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The Impact Of Job Experience Training On Executive Functioning Skills For Students With Language Impairments

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THE IMPACT OF JOB EXPERIENCE TRAINING ON EXECUTIVE FUNCTIONING SKILLS FOR STUDENTS WITH LANGUAGE IMPAIRMENTS

by

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ABSTRACT

The collaborative efforts of families, educators, and policy makers have merged vocational training with special education services for students with disabilities. The Individuals with Disabilities Education Act of 2004 introduced mandates for schools to provide transition services for students with disabilities based on three areas of need: a) education, b) employment, and independent living. This legislation has led to more work-based learning programs that meet the postsecondary needs for students with disabilities. Despite this increase in work-based learning programs many students with disabilities are still unable to make successful transitions into postsecondary outcomes. Using a mixed method design, this study examined the impact of a Job Experience Training (JET) program on the executive functioning skills of seven young men (15 to 18 years of age) over the course of seven weeks at an assisted living facility. Results of the teacher evaluations showed the students were capable of completing tasks, making individual goals, and increasing executive functioning skills while participating in the JET program. Conversely, the results from the parent and student assessments showed little to no change in executive functioning skills once the participants were outside the context of the assisted living facility. Future research is encouraged to examine a longitudinal study across multiple job sites that evaluates and measures the students' ability to transfer executive functioning skills to other contexts and further investigate mentoring as the core teaching strategy of a JET program.

To Susan, Sam and Will

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LIST OF ACRONYMS/ABBREVIATIONS

ASDAN	Award Scheme Development and Accreditation Network
CEFI	Comprehensive Executive Functioning Inventory
IEP	Individual Education Plan
IDEA	Individuals with Disabilities Education Act
JET	Job Experience Training
LI	Language Impaired
SBE	School-Based Enterprises

CHAPTER ONE: INTRODUCTION

Shortfalls within the United States public school system have become a catalyst for economic disaster as a large number of students with disabilities are graduating from high school with little ability to be competitive in a challenging job market. The ability to serve students with disabilities in education and business communities should be a concern for everyone in the United States as legislative protocol strives to support rather than dismantle the vocational needs of the next generation. United States special and vocational education has always supported the ability of students with disabilities to maximize their postsecondary potential despite the challenges this student population faces accessing higher education, employment opportunities and independent living after high school. Students with disabilities need educational purpose and value to successfully transition into adult life and one of the most promising developments for the successful transition of students with disabilities over the past decade has been through a rebirth of school-to-work, dual-enrollment, and vocational training programs. Over the past ten years the combination of legislative protocol and economic downturns have forced school districts to re-evaluate workforce training models that support and enhance the educational achievements of their students. This study is designed to evaluate the ability of a community-based Job Experience Training (JET) program to impact the executive functioning capabilities for students with high-incidence disabilities and more specifically students with pragmatic language impairments.

Statement of the Problem

The results of two National Longitudinal Transition Studies (NLTS-1983-1990; and NLTS-2-2000-2012) funded by the Department of Education tracked a national sample of students with disabilities for nearly three decades as they transitioned from high school to postsecondary lives and found students with disabilities achieving postsecondary education, employment and independent living outcomes at a lower rate than their non-disabled peers. The results of the NLTS, NLTS-2 were based on tracking students for up to six years after high school and utilizing telephone interviews and home questionnaires for the purpose of documenting postsecondary outcomes. These outcomes consist of many elements of transition services for students with disabilities including: a) comparisons made to students without disabilities, b) marital status, c) financial independence, d) community integration, and e) residential independence. The results of NLTS and NLTS-2 are further supported by a recent report by the Government Accountability Agency (2012) stating students with disabilities are not successfully transitioning into life after high school due to limited opportunities to engage in vocational and life skills training while in school.

Even when students with disabilities graduate from high school and have vocational training, their disabilities do not always allow them to become productive members of society. Employment opportunities are scarce and usually short-lived as the individuals' disabilities impede their ability to be a consistent and productive worker. Additionally, due to the economic downturn of the United States since 2006, many businesses with entry level employment positions no longer have an interest in investing educational support and training for students with disabilities as they have the ability to hire more highly qualified individuals.

In the state of Florida, community colleges have traditionally offered vocational training programs for students with disabilities, but have recently been moving away from

vocational training programs to meet the demand of higher education needs and now have the capacity to be more selective about their prospective student body. In large part, colleges and businesses are still willing to assist and support the vocational training of students with disabilities, but the systematic changes to the education and business sectors over the past five to seven years have redirected the postsecondary education and employment training of students with disabilities back to the K-12 school experience.

Legislative Support

Academically, the U.S. Department of Education (2002) addressed postsecondary success by mandating individuals entering the workforce out of high school have a strong foundation in both occupational and academic skills and authorized the No Child Left Behind Act (NCLB, 2001) which intended to close the achievement gap by requiring students to pass rigorous academic assessments and benchmarks to advance in the education system. Although NCLB raised the academic expectations for students with disabilities, it redirected resources in many schools away from vocational training in order to meet academic objectives. Vocationally, the Department of Labor has recently proposed a regulatory amendment to the Rehabilitation Act of 1973 which includes a hiring quota and strict stipulations on data collection, disclosures and evaluations of the hiring of nondisabled versus disabled employees (Cann, 2013), but the impact of these regulations remain to be seen. Over the past fifteen years, it could be argued that special education public policy has provided the most significant impact on the postsecondary transition capabilities and vocational training program development for students with disabilities.

In addition to NLTS and NLTS-2, a follow up comparison study between 1990 NLTS and 2005 NLTS-2 by the National Center for Special Education Research (2010) found a 65 to

86 percent increase of students with disabilities engaged in postsecondary education or employment outcomes (Newman, Wagner, Cameto, Knokey, Shaver, 2010). The upturn for NLTS and NLTS-2 postsecondary engagement percentages from 1990 to 2005 are at least partially attributed to legislative support through the Individuals with Disabilities Education Act (IDEA, 1997). IDEA 1997 brought attention to transition services and initiated changes to educational service delivery models by requiring special education student study teams to address transition goal statements for students on Individual Education Plans (IEPs). Seven years later, the Individuals with Disabilities Educational Improvement Act (IDEIA, 2004) provided strict legislature with transition mandates requiring transition services for students with disabilities and documentation when a student reaches sixteen years of age. Transition services for students with disabilities are designed to facilitate the students' movement from high school to a postsecondary education, vocational education, integrated employment, supported employment or community participation (IDEA, 2004).

In conjunction with IDEA 2004, the U. S. Department of Education and the Office of Special Education Programs began requiring states to adopt performance plans with IEP transition planning service indicators. In the state of Florida, performance Indicator 13 changed the traditional IEP to a transition IEP with a desired postsecondary outcome statement. Subsequently, Indicator 13 has forced the hand of school districts and other state agencies to provide IEP documentation and support for transition service delivery models and expectations for students with disabilities. In Florida, the IEP must address postsecondary education, employment and independent living goals for the student beginning at age fourteen. Still, regardless of documented postsecondary transition goals the challenge remains for school districts to serve students with disabilities in ways that deliver on legislative promise.

Students in Need

Since the inception of IDEA 2004, one of the most highly identifiable subgroups of students in need of transition services are students labeled with Language Impairments (LI). The Florida Department of Education defines LI as disorders of language that interfere with communication, adversely affect performance and/or functioning in the student's typical learning environment, and result in the need for exceptional student education (FDOE, 2013). In some cases, students with LI may include a combination of another disability profile and have extreme difficulties with mainstreamed educational standards. Training students with LI in higher education facilities is often a more challenging student demographic to work with and educate. Additionally, students with disabilities behind in executive skills development may require more intensive support for a longer period of time (Dawson and Guare, 2010). These students regularly work toward special diplomas including high school certificates of completion. The Florida Education and Training Placement Information Program (FETPIP) is a reporting system providing follow-up data on former students and program participants who have graduated, exited or completed a public education or training program within the state. FETPIP reports the postsecondary placement outcomes for students who have previously graduated to allow time for students to matriculate into postsecondary education and employment placements. The most recent FETPIP report (2008- 2009) found high school certificate completers achieving postsecondary outcomes at even a lower rate than their peers with 42% employed and 16% continuing their education in postsecondary formats (FDOE, 2012). One of the many challenges facing schools and communities addressing vocational training issues for a younger population of students is in the opportunities for students exiting high school and entering the business or higher education sectors.

Purpose of the Study

In an effort to address transition legislation and service delivery models, school districts in the state of Florida are in the process of revamping and developing new School-Based Enterprises (SBE). SBE's are a described as a set of entrepreneurial activities for students in their first job training experiences including developing responsibility; confidence and beginning to maintain independence (Gamache & Knab, 2008). There are currently over a hundred school- based enterprises operating in Florida school districts (Project 10 Regional Network, 2012). Many SBE programs offer job experience training objectives and are structured in their own ways depending on regional philosophies, resources, and organizational capacities. While few would argue SBE transition training programs have the ability to provide lifelong learning outcomes for students with disabilities, it's often difficult to evaluate the effectiveness of one SBE or job training program over another. The challenge facing school districts is to substantiate the value of existing job training programs while offering substance and credibility in the development of new training programs. The purpose of this study is to examine the impact of a community-based job training program on the executive functioning skills of students with disabilities. Further, the goal of this study is to provide a clearer perspective of how a seven week long job experience training at an assisted living facility has an impact on the executive functioning skills of students with language disabilities.

Research Questions

1) To what extent does participating in a community-based Job Experience Training program impact the executive functioning skills of students with Language Impairments?
2) How does a seven week Job Experience Training placement at an assisted living facility impact the executive functioning skills for students with Language Impairments?

Research Design

The present study is designed to measure a community-based job experience training program's impact on the executive functioning skills development of students with Language Impairments (LI). Executive functioning skills in the workplace are critical to the ability of a student with disabilities to be successful in the workplace. Dawson and Guare (2010) note executive skills enable the individual to manage emotions and monitor thoughts in order to work more efficiently and effectively. This study utilizes a mixed method research design with a Comprehensive Executive Functioning Inventory (CEFI) assessment as the quantitative method; and a goal-driven performance-based observation as the qualitative method. The CEFI is a comprehensive evaluation of executive function strengths and weaknesses and offers parent, teacher and self-evaluation multi-rater reports for youth ages 12 to 18 years (CEFI website, 2013). The goal-driven performance-based observations were completed on a weekly basis for each student participating in the job experience training program and included four parts: a) weekly student goals, b) task completion, c) teacher observation notes, and d) primary investigator observation notes. Isquith, Roth, and Gioia (2013) note rating scale and performance-based measures provide complementary information for a child's executive functions, and offer a more comprehensive view than either approach alone.

