment to another. Praise and criticism needs to come from both the teacher supervisor and the manager of the actual workplace.

-I would recommend that someone who is knowledgeable of working with students with disabilities, initiate the concept of exposing the student to activities that they will be using in the future, rather than just "grasping" for an activity to complete the time needed to account for. Also, it is imperative that the activities be spread out and not completed at the very last minute. Sometimes, the students are overlooked with ideas they could participate in when they are not given opportunities to challenge their knowledge. Be Creative with locations and personnel. It may become surprising to the teacher that the students really will work harder when they know there is a viable reward or plan in action.

-Make good relationships with community members. Make a good impression on the community businesses so they will invite you back and others will be welcomed in the future.

-Communicate weekly and again, establish and maintain good relationships with these people/businesses

-Many times you have to create these programs that best suit the population of students you work with. Life Skills should be at the fore front.

-Keep constant feedback and communications with the job settings to prevent misunderstandings and to ensure that the situation remains mutually beneficial for both the student and the business.

-I would suggest that they have basic information to provide to the employers and explain to them how it will help them as well as the students. I would offer suggestions on what kind of jobs your students could perform and what kind of accommodations might be needed to complete various jobs at their work site.

-Stress how priceless a work history is to their chances of being hired for paid employment.

-Establish relationships with colleagues in your school setting. Actively look for jobs that you think that your students could successfully complete.

Suggestions for Implementing Paid Employment Programs

-Connect with Parents and Vocational Rehab

-Set realistic expectations, educate the people allowing your students to come to their business, maintain a good working relationship, communicate often

-Start asking at locally owned stores or stores where you know the manager

-They need that real world experience. Make sure the job is interesting and beneficial.

General Comments on Improving Work Experiences for Students with Significant Intellectual Disabilities

-Most of my students learn and complete activities through repetition not because they necessarily understand what they are doing and why they are doing it. Therefore any work experiences that are done through repetition and with supervision would be very beneficial to them.

-There needs to be more agencies involved with this population after they graduate. We spend 4-7 yrs (depending on if they graduate in 4 yrs. or stay until 22 birthday) training them, taking them into the community, then they graduate and have very little job opportunities. Voc. Rehab. only works with the students that will be able to work independent. The students I have need job coaches, supervision- but they are good workers and work will with supervision and as a team member, I would like to see more enclaves. Parents need to be involved to help get students services.

understanding the language disability component and being able to predict what might be a possible hindrance/problem in a workplace. Working with community partners and educating them on how to interact with students; helping students start to generalize behavior expectations and employment-appropriate expectations as far back as late elementary school

-It is crucial to our economy. We want these students to be ready for work so they do not expect a draw a check each month for doing nothing. These students can be trained to do something and earn some type of living. We have way too many individuals with disabilities drawing and SSI check each month when they should be working more.

-Students need to be encouraged to want to be employed and not feel that the government system will continue to take care of their needs. I think that teaching a strong work ethic is important for our students due to the lack of employment opportunities. These kids need to bring something great to the table to get a job and being willing to work and motivated will help them go further.

-They should be provided with regular/weekly community-based field trips to practice skills in the actual job-related environment.

-The student's transition plan needs to be better planned out. Maybe a timeline developed in middle school so that by the time the student graduates, services can be put into place right after graduation. Too many students are left out not knowing what services they can use after graduation.

-Community services, voluntary services, visits outside school and community to help them realize and learn living skills.

-The most difficult aspects of the job that need to be taught are social skills, what is considered sexual harassment, what to do on break, what to do during lunch, how to answer and comply with supervisor's directions. The job skills can be taught, but the most difficult for students with significant cognitive disability is the abstract concepts of social interactions.

-Non paid and paid work experiences of their interest.

-On campus environment is critical for fostering opportunities that will allow students that only participate in monthly off-campus activities the opportunity to utilize skills outside the s/c classroom

-The community-based activities/field trips that allows real life situations with other community members was key in providing social skills, self-esteem, problem solving in the real world, and the sense of accomplishment and independence. Due to lack of funding, and specifically placing more focus on higher educable students has become more important. The lack of some cognitive abilities of severe disabled students needs interaction with the community.