Assumptions

This study will evaluate the impact of a job experience training program on executive functioning skills for students with Language Impairments. The study makes the following assumptions:

3) The results of this study will establish that there is either an impact or no impact on the executive functioning skills of students with disabilities participating in a seven week community-based job training program.
4) Students participating in the study will not be participating in any other job training programs that target the impact of executive functioning skills through work-based learning in the community. Students may be exposed to social skills development and academic coursework through other high school courses, but will not be actively working in an employment setting outside of the parameters of this study.
5) Teachers, parents, students, job-coaches, mentors, and anyone else involved with the job training program will have full knowledge and disclosure of the objectives of the study and have opportunities to clarify the intent of the observations or assessment guidelines.

Limitations

1) ***Study Size:*** This study evaluates the impact of a job experience training program for seven fifteen to eighteen year old male students. The sample size is small and only one gender is represented in this study.
2) ***Constantly Shifting Model***: Part of this study involves "job coaching" and the ability of the business and educational partnership in the job experience training program to form an ongoing and trustworthy relationship with the participating students. Some business

communities have a high rate of *"job change"* and it is common for people to change jobs within the service industry. Absenteeism or job change has the ability to disrupt the effectiveness and value of the job training relationship that is part of the study. For example, if a student is working with a job coach in the kitchen at the assisted living facility, it may be common for the job coach to be moved to another job to fill in for an absent job coach thus disrupting the normal training regime.

3) ***LI student aptitudes and personal assistance:*** Due to the processing abnormalities of the targeted student population, students will require clarification of the CEFI inventory questions or require the questions to be read to them. Therefore, personal bias may factor into the rating scale scores and the level of clarification for survey response items couldbe subjective depending on the relationship the administrator has with each individual student. For example: a question measuring the "ability of a student to communicate and relate to the public or communicate effectively" may be clarified and interpreted more or less effectively based on the relationship the primary investigator has with each individual student.

Definition of Terms

1) ***Benefactor Relationships*:** A trusting, dependable, person who provides an individual with long-term counsel and support during the transition process (Siegel et al. 2003).
2) ***Career and Technical Education*** "Blending career or occupation-specific knowledge, opportunities for innovation and change in occupations-specific knowledge, and the thoughts and perspectives of the individual student and teacher" (Kochhar-Bryant, Bassett, and Webb, 2009, pg. 81)

3) ***Executive Function:*** a single phenomenon, conceptualized as the efficiency with which individuals go about acquiring knowledge as well as how well problems can be solved across nine areas: attention, emotion, regulation, flexibility, inhibitory control, initiation, organization, planning, self-monitoring, and working memory (Goldstein, S., Naglieri, J., Princiotta, D. and Otero, T.M. (2013).

4) ***Job Experience Training (JET):*** JET takes on many different forms in the United States and throughout the world. However, for the purposes of this study JET is a *community-based* vocational training program by which students participate in *non-paid* working experiences on *actual* job sites. This training program provides students with small group instruction (usually between 4 and 6 students per site) and job coach supervision. The program is intended to prepare students for the working world through "*hands-on"* learning and actual on-the-job training opportunities (Elliott, 2014).

5) ***Person-Centered Planning*** The process of closely examining the interests, aptitudes, knowledge, and skills of an individual, not on his or her perceived deficits, to establish a basis for identifying appropriate types of employment, training, and career development possibilities (Kochhar-Bryant, Bassett, and Webb, 2009)

6) ***Transition Services:*** 1) a coordinated set of activities focused on improving the academic and functional achievement of a student with a disability; 2) should help facilitate the students' movement from high school to a postsecondary education, vocational education, integrated employment, supported employment and community participation (IDEIA, 2004).

7) ***Vocational Education*** an educational construct which prepares learners with and without disabilities for careers that are based in manual or practical activities related to a specific trade, occupation, or vocation (Kochhar-Bryant, Bassett, and Webb, 2009,pg. 72)

8) ***Vocational Rehabilitation Services*** the primary federal vehicle for assisting individuals with disabilities to obtain employment, offers direct links to education, training, and employment links after high school (Kochhar-Bryant, Bassett, and Webb, 2009, pg. 34)

9) ***Work-Based Learning***: Work-based learning is a contextual or informal learning process that takes place outside a traditional classroom setting and deliberately uses the workplace as a site for student learning (Hodkinson, Colley & Malcolm, 2003).

CHAPTER TWO: LITERATURE REVIEW

Introduction

Employment is a fundamental part of being a contributing member of society. Every society must ensure adult roles are filled by members of the next generation, and it is important that a certain proportion of youth can successfully fill those roles (Gardner, 2000). Employment outcomes for students with disabilities should be everyone's concern, and job experience training is a method of facilitating those concerns. Our ability to serve students with disabilities in the education and business community is essential to providing them with a fulfilling and productive life after high school. The purpose of this chapter and literature review of the study is to examine the theories, research, legislature, and the educational expectations for students with Language Impairments (LI) participating in a job experience training (JET) program. Most studies on this topic have evaluated JET as an educational alternative, but few have examined work-based learning programs as a systemic solution to dropout prevention, community involvement and increased social success for students with disabilities. Most literature on JET programs has been based on individual vocational education programs for academic achievers, but little has been written about the core components of a JET program and why it is such an effective educational means for students with disabilities. Additionally, little analytic attention has been paid to how JET programs provide benefits to a struggling economy and business community. This literature review provides insight into the theories, politics and practices of JET programs that can collectively contribute to postsecondary employment outcomes for students with disabilities.

Special and Vocational Education Legislature

The legislative history of special and vocational education public policy in the United States began in the mid-eighteen hundreds and has continued to the present day as laws, litigation, and special events have shaped educational service delivery systems for students with disabilities transitioning from high school to the adult workforce. Since the mid-eighteen hundreds, these two educational support systems have worked together to meet the needs of students with disabilities transitioning to the adult workforce. Although the combined history of vocational and special education has been a continual course of events by which students, citizens, and policymakers have worked together to construct today's educational service delivery system, there are distinctive periods of time when the rights for individuals with disabilities and their ability to access postsecondary transition outcomes made a historical impact. These time frames can best be explained by the historical and chronological order of laws, litigation, and global events affecting policy change. In order to provide the reader with a more organized outline, this review has grouped these events by decades and multiple decades that fit within the context of change. These groupings are a) Pre-20th Century, b) 1900-1920, c) 1920-1950, d) 1950- 1970, e) 1970- 1990, and f) 1990-present day. The laws, litigation and events impacting vocational and transition service delivery models are displayed through a chronological timeline (Table 2.1: Special and Vocational Education Legislative Transition Service Timeline).

Table 2.1: Special and Vocational Education Legislative Transition Service Timeline

Decades	Years	Legislation
Pre–20th Century	*1840 & 1852*	Rhode Island and Massachusetts Compulsory Education Laws Included children with disabilities in regular classroom environments
	1883	Watson vs. City of Cambridge Established students with disabilities could be expelled from schools due to disruptive characteristics of the disability.
1900–1920	*1917*	Smith-Hughes Vocational Education Act Established vocational education as a federal program reinforcing the beliefs that youth should be prepared for entry-level jobs by learning occupational skills.
	1917	World War One Ends. Disabled veterans return home. Led to increased medical research and advocacy groups for all individuals with disabilities
1920–1950	*1920–1950*	Increased Advocacy Groups Worldwide Council for Exceptional Children, United Cerebal Palsy, Muscular Dystrophy Association
	1929, 34, 36, 46	Vocational Education George Acts Provided federal money and structural development for Vocational Education programs
1950–1970	*1954*	Brown v. the Board of Education Civil Rights mandating public school racial integration
	1963	Vocational Education Act Improvement of vocational training programs and services for disadvantaged and disabled students
	1966	Elementary and Secondary Education Act Assisted the states in the initiation, expansion, and improvement of programs for the education of handicapped children.
1970–1990	*1971*	Pennsylvania Association for Retarded Citizens (PARC) v. the Commonwealth of Pennsylvania Established free and public education for all students with disabilities
	1971	Mills v. Board of Education of the Districts of Columbia Established educational "due process" and serving students with disabilities in the least restrictive environment
	1973	Rehabilitation Act of 1973 Supports the hiring and training of individuals with disabilities in the workplace by requiring businesses to refrain from discrimination and provides services that promote employment outcomes.

Decades	Years	Legislation
	1975	Education for all Handicapped Act Mandated a Free and Appropriate Public Education, and Individual Education Plan for Students with Disabilities
	1982	Rowley v. the Board of Education Supreme Court ruled an *appropriate education* does not minimize or maximize the student's educational potential, but contains specialized services to permit *educational benefit* from special education services
	1984	Carl D. Perkins Act Provided funding for specialized programs in vocational education, for students with special needs and the re-training adults
1990 - present	*1994*	School-to-Work Opportunities Act Embraced hands-on work experiences, employment skills training, and workplace mentoring through vocational education programs.
	1997	Individuals with Disabilities Education Act Introduced changes to many disability service requirements including IEP team members, behavior and discipline guidelines, special education practices, service models, and a brief suggestion of the students' transition needs.
	2001	No Child Left Behind Mandated individuals entering the workforce out of high school have a strong foundation in both occupational *and* academic skills.
	2004	Individuals with Disabilities Educational Improvement Act Introduced distinctive mandates for schools to provide *transition services* for students with disabilities. Transition services are defined as "a coordinated set of activities focused on improving the academic and functional achievement of students with disabilities."
	2006	Carl D. Perkins Career and Technical Education Act Led to a resurgence of vocational education programs for students looking to enter the workforce out of high school.
	2007	Ross v. Illinois Department of Education District court found it reasonable for the school district to determine that a student had not yet progressed to the point at which a transition plan was necessary, and the court determined the students was not in a position to benefit from a transition plan including vocational or educational skills development.
	2008	Lessard v. Wilton County School District District court ruled the IEP need not contain a stand alone transition plan. An individualized transition IEP does not imply that a disabled

Decades	Years	Legislation
		child is entitled to the maximum educational benefit possible, only that the IEP provides a statement of transition services.
	2008	K.L. vs. Mercer Island School District The Supreme Court noted IDEIA is focused on transition services that provide an outcome-oriented process. The word process denotes a procedure which does not imply a substantive standard or a particular measure of progress.
	2008	Higher Educational Opportunity Act Empowers programs that provide support for disadvantaged student populations transitioning from high school to college. The HEOA provides funds and promotes partnerships and collaboration efforts between local education agencies.

Pre-20th Century

The inclusion of individuals with disabilities into mainstream learning opportunities has been an ethical and historical point of interest for most of human history. The formation of Special Education policies and practices was developed largely before World War I but ended up laying the foundation for war veterans, independent citizens, and public school children for centuries. Special Education inclusive practices date back to the mid 1800's when Rhode Island and Massachusetts passed compulsory education laws in 1840 and 1852 providing all students with the structure of inclusion and service delivery in the same school setting (Yell, Rogers & Rogers, 1998). Compulsory education continued to be a hotly debated topic as children with disabilities were often excluded even within inclusive schools for the next three decades. In Watson v. City of Cambridge (1983), the Massachusetts Supreme Judicial Court made an exclusive ruling when it determined students who were "weak in mind" could be expelled from public school**.**

1900- 1920

The beginning of the nineteenth century introduced the Smith-Hughes National Vocational Education Act (1917) which first established vocational education as a federal program. The Smith-Hughes Act introduced alternative vocational education models by structuring agricultural training opportunities for students to work on their family farms in New England. Students would go to school for part of the school day and work for part of the day earning school credits and beginning to make the transition between school and life as a working adult. The Smith-Hughes Act not only supported the farming industry but allowed for students with unique needs to make transition progress. The Smith-Hughes Act also provided the beginnings of a structural framework for dual-enrollment, apprenticeship, and work-based learning opportunities still used in automotive, construction, child-care, culinary, health science, and many other postsecondary employment industries today. Differences of opinion for inclusive and exclusive educational practices continued until 1918 when compulsory education laws were instituted in all states. Still, only one year later in Beattie

Board of Education (1919), the Wisconsin Supreme Court ruled that school officials could exclude a student who had been attending public school until the fifth grade because of conditions causing interruptions in class due to the nature of the student's disability. During this historical period of time many changes were also taking shape in the United States and the rest of the world's view of individuals with disabilities.

1920-1950

World War I had a unique role in the cooperative development of special and vocational education organizations worldwide. As disabled veterans returned from service duties, they were in need of vocational education rehabilitation and training services. This occurrence

sparked interest in the medical science field which began to extensively study and increase the knowledge base and effective practices for serving individuals with disabilities. This increased knowledge base contributed to new constituent groups of parents of students with disabilities. During this timeframe special and vocational education policies and practices were beginning to be driven by independent initiatives, advocacy groups, and activist groups representing strong special education societies. Some of these societies are still powerful political advocates for students with disabilities today including the Council for Exceptional Children; United Cerebral Palsy Association; and the Muscular Dystrophy Association. Hardman, Drew and Egan (1999) described the availability of public school programs for exceptional children from 1920 to 1950 as sporadic. The limited number of federal mandates for special education services shifted the responsibility of serving children with disabilities to the state and local governments. During this time, vocational education legislature continued to provide more federal money and extended the provisions of the Smith-Hughes and subsequent acts. The George-Deen Act (1936) added distributive educational funding, youth programs, and counseling to the vocational education sector. The George-Deen Act reinforced the need for the development, supports and services for students with disabilities to successfully transition from education into workforce opportunities.

1950- 1970

In the 1950's both the vocational and special education sectors were becoming well-established educational frameworks in the United States. Brown vs. the Board of Education (1954) and the civil rights movement supported special and vocational education initiatives when racial integration became mandatory in public schools. Like minorities, students with disabilities were still being underserved and oppressed by the educational system. Increased awareness of the inequities of the public school service delivery model would be highly

scrutinized and grounded in equality until the present day. School accessibility increased at state and local levels in the 1960's as more students with disabilities were able to participate in inclusive school practices and vocational education programs. The Vocational Education Act (1963) provided a broader definition of vocational education to include the improvement of programs and services for disadvantaged and disabled students. The United States also amended its Elementary and Secondary Education Act (1966) to assist the states in the initiation, expansion, and improvement of programs for the education of handicapped children, a term still used in 1966.

1970- 1990

The early seventies brought more special and vocational educational reform. The Pennsylvania Association for Retarded Citizens (PARC) vs. the Commonwealth of Pennsylvania (1971), established that schools provide a free public education to all school-age children with mental retardation. PARC was the catalyst for more educational reform nationwide. In the case of Mills vs. the Board of Education (1971), a civil action was brought on behalf of seven school age children with handicapping conditions in the District of Columbia. Mills established integration *due process* for students with handicapping conditions and placed strict barriers on disciplinary infractions including suspensions and expulsions for handicapped students (Murray & Murray, 2009). The Mills case provided educational evaluation and re-evaluation guidelines for students with disabilities, and maintained that parents must be notified of the students' disability placement rationale in their respective schools. Mills asserted the placement of a student with a disability must be made in the least restrictive environment. The Rehabilitation Act (1973) was a product of an era with a focus on civil rights legislation and established protective postsecondary educational guidelines for students with disabilities. The

Rehabilitation Act required businesses to refrain from discrimination against individuals with disabilities during the hiring process and supported the employment training of individuals with disabilities. Section 504 of the Rehabilitation Act offers daily placement and services to students who have an existing medical condition. In this case, classroom accommodations and educational support may be offered through a 504 plan. The Education of All Handicapped Children Act (EHA, 1975) established a Free and Appropriate Public Education (FAPE) for students with disabilities. FAPE refers to special education and related services which are under public supervision and provided at public expense. FAPE was tailored to meet the unique needs of handicapped children by providing students with an individualized educational plan (IEP). In the case of Rowley vs. the Board of Education (1982), a girl with a hearing impairment (Amy Rowley) put FAPE and the IEP to the test in the state of New York. Amy was in need of assistive technology devices to be successful in regular education classrooms. The Rowley decision eventually ended up in the Supreme Court where the court ruled an appropriate education does not minimize or maximize the student's educational potential, but contains specialized services to permit educational benefit from special education services. The Rowley decision personalized the IEP process and quickly became the standard by which special education services are measured. Individualized educational approaches were taking shape during this period of time and continued to develop with a strong piece of vocational legislature. The Perkins Vocational Education Act (1984) provided funding for specialized programs in vocational education, support for individual special needs, and retraining of adult basic skills. Emphasis on career and technical training within the vocational education sector would eventually make a great impact on the postsecondary training opportunities for students with disabilities.

1990- Present

From 1990 to the present, special and vocational education policies have grown together as both sectors continue to serve and support students transitioning from school into the workforce. The Americans with Disabilities Act (ADA, 1990) identified individuals with disabilities as having a physical or mental impairment that substantially limits their capacity as a worker. ADA provides anti-discrimination legislation for qualified individuals with disabilities through job application procedures, hiring, workers compensation, job training, and other employment provisions. The School-to-Work Opportunities Act (1994) embraced hands-on work experiences, employment skills training, and workplace mentoring through vocational education programs which greatly benefit the needs of students with disabilities gaining employability skills.

In 1990, the EHA was codified as the Individual with Disabilities Education Act (IDEA) and the legislative reauthorization of IDEA (1997) introduced changes to many disability service requirements including IEP team members, behavior and discipline guidelines, special education practices, service models, and a brief suggestion of the students' transition needs. The Elementary and Secondary Education Act was reauthorized as The No Child Left Behind Act (NCLB, 2001) and increased accountability of educational outcomes in the United States. Results of a study by Nagle, Yunker and Malmgren (2006) revealed educators recognize students with disabilities are *vital* to educational reform. NCLB methodology supports accountability across multidisciplinary service industries which helped bring together special and vocational education positions on workforce development. In a report to Congress, the United States Department of Education (2002) maintained individuals entering the workforce out of high school have a strong foundation in both occupational and academic skills. IDEA was again reauthorized in 2004 and became the Individuals with Disabilities Educational

Improvement Act (IDEIA, 2004). IDEIA mandated schools provide transition services for students with disabilities. IDEIA established transition services that help facilitate the students' movement from high school to a postsecondary education, vocational education, integrated employment, supported employment or community participation. Turnbull (2005) aligned IDEIA's focus on personal responsibilities with the accountability focus of NCLB.

Today, the most widely available vocational education programming for students with disabilities is through Career and Technical Education (CTE). The Carl D. Perkins Career and Technical Education Improvement Act (2006) led to a resurgence of vocational education programs for students preparing to enter the workforce out of high school. In most cases, CTE courses offer the kind of workforce curriculum and postsecondary training opportunities that students with disabilities need after high school. The Higher Education Opportunities Act (HEOA, 2008) ended the era of legislative exuberance by empowering programs providing support for disadvantaged student populations transitioning from high school to college. The combination of the Perkins and Higher Education Acts benefits many students with disabilities who struggle with more traditional postsecondary education tracks.

Court Cases

Since IDEIA infused transition services into the IEP, court cases involving transition services have emerged across the nation. In the case of Ross vs. the Illinois State Board of Education (2007), the parents of a student with special needs (Lindsey) argued the IEP for their daughter failed to include a transition plan. The school district conceded that the transition plan had been deferred. The district court agreed with the parents that the school district did not have the authority to take such action and had made a procedural error when it failed to include a transition plan in the student's IEP. However, the district court found it reasonable for the

school district to determine that Lindsey had not yet progressed to the point at which a transition plan was necessary, and the court determined Lindsey was not in a position to benefit from a transition plan including vocational or educational skills development. Therefore, this procedural flaw did *not* result in the denial of FAPE and no compensation was awarded. In the case of Lessard vs. Wilton-Lyndeborough Cooperative School District and the New Hampshire Department of Education (2008), the parents of a student with moderate mental retardation, cognitive delays, speech impairments, a seizure disorder, scoliosis, and partial paralysis of her left side argued the transition services on the IEP were incomplete. This case revolved around the fact that the parent refused to sign her daughter's IEP on multiple occasions, and the school district invoked its right to a due process hearing. The court ruled the IEP suffered from neither procedural nor substantive faults, the appellants were demanding more than the IEP required, and the appellants frustrated the operation of a collaborative process and put the school district in an untenable position. The district court ruled the IEP need not contain a standalone transition plan. An individualized transition IEP does not imply that a disabled child is entitled to the maximum educational benefit possible, only that the IEP provides a statement of transition services.

In the case of K.L. (minor) versus the Mercer Island School District (2008) in the state of Washington, the parents of a student diagnosed with a learning disability (K.L.) argued transition services were not provided as part of the IEP. The court ruled that K.L. did not receive FAPE in eighth, ninth, and tenth grades and the IEP during these years failed to focus on progressing K.L. toward self-sufficiency and her desired goal of postsecondary education. K.L. proceeded to be removed from the school district and her parents placed her in private schooling. Initially, the court ruled the placement at a private school was appropriate and the family was awarded reimbursement for tuition and related expenses for tenth and eleventh grades based on the

district court's holding that K.L. did not receive FAPE in those grades. The district court ordered the school district to pay for three years of private schooling and attorney fees totaling over 160K. However, in the subsequent appeal of this decision, the Supreme Court noted IDEIA is focused on transition services that provide an outcome-oriented process. The word *process* denotes a procedure which does not imply a substantive standard or a particular measure of progress. The Supreme Court ruled the school district did *not* fail to provide K.L. with FAPE and the family received *no* reimbursement for the private school or attorney fees.