-I believe that teachers should be teaching employability skills and work skills to their students from the time they are in the 9th grade. It is important that the student understands what work is and what it means to work. Also, I suggest letting the students be more independent in their daily routines.

-Our students need the opportunities to participate in work-study, work instruction as well as paid work experiences. Unfortunately as teachers, our hands are tied.

-The students and parents of said students would have to have a reality based opinion about the work programs and training scenarios available. Set high expectations, but also achievable expectations.

-Job Shadowing.

-I think that you need to provide them with multiple opportunities to learn various job skills at different sites. However, I feel that it is also important to start narrowing down their choices and help them concentrate on specific job sites, the closer they get to graduating. This allows them to focus on one or two skills they are good at or like and hopefully help them gain employment once they graduate.

-A good social skills curriculum integrated into work preparation and readiness skills.

-work skills class and consumer math class

-Ask, seek, beg for opportunities in the community to take your students for work experience and exposure. This is particularly difficult for small towns without many options, but it's so important. Make opportunities within your school or school system. Find things that might actually translate to a job within your area (teaching them to bus tables won't be of any help if there are no restaurants within an appropriate distance). Think of what your kids need and remember that no matter what sounds good on paper, if it doesn't actually work, it won't happen after they leave you.

-We need to do something to help meaningfully help these students so they can be productive responsible citizens of their community. Not make it just window dressing that we are helping them. I know this is probably not what you want to hear but it's the day before graduation and my emotions are at a high level.

-Preparing the students for situations that will allow students to become as independent as possible. Allowing students to have a choice in the opportunity in preparing for employment.

-Instructional focus on areas of strengths, parental involvement with community resources/services, and involvement with community agencies which help provide supported employment.

-The most critical missing link for my students is access to transportation. Lack of available public transportation in many areas, and the cost ($8) a day of what is available, makes it difficult for students who may only be able to work a few hours a day.

-Being aware of all the resources is the most important thing

-N/A for my students.

-Lifetime skills are a necessity. Leisure skills are also important. Socialization is a top priority.

How to obtain transportation - how do take control of their money and use it wisely

-In our county, we do not have businesses that are willing to open their doors to actually employ our students after high school which is shameful considering the wealth and size of our county as being one of the fastest growing counties in the nation. Our school system continues to grow and grow in size because of our wonderful schools yet local businesses do not see the value in hiring our students. I served on a committee that tried to generate partnerships with local businesses and yet these businesses were not interested in partnering.

-Social Skills!

Parents need to be willing to let students have freedom and take chances in employment settings.

APPENDIX 5

CAREER CLUSTER INFORMATION

The 16 Career Clusters®

One of the keys to improving student achievement is providing students with relevant contexts for studying and learning. Career Clusters® do exactly this by linking school-based learning with the knowledge and skills required for success in the workplace. The National Career Clusters® Framework is comprised of 16 Career Clusters® and related Career Pathways to help students of all ages explore different career options and better prepare for college and career.

Each Career Cluster® represents a distinct grouping of occupations and industries based on the knowledge and skills they require. The 16 Career Clusters® and related Career Pathways provide an important organizing tool for schools to develop more effective programs of study (POS) and curriculum.

- Agriculture, Food & Natural Resources

  The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

- Architecture & Construction

  Careers in designing, planning, managing, building and maintaining the built environment.

- Arts, A/V Technology & Communications

  Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

- Business, Management & Administration

  Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

- Education & Training

  Planning, managing and providing education and training services, and related learning support services such as administration, teaching/training, administrative support, and professional support services.

- Finance

  Planning and related services for financial and investment planning, banking, insurance, and business financial management.

- Government & Public Administration

  Planning and executing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.

- Health Science

  Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

- Hospitality & Tourism

  Preparing individuals for employment in career pathways that relate to families and human needs such as restaurant and food/beverage services, lodging, travel and tourism, recreation, amusement and attractions.

- Human Services

  Preparing individuals for employment in career pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.

- Information Technology

  Building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.

- Law, Public Safety, Corrections & Security

  Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

- Manufacturing

  Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

- Marketing

  Planning, managing, and performing marketing activities to reach organizational objectives such as brand management, professional sales, merchandising, marketing communications and market research.

- Science, Technology, Engineering & Mathematics

  Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

- Transportation, Distribution & Logistics

  The planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

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