Career and Education Planning

The Individual Education Plan (IEP) is the legislative vehicle responsible for documenting transition plans, services, and supports for students with disabilities. As a result of IDEIA (2004) legislature, most school districts nationwide have been mandated to make changes to the student's IEP to address postsecondary transition goals, timelines, and training opportunities. Research and legislation in special education consistently identifies four areas as the cornerstone of post-secondary success for students with disabilities: 1) employment; 2) post-secondary education; 3) independent living, and 4) recreation and leisure (National Transition Network, 1997). These four identifiers of postsecondary transition development and success for students with disabilities are often addressed on the IEP through transition planning and desired post school outcomes statements. The process of collecting, documenting, and facilitating transition planning on the IEP is the first step in moving a student with disabilities into postsecondary employment outcomes.

Student-Centered Planning

One of the keys to transition planning of high quality is in the ability of the IEP team to develop a student-centered planning approach. Studies have shown person-centered transition planning results in a successful link to higher employment outcomes (Lindstrom et al., 2007). Research has also established that person-centered planning leads to career goals and exposure to work and career options including jobs that are the most appropriate and rewarding to the individual (Woolsey & Katz-Leavy, 2008). Person-centered planning has the ability to advance self-determination and self-advocacy skills for students with disabilities. Super's (1980) theory of occupational choice and career development maintains the concept of "self" is directly proportional to the ability of the individual to make his or her occupational choice, and Wehmeyer & Schwartz (1997) noted self-determination skills contribute to increased employment opportunities for individuals entering the workforce. Although, person-centered transition planning promotes individualized capabilities and fosters developmental practices that lead to better employment outcomes, students with processing abnormalities are still fundamentally less capable of making their own lifelong employment decisions. Interest inventories and other postsecondary transition planning approaches should be used to supplement IEP transition planning for students who are not capable of identifying clear employment goals. Williams-Diehm & Lynch (2007) noted only half (54.5%) of special education IEP transition plans described the career choice of the student with (18%) providing vague responses with no specific career aspirations. To work effectively parents, teachers, and other support personal should provide guidance and feedback to the student with the student maintaining the central focus of the decision making process. It remains the responsibility of the educational system, including the job experience training program to provide support services and strategies that will assist students with disabilities in reaching their maximum potential.

Transition Training Models

One reason for such strong legislative support for the postsecondary success of students with disabilities is that the transition service delivery models are complex. IEP transition planning is often designed to fit the student into a particular program even if that program, and eventually the IEP comes under scrutiny for not meeting the needs of the individual. In a study of student knowledge of transition planning and its process, Williams-Diehm & Lynch (2007) maintain students are preparing for life after high school with little or no help from school personnel. School representatives with students on their case load are often responsible for getting parent permission to invite outside agencies, organizing meeting times, locations, and the corresponding paperwork. These professionals are also dealing with students that represent a broad range of disabilities and clear transition pathways are not often the case. Presently, during the most pivotal years for successfully transitioning students to lifelong learning and employment outcomes, many regard the IEP as having little substance (Rock, 2000). As important as it is for teacher and other school staff to initiate the transition planning process for students with disabilities, it's difficult to believe teachers and school staff have the capacity or expertise to navigate the complexities of assisting the student in gaining workplace success alone.

Outside Agency Assistance

Students with disabilities often make inappropriate career decisions because they do not see the relationship between educational attainment and employment outcomes. Students with disabilities do not typically have the ability to realize how their own personal interests and characteristics fit into rapidly changing vocational systems. Research shows students with disabilities face knowledge deficiencies and many other barriers preparing them for the

transition from high school to postsecondary employment outcomes (Wagner, Newman, Cameto, Garza, & Levine, 2005; Madaus, Gerber & Price, 2008). Legislation has supported the IEP as a team practice where appropriate team members may be represented by outside agencies or even members of the local business community. These agencies may include for-profit or not-for- profit state or federal agencies outside the school system such as the Department of Vocational Rehabilitation Services, Children's Medical Services, Behavior Support Services, etc. These agencies exist to provide services to help students with disabilities find, learn, and keep a job (Gugerty, Tindall, Weis, Phelps & Dhuey, 1996). Still, organizing and facilitating a transition team with outside agency involvement creates pressing demands on teachers, specialists, and other school professionals. IEP transition planning of high quality also relies on the direction and support of family members, social networks, and other support systems that can identify the strengths and skills of the student (Martin, Marshall & Sale, 2004). Many students have support from family and friends, but without an advocate or benefactor, they stand little chance of making substantial progress toward gaining independence after high school. A benefactor is a trusting, dependable person who provides the individual with long-term counsel and support during the transition process (Siegel et al. 2003). These relationships are imperative to the ability of the student and his/her family to navigate the uncertainties of the transition process and obtain or maintain employment outcomes.

Work-Based Learning

As academic barriers manifest themselves in large numbers of students with disabilities, it's more important than ever to provide access to a full range of educational opportunities. One of the criticisms of NCLB legislature is that it has resulted in students with disabilities spending most of their time failing regular education classes and unable to participate in vocational education classes and programs providing more vocational certainty. Studies show youth with disabilities who receive vocational training are better prepared for a successful transition into adulthood, and have a better chance of becoming a contributing member of society (Johnson, Stodden, Emanuel, Luecking & Mack, 2002). Today, the most widely available vocational education programming for students with disabilities is through Career and Technical Education (CTE). Although CTE programs are designed around vocational tracks, CTE has a rigorous academic curriculum to follow and may only lead to more failure for students with disabilities. Harvey, Cotton & Koch (2007) articulated the need for supports, assistance, training, and awareness concerning the inability of CTE instructors to serve students with disabilities. To successfully meet the individual needs of students with disabilities, our educational system may need a resurgence of work-based learning and other community-based vocational training programs.

Community-Based Job Experience Training Theory

The overwhelming need for vocational training for students with disabilities has constituted a review of our educational approach in serving this student population. Parents of students with disabilities often say that the world stops caring for their son or daughter when the school bus stops showing up to take them to school. Schools often create a developmental bubble through contextually safe and supportive learning environments for students with

disabilities. The students and their families become dependent on a school which is not matching the contextual challenges found in the adult working world. Learning and working are interdependent experiences only the workplace can provide and unlikely to be replicated in educational institutions (Billett 2001, chapter 1, pg. 39). Work-based learning is a contextual or informal learning process that takes place outside a traditional classroom setting and deliberately uses the workplace as a site for student learning (Hodkinson, Colley & Malcolm, 2003). Work-based learning stems from the idea that eventual engagement in the workplace is necessary to embrace a students' vocational expertise. The prospect of evaluating executive functioning skills in the workplace is dependent on the ability of the student to transfer existing abilities from the context of the classroom environment to that of the workplace. Dawson and Guare (2010) note children struggling with the flexibility to regulate executive functions in classroom environments are likely to do better in social environments in which the number of children whom they have to interact is reduced and the degree of adult supervision is increased.

Student Motivation

Work-based learning has the ability to provide both extrinsic and intrinsic motivation through the ability of the individual to fit into the workplace environment and perform work-related tasks. Students with emotional disabilities have shown positive outcomes through increased motivation, personal presentation, social competence, and peer relations through community-based learning (Curtin, 2008). Work-based learning works because it takes a reactive form, where the learning is unplanned but still recognized by the learner. Livingstone (2000) compared informal learning practices to an iceberg, in that a small portion is observable, but the vast majority of it takes place in subtle forms that are not easily observed and documented. Upon entering the workplace, individuals will strive to maintain balance. A

student will use existing knowledge (*assimilation*) to respond to their new environment and incorporate new knowledge (*accommodation*) into that stimulus (Piaget 1966). This provides the individual with a sense of self-accomplishment and self-fulfillment. The workplace environment provides external rationale promoting student motivation and engagement when delivered autonomously (Jang, 2008). The student will attempt to balance their lack of knowledge in the workplace, and become motivated to learn and impress others in the working environment (Piaget, 1976). In this sense, work-based learning has the ability to provide both extrinsic and intrinsic motivation through a combination of social competence and personal identity.

Social Competence and Personal Dispositions

Dewey (1916) maintains vocations are directly associated with an individuals' sense of personal identity and well- being. Students with disabilities are typically not comfortable with themselves or have a lost sense of identity, and poor performance in an academic classroom setting fosters more self-doubt. As the environment changes from the traditional classroom setting to the workplace, so does the students' self-esteem, behavior and learning capabilities. Through the process of compilation, concepts associated with a work activity are progressively transformed into a single, smooth procedure (Anderson, 1982). As individuals practice a task, they monitor their performance and gradually improve on the task that has been modeled to them. Different workplace environments attract similar personality types and preferences depending on the nature of the job and the value of the work practice. Students may determine whether participation in an activity will result in them impressing others with similar interests. John Holland (1973) maintains the workplace provides an individual with a vocational identity and reinforces self-perception. Berg and Chyung (2008)

note people tend to be intrinsically motivated to spend time on things that interest them. Individuals develop a sense of connection to the rest of the community, and a sense of loyalty to a profession (Gardner 2000, chapter 11, pg. 249).

Students with disabilities, who see themselves as competent, are more capable of managing their own learning, training, and performance (Ryan & Deci, 2000). Individuals may also determine what they learn from the working environment by their willingness to identify with what they see and experience (Hodges 98). The basic nature of employment is to define the individual and some workplace environments are a better match to student dispositions than others. Dispositions are the attitudes, values, interests and identities of the individual associated with work (Prawat, 1989). For students with disabilities, working in an environment with individual interests that fit into pre-existing dispositions can form a valuable cognitive behavioral intervention. Cobb, Sample, Alwell & Johns (2006) found cognitive behavioral interventions reduced dropout rates for students with disabilities and contribute to social skills development. Exposure to a workplace environment forces introspection. The student eventually overcomes his/her initial fears and finds comfortable stability in their surroundings.

Workplace Mentoring

For work-based learning to be an effective educational practice, it should enrich the learning process by providing authentic working activities and ongoing direct or indirect guidance to the participants. Work-based learning programs include: paid or unpaid work experiences; job-shadowing; internships for students; and apprenticeship opportunities. Guidance in the workplace consists of listening, observing, and interacting with other workers. Gardner (2000, chapter 11, pg. 249) maintains these kinds of mentoring activities allow individuals to develop a righting mechanism, a sense of what is proper and what is not.

Regardless of the approach to individual accomplishment in the workplace, social learning and interpersonal skills development is the most distinguishable quality for students with disabilities. Students need to make choices about work and career opportunities, build strong social and interpersonal skills, and develop meaningful relationships with members of the business community. Vygotsky (1978) proposed the Zone of Proximal Development (ZPD) attributes knowledge to what the individual experiences in the "lived" world. ZPD refers to joint problem solving through proximal guidance and collaborative thinking between the expert and novice. As a student enters the workplace environment, learning is acquired through the interaction between the student and workplace mentors. Perhaps the single most significant factor contributing to the ability of an individual to establish employment outcomes is in the ability of the individual to get along with others. Valuable employees have good personal attributes, respect themselves and others, come to work on time, dress appropriately, and work cooperatively as part of a team, community and society (Sanchez, 2003). In this regard, students with disabilities are vastly unprepared to enter the mainstreamed world, and typically exhibit behaviors that are not "at peace" with the workplace or themselves. A workplace environment has the ability to instill a perceived confidence and competence in the individual student. People skills are often a better indicator of an individuals' level of employability than academic skills (Kraska, Zinner & Abebe, 2007). The relationship between the instructional mentor and student is a vital component of job experience training because it provides a direct link to the student's autonomy in the workplace. Personal autonomy in the workplace environment is based on the naturally occurring contingencies of reinforcement (Haworth, 1986). The level of student success is ultimately determined by the ability of the student to work collaboratively and autonomously in the program and workplace environment.

Job Experience Training

Work-based learning is sometimes referred to as "on-the-job training" or "job-experience training." Job Experience Training (JET) programs provide students with opportunities to develop individual strengths that meet diverse learning needs. For this reason the most important component of a JET program is access to the business community and workplace environment. Participation in community-based JET programs has been associated with improved graduation rates and employment outcomes (Benz, Lindstrom & Yovanoff, 2000; Phelps & Hanley-Maxwell, 1997). Although components to JET programs are often complex, learning in the workplace is highly formalized and structured by the goals, activities and culture of the work practice (Brown, Collins & Duguid, 1989). Community-based JET needs to begin before the student exits high school so that educators can identify the realistic career expectations for the student. JET that does not begin until after high school and when the educational safety net of the school is removed has actually created more barriers for students and their caring family members. A valuable JET program will help guide the student with a disability into the context of the working world while gradually assisting them in meeting developmental milestones.

Existing Job Experience Training Program Partnership Models

1) ***Iowa's Super Senior School–To-Work Transition Program*** (Nietupski et al. 2006) A two year high school program designed to help students make informed career choices and obtain twenty to forty hours per week of job experience training prior to graduation. The program incorporates a collaborative partnership between high schools and outside agencies including the Grant Wood Area Education Agency (GWAEA); Goodwill Industries; and a rehabilitation agency. GWAEA administratively runs the program with

Goodwill providing the job coaches and employment specialists. Job-shadowing is used for the students' senior year and student internships are available for second year seniors. The internships offer employers a low-risk way to determine whether a student might become a valuable addition to their workforce. The internship provides the business an opportunity to see the students' capabilities firsthand. Super Seniors is successful because 85% of graduates leave with a job and 80% of the internships lead to the employers extending an employment offer.

2) ***Lynn University Transition Program*** A partnership between Lynn University and Palm Beach County school district. The program places students with disabilities on the Lynn University campus for a maximum of two years in order to learn the skills necessary to obtain employment. The program is designed to provide students with an opportunity to interact with age appropriate peers through integrated job training and campus activities in a realistic environment which enable the application of skills learned during high school. The goals of the program are to increase student independence, prepare students with competitive employment in a full or part time paid position, increase social and communication skills, improve self- determination skills and develop age-appropriate community employment training opportunities.

3) ***Project 10 STING RAY (Students Transitioning Into the Next Generation, Recognizing Alternatives for Youth, 2011)*** A partnership of the Pinellas County School District, Project 10, the University of South Florida St. Petersburg, the Florida Department of Education, and the Florida Governor's Commission on Disabilities. It offers young adults with significant cognitive disabilities, ages 18 to 22, an opportunity to experience life on a college campus while developing self-determination, independent living, and employability skills. STING RAY's mission is to provide an innovative and

transformational postsecondary learning experience that will empower young adults with significant cognitive disabilities to acquire the knowledge and skills needed to become independent and productive citizens. Located on the University of South Florida (USF) St. Petersburg campus, the innovative STING RAY program emphasizes development of self-determination skills, independent living in the community, employment preparation, community-based work experience, on-the- job training, placement in competitive integrated employment, preparation for continuing higher education, and establishment and maintenance of positive social and work relationships. The STING RAY curriculum is individualized, person-centered, and adaptive, and is based on the student's individual needs, strengths, and interests.

4) ***Project Search*** A uniquely designed workforce development program specially designed for students with disabilities. Project Search has been used in affiliation with the Project 10 Regional Transition Network, the Quest Workforce Development Agency, the Division of Vocational Rehabilitation Service Agency, and Seminole and Orange County Public Schools (two of the largest school districts in the Central Florida Orlando region). The program is designed to provide a variety of worksite experiences in a business or hospital setting. During the school year the students rotate through different jobs and learn the skills of that career with the goal of building the skills needed for the world of work and eventual job placement at a business or hospital in the community.

The Employment Gap

Special and vocational education legislature has supported collaborative working relationships between education and business sectors to provide transitional prosperity for students with disabilities, but there is still a gap between the ability of students with disabilities to find jobs after high school contributing to business industries. Federal legislature continues to support the rights of individuals with disabilities and the ways by which businesses and postsecondary institutions work with this demographic population. The Department of Education recently addressed employment issues for individuals with disabilities by setting a goal to increase the employment and retention of individuals with disabilities through the 2015 Fiscal year (Plan for the Employment of Individuals with Disabilities, 2011). This kind of educational focus addresses the growing importance of students with disabilities to acquire the skills needed to become employed after high school. Additionally, the success or lack of success for this student population in successfully meeting employment objectives may be contributing to workforce and industry shortages affecting the economic stability of the United States. Vocational education and JET programs are so strong in many European countries that some of the highest academically achieving students choose to participate in dual vocational education systems before entering a university (Behrens, Pilz, & Greuling, 2008). Although special and vocational education legislation has consistently supported the hiring, and training of students with disabilities, one of the most distinguishable differences between the United States and other countries is in the way educators *and* employers share the responsibility for JET programs.

Working Together

School-to-work transition systems should strengthen relationships between academic and vocational education, educators and employers, labor organizations and secondary and postsecondary education. All of these relationships need to be evident in JET models and practices. For vocational education to be an effective link between the business and educational community, JET must lead to organizational gains. For this reason, the success of vocational education training programs must not only provide students with positive learning outcomes, but also be a significant benefit to the business providing the training program. Many businesses understand that students with disabilities who benefit from business and workforce training become valuable, trustworthy, and dependable employees. In order to meet the legislative guidelines, many employers also offer special skills training opportunities for students with disabilities (Lindstrom et al., 2007). Businesses willing to take the risk of supporting work-based learning models are often provided free labor, and valuable community service interests. Lynch, Leo and Downing (2006) noted work-based learning programs could help enhance workplace environments, and many business models support the hiring and training of students with disabilities. But employer attitudes toward hiring individuals with disabilities are still widely subjective, depending on individual attitudes and the types of disabilities the students possess (Bordieri, Drehmer & Taylor, 1997). Work-based learning programs that offer a support network with a highly structured format have proven to be the most successful. In this sense, work-based learning has the ability to simultaneously provide the student with working experiences leading to meaningful career choices and learning functional skills (Benz, Lindstrom & Yovanoff, 2000).

Summary

Employment is generally perceived as the most important goal for students with disabilities, but discouraging employment outcomes can be attributed to the failure of our educational system to provide support for this student population. This literature review has examined the theories, research, legislature, and the educational expectations for students with disabilities participating in a JET program. Additionally, this literature review has linked the history of vocational and special education public policy affecting transition outcomes for individuals with disabilities. Advocacy groups, legislative councils, and a country determined to offer equal rights to all have provided a far greater educational opportunities than ever before in the history of the United States. The results of this study will provide perspective into the ability of a JET program to meet high vocational and educational expectations for students with disabilities in the United States.

CHAPTER THREE: METHODOLOGY

Purpose of the Study

In this study the researcher evaluated the impact of a community-based Job Experience Training (JET) program on the executive functioning skills of students with Language Impairments (LI). This chapter provides the description and characteristics of the study's mixed methods research design including: a) the research question, b) methodology, c) settings, d) participants, e) research timeline, f) quantitative data collection procedures, g) qualitative data collection procedures, h) data analysis, i) reliability, and j) validity. Finally, the chapter concludes with a discussion of the potential limitations of the study.

Research Questions

1) To what extent does participating in a community-based Job Experience Training program impact the executive functioning skills of students with Language Impairments?
2) How does a seven week Job Experience Training placement at an assisted living facility impact the executive functioning skills of students with disabilities?

Methodology

This study used a mixed methods design where data is equally weighted and collected concurrently throughout the same study. Gay, Mills, & Airasian (2009) note mixed method designs do not place special interest in either the quantitative or qualitative sections, but challenge the researcher to equally value collected quantitative and qualitative data and look critically at the results to determine if the sources reveal similar findings. Further, the results of one section do not affect how the other section is implemented (the quantitative section of the study does not precede the qualitative section and vice-versa). Data are collected concurrently

from both sections of the study and results are compared simultaneously. The researcher looked critically at the results to determine if the quantitative and qualitative sections of the study reveal similar findings. This study utilized the Comprehensive Executive Functioning Inventory (CEFI) which functions as the quantitative instrument and weekly goal-driven performance-based observations as the qualitative instrument.

Role of the Primary Researcher

Creswell (2007) noted qualitative researcher's interpretations cannot be separated from their own background and prior understandings. The primary researcher has a Bachelor of Science in Pediatric Rehabilitation Services and a Master of Arts in Special Education with over twenty years of experience working with students with special needs. The primary researcher was a transition resource teacher in a large public school district and worked as a transition teacher coordinating community-based JET programs during that time. The primary researcher also has experience with this study format through collecting, coding, interpreting, synthesizing, and analyzing data and data trends for qualitative design outcomes. The primary researcher completed two pilot studies of different aspects of an automotive JET program at a community college prior to the study including an ethnographic case study of the social/interpersonal improvements of students with disabilities, and a focus group case study of the capabilities of automotive instructors in working with students with disabilities. The role of the primary researcher was to: a) coordinate the study from beginning to end, b) facilitate and gather all other pertinent information for the study, c) administer the pre and post CEFI assessments to the participating students, d) examine the results of the parent, teacher, and student CEFI assessments, and e) dialogue and collect observational data while the students were participating in the JET placement (see Appendix A: Institutional Review Board Approval Document).

Role of Transition Teacher

The JET program transition teacher had an important role in the study. The transition teacher originally utilized the Award Scheme Development and Accreditation Network (ASDAN) training program as a transition teacher in England before replicating the program in her current position. She holds a Master of Education degree and is responsible for the implementation of the program at the school and establishing suitable job placements for the students in the community. The transition teacher assisted in the pre-meeting correspondence with the parents of the students participating in the study, documented weekly student goals with progress monitoring observation notes, and provided a pre and post CEFI teacher assessment for each participating student.

The School Setting

The students who participated in this study attend an independent, not-for-profit school for children with learning differences under the umbrella of a foundational nonprofit organization. The school is located in a suburban community of a large metropolitan area. The school serves children with varying exceptionalities, including language delays, high functioning autism spectrum disorders, significant learning disabilities, attention deficit disorders and developmental delays. Therapeutic interventions including social cognition training, executive function skill assessments, daily living and vocational skills are incorporated into the school day. Young adult transition services are also a part of the program by which the ASDAN program is a significant component. The school acts in accordance with state legislative guidelines for serving students with disabilities and corresponds with the student's zone school in the public school system.

The Assisted Living Facility

The assisted living facility that provided the community-based JET is a residential rehabilitation facility. The facility is large in capacity and has a large number of elderly residents with physical impairments. The facility has a large therapy room with many therapists and medical staff on hand. The assisted living facility is in close in proximity to the school. The students are shuttled to and from their job placement once per week by parents or the transition teacher. At the facility the students work for approximately two hours on an assigned job placement in one of five areas of the facility: a) kitchen, b) laundry, c) therapeutic activities room, d) grounds work, or e) housekeeping. The students are assigned to one of the five job placements and learn the day-to-day job tasks for that part of the assisted living facility from the transition teacher and assisted living staff, also referred to as job coaches for the purposes of this study. The job placements are aligned with the facility job descriptions and the job coaches are actual faculty members doing those jobs. The faculty members have a regular schedule and routine for performing the job-related tasks and have agreed to assist in the training and mentoring of the job experience training students on an as-needed basis. The job coaches only received a small amount of information prior to working with the students from the transition teacher and facility director. They were briefed that the students had disabilities, but there was no information as to the disability labels of the students or any other personal information. The transition teacher provided information about the student's ability levels as they placed the students with each job coach throughout the duration of the study or in an as-needed basis to help facilitate the ability of the students to be successful in the training program.

Participants

The participants for this study were seven young men ages fifteen to eighteen. All seven boys were diagnosed with pragmatic Language Impairments (LI) and enrolled full-time. LI is defined as significant difficulties affecting listening comprehension, oral expression, social interaction, reading, writing, or spelling. LI is not primarily the result of factors related to chronological age, gender, culture, ethnicity, or limited English proficiency (FDOE, 2013). Pragmatics is the system that combines language components in functional and socially appropriate communication (State Board of Education Rule 6A-6.030121, F.A.C, 2013). While some of the students were identified with more than one disability categorical label, all seven students were being served with LI as their primary disability. The lead psychologist believed the pragmatic language aspects of their language impairments presented the biggest obstacles for them specifically in the area of social interactions, oral expression and listening comprehension. Together, the primary researcher and the lead psychologist reviewed each student file for IQ, grade, age, and grade level equivalency for each student. The results are documented in Table 3.1: Student Demographics.

Table 3.1: Student Demographics

	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6	Student 7
IQ	116	88	68	89	71	NA[1]	85
Grade	9	10	9	10	10	11	11
Age	15	17	15	18	17	17	18
English	7/8	5	3	3	7	12	12
Math	9	7	3	4	8	12	5

[1] No IQ on record, but believed to be above average.

Research Timeline

This study was conducted over a ten week timeline with a seven week job placement for the students at the assisted living facility. Prior to the inception of the study, the primary researcher and transition teacher met with the parents of the students involved in the study at the school. The purpose of this meeting was to provide the parents with disclosure agreements, explain the details of their student's participation in the study, and answer any questions or concerns of the parents (see Appendix B: Parent Informed Consent Form). This meeting was held at the students' school and all parents or legal guardians were in attendance. During this meeting, parents were asked to complete the CEFI pre- functional skills assessment and return the assessment to the transition teacher within a week. Following the meeting the transition teacher also completed a CEFI pre-functional skills assessment for each student. Next, the primary researcher met with each student and assisted them in completing the CEFI pre-functional skills assessment by reading the rating scale items and clarifying student questions. The primary researcher conducted the interviews in a private office by pulling each student out of class one at a time. Each student assessment lasted between thirty and forty-five minutes based on number of clarification questions the students had and the speed by which each student would provide assessment responses. Once the student pre-assessments were completed, the students were placed for the first week of their seven week JET placement at the assisted living facility. During this time, the primary investigator completed weekly goal-driven performance-based observations while the transition teacher facilitated the ASDAN program. After completion of the seven week JET, the teacher and parents completed a post CEFI functional skills assessment and the primary investigator met with each student to complete the post CEFI assessment in the same office with the same timeline as the pre assessments were administered (see Table 3.2: 10-Week Study Schedule Timeline).

Table 3.2: 10-Week Study Schedule Timeline

Week 1	Pre-Meeting with Parents
Week 2	Pre-CEFI Assessments
Week 3 to Week 9	Jobsite Training Observations
Week 10	Post-CEFI Assessments

Independent Variable

The independent variable for this study is the Award Scheme Development and Accreditation Network (ASDAN) JET program. ASDAN is a British charity organization that offers educational opportunities to students learning life and employment skills. ASDAN uses a plan-do-review JET system where the students a) *plan* their community-based workday, b) *do* their job at the community-based workplace, and c) *review* their working progress on separate days of the week. The program is designed to support learners in developing the working knowledge to be effective in the workplace (ASDAN website, 2013).

Dependent Variable

The quantitative data collection for the dependent variable in this study was completed through the collection and results of the Comprehensive Executive Function Inventory (CEFI). The CEFI is a computerized executive functioning skills assessment (ages 12 to 18 years) that offers parent, teacher, and student self-report forms. The response form includes 100 questions with ordinal response scale items including: a) never, b) rarely, c) sometimes, d) often, e) very often, and f) always. The questions are identical across the three response forms but begin with

a different prompts. The parent and teacher response forms begin with: "*during the past four weeks, how often did the child…";* and the student response forms begin with "*during the past four weeks, how often did you*…"; The CEFI provides executive functioning rating scales for nine executive functioning skills (see Table 3.3: Executive Functioning Skill Scale Definitions, Naglieri and Goldstein, 2013).

Table 3.3: Executive Functioning Skills and Definitions

Attention	measures how well a youth can avoid distractions, concentrate on tasks, and sustain attention
Emotion Regulation	measures a youth's control and management of emotions
Flexibility	describes how well a youth can adapt to circumstances, including problem solving ability
Inhibitory Control	reflects a youth's control over behavior or impulses
Initiation	describes a youth's ability to begin tasks or projects without being prompted
Organization	describes how well a youth manages personal effects, work, or multiple tasks
Planning	reflects how well a youth develops and implements strategies to accomplish tasks
Self-Monitoring	describes a youth's self- evaluation of his/her performance or behavior
Working Memory	measures how a youth keeps important information in mind in order that he/she know what to do and how to do it, including remembering important things, instructions, and steps

The CEFI was completed by the transition teacher, a parent or guardian, and the student before and after the seven week job placement at the assisted living facility. The CEFI can be administered online or with paper copies. For the purposes of this study all CEFI pre and post assessments were completed with paper and transferred into the online database by the primary researcher. Following administration, all CEFI forms were scored using online software. There

are three types of reports that can be generated from all forms: a) the Interpretive Report which provides detailed results from one administration, b) the Progress Monitoring and Treatment Effectiveness Report which provides an evaluation of CEFI score changes over time for up to four administrations from the same rater, and c) the Comparative report which provides an analysis of scores from two to five different raters (CEFI website, 2013).

Comprehensive Executive Functioning Inventory Student Administration

Due to the nature of the disabilities of the students participating in this study, the pre and post CEFI assessments were completed with the assistance and clarification of response items by the primary investigator. The primary investigator read each response item to the student and allowed the student to answer the corresponding ordinal scale response on their own. The primary researcher then circled that respective response on the student's form. If the student needed clarification of any of the response form items, the primary researcher read the response statement and offered clarification of the intention of the response statement as a question. The primary researcher did not provide ordinal scale response answers to the students, but clarified the prompting questions so that the student adequately understood what was being asked. The reason for this was to help facilitate the opportunity for the students to provide the best possible answer in response to the true meaning of the assessment items. Students with pragmatic language impairments have difficulty receiving auditory information and may have had difficulty understanding the assessment item contents. With clarification, the students had the opportunity to provide an accurate response to the intent of each assessment item.

Qualitative Data Collection Procedures

The qualitative framework of this study was documented through weekly goal-driven performance-based observations while the student was participating in the seven week JET program placement at the assisted living facility. The records were completed through active participant observer (teacher) input and non-participant observer (primary researcher) of student performance and notes were completed and compared by both observers. The primary investigator met the students and transition teacher at the assisted living facility each week and observed while the director of the facility discussed the needed job placement tasks with the transition teacher. Next, the teacher assigned the students to each job placement and the primary investigator followed the teacher with the students as the teacher spoke to each facility job coach and dropped off students at their designated job assignments. The teacher would then relay each student's weekly goal to the primary investigator who *floated* around the facility and took observation notes of the students as they completed the tasks associated with their job assignments. Typically, the primary researcher spent about fifteen minutes observing each student before moving to observe another student. However, if there was a group of three or more students the primary investigator observed for a longer period of time. During this time the primary researcher acted as a non-participant observer of the day-to-day job responsibilities of each student while the transition teacher worked as a participant observer with the students and assisted the job coaches in facilitating student instruction and completion of job-related tasks. The teacher also *floated* around to the students at their respective job placements and provided them with instructional support for completing the tasks, but the transition teacher would often spend more time with a student or small group of students to ensure they learned and followed through with their job-related tasks appropriately.

While taking notes during much of the observation time, the primary investigator documented instances that coincided with an opportunity for the student to utilize one or more executive functioning skills. At times, the primary investigator and transition teacher would meet with the same student or set of students in their job placement and exchange information. At the end of each daily student placement time the transition teacher provided written notes of observations of the student's progress and input to the ability of each student to complete the tasks assigned by their respective job coaches. The job coaches provided no written documentation of the student's ability to complete tasks, but communicated verbally to the transition teacher who would document task completion success rate on her daily progress reports.

Goal-Driven Performance-Based Observations

Goal-driven performance-based observations were used to measure student progress during the seven week JET program. The weekly goal-driven performance-based observations were completed by the primary investigator and transition teacher during each week of the seven week timeline while the students participated in the JET job placements. There were four components of the observations used to evaluate the student's ability to apply executive functioning skills to performance tasks on the job: a) the student's weekly job placement goal, b) completion of job-related tasks, c) transition teacher notes, and d) primary investigator notes. The student's weekly employment goals were established as part of the *planning* portion ASDAN program on the day prior to the weekly JET placement. Notes from the transition teacher include feedback from the student's job coach, success meeting the weekly goals and completing job-related tasks, and other significant observations made by any or all parties. The teacher notes were then combined with the primary investigator notes for a combined intra- and inter observer goal-driven performance based observation of each student's weekly progress.

Job Experience Training Placements

During the seven week JET placements at the assisted living facility, the students were placed in different job assignments with different job descriptions and assigned tasks. When the students arrived at the center each day, the director informed the transition teacher of the job placements that required assistance that particular day. The teacher would then assign the students to job placements to accommodate the facility and provide the students with the best job placement possible to meet their weekly goals. The students were sometimes assigned more than one job per day as time permitted (see Table 3.4: Job Experience Training Student Placements.)

Table 3.4: Job Experience Training Student Placements

	STUDENT 1	STUDENT 2	STUDENT 3	STUDENT 4	STUDENT 5	STUDENT 6	STUDENT 7
WEEK 1	Grounds Work House-keeping	Laundry	Kitchen	Silverware Kitchen	Physical Therapy House-keeping	House-keeping	House-keeping
WEEK 2	Absent	Silverware House-keeping	House-keeping Kitchen	Cookies Kitchen	House-keeping	Kitchen Carts Laundry	House-keeping
WEEK 3	Absent	Kitchen Carts Laundry	Kitchen Carts House-keeping	Grounds Work Silverware	House-keeping	Physical Therapy Kitchen Carts Silverware	House-keeping
WEEK 4	Absent	Kitchen Carts House-keeping	Kitchen Carts	House-keeping	Absent	Physical Therapy Kitchen	Laundry
WEEK 5	House-keeping	Silverware	House-keeping	Painting	Laundry	Physical Therapy	Painting
WEEK 6	Grounds Work	House-keeping	Silverware Kitchen	Kitchen Carts	Laundry House-keeping	House-keeping	House-keeping
WEEK 7	Grounds Work	House-keeping	Grounds work	Silverware	House-keeping	House-keeping	Grounds Work

The job placements for the students participating in JET program at the assisted living facility were based on a combination of the following factors: (a) tasks that needed to be completed at the facility of any given day, (b) the capabilities of the students, and (c) the staff supervision available to work with the students as they learned each job. Each job placement corresponded with a different job in the facility's handbook. Students were responsible for performing many of the same duties as the staff with their respective job descriptions. In the case of the physical therapy job description there was no formalized job description for the job placement the student participated, so the job description that matched most closely was used as a reference (i.e. activities assistant for physical therapy assistant). In these cases the transition teacher and facility director felt the job placement would be a highly beneficial experience to the student and assist in maximizing their training opportunities. The following section of this study highlights the basic responsibilities for each job placement and matching facility handbook job description for each student job training experience.

Housekeeping[2]

The Housekeeping job description included the dusting and polishing of furniture, the cleaning of windows, and vacuuming of three areas of the facility (a front seating area, the dining room, and the activity area). The front seating area was located directly in front of the main entrance of the facility and connected through glass doors to the center courtyard of the facility. The seating area had one large couch and two chairs with two bookcases and pictures. The students were responsible for vacuuming all areas, using a glass cleaner and paper towels on both sides of the glass doors, dusting all the furniture including the bookcases and pictures and using a cleaning solution and a rag to polish wood on furniture including the picture frames.

[2] See Appendix C: Housekeeping Facility Handbook job description.

The students were responsible for the same procedures and responsibilities in the dining and activity area (a much larger set of two rooms connected by a glass door). The dining room included one room with seven tables with four chairs each, three bookshelves, and four large pictures with frames. The activity room was smaller with a large television, a couch, two chairs and two pictures with frames. It would take three students working with limited breaks the entire two hours to complete all the tasks associated with the housekeeping job description. Additional responsibilities for the job description included assisting the activity coordinator in setting up the rooms a certain way, adding tables and chairs to the rooms, and navigating or working around the changing population of visitors and residents in the front sitting room who would also move between the room and the courtyard. One of the housekeeping days included assisting in painting the dining room and activity areas. The students were allowed to provide limited assistance in the painting but mostly needed to continue cleaning around the scheduled painting of these areas.

Grounds Work[3]

The Grounds Work job description included picking up litter around the perimeter of the facility or courtyard, sweeping pathways or sidewalks, and assisting with general maintenance issues like raking or placing mulch in garden beds. Students participating in the litter pickup were responsible for carrying a large bucket and/or stick with a metal tip to stab paper, wrappers, and other loose articles and place them in the bucket. Students were also responsible for picking up larger litter pieces by hand. Students who were asked to sweep sidewalks or pathways would have to know how to use a small or large broom and push dirt to proper places on the side of the walkways. For larger activities such as moving or placing mulch, the student needed a great deal

[3] See Appendix D: Plant Operations Assistant facility handbook job description.

of physical ability and to have the ability to overcome heat related issues such as working outside in the afternoon and at a hot time of day. Two students could pick up about 95% of the facility trash and sweep most facility walkways during the two hour job training.

Laundry[4]

The Laundry job description included transferring sheets, washcloths, towels, and other facility housekeeping items in and out of washer and dryer, sorting and folding clothing on a large table, and transporting stacks of folded laundry to the kitchen, housekeeping, and physical therapy areas. One student could sort, fold, and transport a large amount of facility laundry during the two hour job training.

Silverware[5]

The Silverware job description included moving clean silverware placed in large baskets to a sorting station, sorting the silverware by forks, knives, and spoons, and wrapping the silverware in napkins for dining services. One student could sort and wrap about five bins of facility silverware during the two hour job training timeframe.

Kitchen Carts[6]

The Kitchen Cart cleaning job description included a deep cleaning of the large metal kitchen carts used to move meals from the kitchen to the dining area. During use, the carts would become caked with food during distribution. Students were responsible for taking four carts to the back of the building, spraying them with a hose, wiping them clean with rags and a

[4] See Appendix E: Laundry Aide facility handbook job description.
[5] See Appendix F: Food Service Aide facility handbook job description.
[6] See Appendix F: Food Service Aide facility handbook job description.

cleaning solution, spraying them again, and drying them with rags again. Two students with limited breaks could complete the cleaning of four kitchen carts during the two hour job training.

Kitchen (Miscellaneous)[7]

The kitchen at the assisted living facility had miscellaneous kitchen jobs that students participated over the seven week job training. These jobs included wrapping items such as bread and cookies, assisting with placing items on a tray in an ordered fashion, sweeping or cleaning the kitchen, and sometimes assisting to make salads dinner service. When these jobs were available the transition resource teacher would assign a student to complete the task. Depending on the task, one student would be able to complete a miscellaneous kitchen task during the two hour job training.

Physical Therapy Assistant[8]

Working in the Physical Therapy room at the assisted living facility was not common for the students participating in the job training program. The physical therapy room is a large busy room with many machines, devices, and equipment for residents. The room was usually full with therapists and residents during the job training hours and presented an overwhelming environment for most everyone passing by the room. Students working in the physical therapy room would assist in moving equipment, transporting and talking to clients, and organizing and filing resident files. One student would be able to assist in the physical therapy room for any allotted amount of time or completion of jobs as supervised by facility.

[7] See Appendix F: Food Service Aide facility handbook job description.
[8] See Appendix G: Activities Assistant facility handbook job description.

Data Analysis

Creswell (2005) notes the proper determination of results of a mixed method study should use quantitative data collection and statistical trends to support qualitative themes. The primary researcher used the CEFI functional assessment results to support data collected through the weekly goal-driven performance-based observations. The CEFI measures nine scale scores of executive functioning skills: a) attention, b) emotional regulation, c) flexibility, d) inhibitory control, e) initiation, f) organization, g) planning, h) self-monitoring, and i) working memory. The CEFI online assessment program was used to compare: a) an individual to a nationally representative norm group, b) a total comparative scale score, c) separate skill scores, d) ratings, and e) intervention strategies. After completion of all assessments, the primary researcher ran CEFI comparative data reports using the online program for pre and post CEFI scores for each parent, teacher and student assessments. These results provided the quantitative comparison data needed to determine if the executive functioning skills in the participating students were impacted as a result of their JET at the assisted living facility. The results of the CEFI comparative reports indicated an impact or lack of impact on executive functioning skills while the student was participating in the job placement. A positive or negative impact was documented through measures of central tendency and compared to observational data compiled from the weekly goal-driven performance-based observations.

The data sources for the CEFI comparative reports included a full scale comparison score based on pre and post standard score administrations to a parent, teacher, and student. The results of the CEFI pre and post parent, teacher, and student assessments included: a) scale scores, b) change scores, and c) statistically significant differences between the scores. The change score documented the increase or decrease for each student's standard scale score for all parent, teacher and student response outcomes. Statistically significant ($p < .05$) differences in

full scale results and between each executive functioning skill scores are provided in the CEFI comparative report results.

Reliability

Richey and Klein (2007) identify four concerns when designing a research project: a) establishing the validity of the final conclusions, b) establishing conditions that make causal inferences and assertions plausible, c) facilitating generalization and interpretation, and d) anticipating problems that may arise in the course of conducting the research. The reliability of this study is embedded in these four guided principles and will be addressed in order: a) validity, b) conditional inferences and plausibility, c) social validity, and d) study limitations.

Validity

Gay et al. (2009) identify four forms of interrelated, not independent aspects of instrumental validity: a) content validity, b) criterion-related validity, c) construct validity, and d) consequential validity. Consequential validity refers to the consequences associated with testing and will not be addressed in this proposal as there are only two tests administered to the participants.

Content Validity

Content validity compares the test to the domain being measured, and asks to what extent the test represents the general domain of interest. This study utilized two instruments: the CEFI comparative reports, and the primary investigator's goal-driven performance-based observations to determine the ability of the ASDAN Job Experience Training Program (independent variable) to impact the executive functioning skills (dependent variable) of the participating students. The

CEFI assessment is useful in this research context as reliability data indicates it has strong psychometric qualities and the assessment has the ability to evaluate the success of an intervention program (Retrieved from CEFI Website, Nov. 12, 2013).

Criterion-Related Validity

Criterion-Related Validity is determined by the relationship between performance on a test to performance on a second test or another measure. The goal-directed performance-based observations included work-related behavior items that match instances of opportunity for each student to gain executive functioning skills while participating in the JET placement. This unique component of the study established the control for sample factors associated with the presence or absence of the presence of executive functioning skills opportunities for the students participating in the program. This study also highlighted a substandard of Criterion-Related Validity (concurrent validity) which is referred to as a "degree to which scores on one test are related to scores on a similar, preexisting test administered in the same time frame or to some other valid measure available at the same time (Gay et al., 2009, pg. 155)." This degree is established through the concurrent pre and post CEFI assessment as compared to the goal-driven performance-based observations for comparative conclusions.

Construct Validity

Construct Validity refers to the ability of the study instruments to measure the intended hypothetical constructs of the study. Construct validity is addressed in two ways for this study: a) inter and intra observer reliability by the combined participant (transition teacher) and non-participant (primary researcher) observation notes, and b) the ability of the primary researcher to clarify CEFI assessment items for each of the participating students.

Conditional Inferences and Plausibility

Conditional inferences of this study were addressed through the CEFI test administration in the clarification of items for the participating students. Gay et al. (2009) note test-retest validity and reliability are the degree to which scores on the same test are consistent over time. Although pre and post test results may differ, the test items remain the same and are administered in the same order to the same participants. Answers were not provided for the purposes of clarification of student test items, but the primary researcher used his experience and discretion for clarification of the contents of the question to ensure the student was provided an appropriate understanding of the item question contents.

Social Validity

In order to assess the social validity of this study, Wolf (1978) recommended three areas of social examination: a) the significance of the research question, b) the social appropriateness of the methodology, and c) the social importance of the study's results. The research questions of this study provided social validity through the qualitative and quantitative impacts of a JET program on the executive functioning skills for students with disabilities. Gay et al. (2009) noted the qualitative portion of a study lies in its ability to connect with its audience. The research questions in this study are relevant to a community of educators working with students with disabilities including teachers, assistants and educational administrators. The research questions in this study address public policy issues in the ways we are teaching and training students with disabilities in successfully transitioning from high school to postsecondary outcomes. The methodology of this study addressed social validity through the combined parent, teacher and student self-assessment results. Richey & Klein (2007) note purposeful sampling techniques combined with non-biased observational data can lead to interpretation even

from small samples. This study used data from the pre and post CEFI parent, teacher and student assessments compared to that of the JET program observational data to establish social validity for a community of stakeholders. The results of this study established social validity through cross-comparative data sources which provided links between the ability of a JET program model (independent variable) to impact executive functioning skills for a small group of participating students with disabilities (dependent variable). The results were generalizable to the working conditions of similar JET programs across state and national levels. Quantifiable conclusions were drawn from the results of the CEFI which provides comparative data to nationally representative norm groups. Qualitative conclusions were drawn from informative observations of the students' day-to-day participation in the JET program at the assisted living facility.

Limitations

There were three limitation concerns for this study: a) inter-rater reliability, b) pre and post-test transfer knowledge of test items, and c) the length of the JET program for the participating students.

Inter-Rater Reliability

Inter-rater or interjudge reliability refers to the consistency of two or more independent scorers. Gay et al. (2009) note subjective scoring can present a source of errors of measurement. The results of this study relied on the ability to the teacher and parent to provide unbiased, impartial perspectives on the CEFI assessment and are consistent on scoring between the pre and post assessments. The assessment results need to present an accurate depiction of student development or lack of development of executive functioning skills as a result of the JET program. One of the purposes of the parent pre-meeting was to provide information about the assessment and answer

questions parents may have on the assessment items, but the parents may have had difficulty understanding the differences between categories on the ordinal scale. The pre-meeting was also useful in discussing the context of the assessment items with the parents. The parents were informed they should answer the assessment items in the context of their home environment and observations made of their students in the community. Additionally, although the primary investigator administered the student self-assessments and provided clarification of assessment items, the nature of the student's disabilities presented challenges in the student's ability to accurately answer ordinal scale items for content, context and understanding.

Test Knowledge Transfer

One limitation concern for the study was in the length of time between the pre and post CEFI assessments. The pre and post CEFI assessments were completed by the transition coordinator, parent, or student within an eight week time frame allowing an opportunity for the individual completing the assessment to remember one or more of their responses to test items. The parent, student and job coach could have prior knowledge of how they answered the 100 questions previously on the pre assessment while completing the post assessment. Parents may have believed they were helping their son or daughter by impartially scoring the post CEFI assessment with higher scores based on their previous knowledge of how they answered test items the first time around. It was important for the primary researcher to ascertain the objectivity of the assessment to the parents or guardians at the pre-study meeting.

Length of Job Placement

Placement changes were initiated by the transition teacher and director of the assisted living facility on a weekly basis during the students' seven week job placement. If they believed a job placement was not appropriate because of safety concerns of the residents, poor working conditions, or the ability of the student to perform the tasks in an appropriate manner, a new job placement was warranted. It took at least a couple weeks for students to adjust to their respective job placements. This adjustment period affected the focus of the study if the student was unable to adjust to the placement due to the nature of their disabilities. Although this concern was addressed by the transition teacher and was a built in expectation of the JET program, a student placement change during such a short study timeline could result in a less accurate measure of the program's impact on the student's executive functioning skills.

CHAPTER 4: RESULTS

After completion of the study timeline and all relevant data was collected the results of the study were compiled by the primary investigator and are presented in this chapter. This chapter presents the Comprehensive Executive Functioning Inventory (CEFI) results, observation results, and comparison results for each student in order. Next, a descriptive analysis of three data tables are provided: a) the CEFI full scale results table, b) executive functioning skill building opportunities table, and c) the job-related task completion table. The Comprehensive Executive Functioning Inventory (CEFI) assessment provided full scale comparison scores based on pre and post standard score administrations. Scores were tabulated using the online scoring program comparing pre and post parent, teacher, and student self-response assessments. The scale change column documented the increase or decrease for each student's standard score. Statistically significant ($p < .05$) differences between scores were documented in the significant change column. The online scoring program provided scale scores with percentile ranks and aligned the students with a national standardization group based on age. The classifications were: a) well below average <69, b) below average 70-79, c) low average 80-89, d) average 90-109, e) high average 110-119, f) superior 120-129, and g) very superior >130. Executive functioning skill building opportunities were added to the observation notes when the primary investigator observed opportunities for the students to practice one or more executive functioning skills. Job-related task completions were documented through teacher notes and provided by the students' job coaches.

Student 1

Comprehensive Executive Functioning Inventory Results

Student 1 presented himself as confident, blond young man with a large build. He possessed a kind nature with a confident grin. When asked if he was excited about taking the assessment and participating in the study, he responded: "it's just another test." During the pre and post assessments student 1 did not seem nervous or apprehensive. He only asked for clarification of four assessment items and went through both the pre and post assessments swiftly. On the pre-test, student 1 fell in the low average range and ranked at the 16th percentile compared to the national standardization group. On the post-test, student 1 scored in the average range and ranked in the 30th percentile. The pre and post assessment comparison reports showed a statistically significant increase in the full scale teacher assessment with a significant increase in four executive functioning skills: a) attention, b) flexibility, c) inhibitory control, and d) planning. Neither the parent or student self-assessment reports showed any statistically significant change in executive functioning skills (see Table 4.1: Student 1 Assessment Results).

Table 4.1: Student 1 Assessment Results

Teacher Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	85	92	+7	Increase
Attention	86	95	+9	Increase
Emotional Regulation	95	91	-4	No
Flexibility	89	103	+14	Increase
Inhibitory Control	89	100	+11	Increase
Initiation	84	90	+6	No
Organization	82	82	0	No
Planning	84	96	+12	Increase
Self-Monitoring	81	89	+8	No
Working Memory	86	88	+2	No

Parent Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	81	77	-4	No
Attention	89	90	+1	No
Emotional Regulation	89	89	0	No
Flexibility	86	83	-3	No
Inhibitory Control	94	86	-8	No
Initiation	78	69	-9	No
Organization	73	73	0	No
Planning	80	71	-9	No
Self-Monitoring	82	79	-3	No
Working Memory	79	68	-11	No

Student Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	88	87	-1	No
Attention	88	82	-6	No
Emotional Regulation	94	99	+5	No
Flexibility	94	91	-3	No
Inhibitory Control	92	87	-5	No
Initiation	86	80	-6	No
Organization	83	81	-2	No
Planning	85	92	+7	No
Self-Monitoring	89	89	0	No
Working Memory	102	104	+2	No

Student 1 Observation Results

Student 1's job experience training was inconsistent over the seven week timeline. In week 1 he was placed with the grounds crew but was moved to housekeeping when it began to rain. He was then absent due to illness for the next three weeks of the training. He returned in week five and was placed in housekeeping where he completed all job-related tasks. For the final two weeks of the training he made improvements in task completion from 70% to 100%, but was noted as having difficulty showing excitement or interest in the jobs from his teacher and did not seem to take ownership or connect with the objectives of the training while working with the grounds crew during the final two weeks of the training. Still, his goals progressed throughout the training cycle and he was able to find success and complete all job-related tasks in the grounds work job description by the end of the training program (See Table 4.2 for Student 1 Weekly Goal-Driven Performance-Based Observations).

Table 4.2: Student 1 Weekly Goal-Driven Performance-Based Observations

Week	Observation Notes
1	*Student Goal:* No goal for first week. In week one the student was placed with grounds work where he worked well despite rainy weather (flexibility). He then moved to housekeeping where his teacher noted "less positive body language," but went on with task (emotional regulation). He was noted working well with other boys in both jobs. He completed all tasks.
2-4	Student was absent due to illness
5	*Student Goal:* Work harder, listen and follow directions.
5	The student was assigned to housekeeping with no significant notes. He completed all job tasks (attention, self-monitoring, and organization).
6	*Student Goal*: Pick up a lot more garbage independently. In week 6 the teacher noted this goal was "achieved in part, but the student needed to be re-focused on the task as needed." It was observed the student would often wander past noticeable trash until it was pointed out to him (attention, self-monitoring, working memory). The student completed all tasks with a low percentage of trash pickup (70%)
7	*Student Goal*: Work independently and more accurately. Student worked in grounds work and was observed working more quickly picking up trash more accurately and independently (initiation, planning), although he had to be redirected when not using the poker stick correctly and raising it up above shoulder level a couple times (inhibitory control, self-monitoring). No teacher notes. The student completed all tasks.

Student 1 Comparison Results

Comparison results showed increases in executive function on the teacher assessment was matched by the student's ability to complete tasks at a higher percentage rate as he progressed through the job experience training. The teacher found the most significant changes in the student's inhibitory control, goal planning and flexibility, but the parent assessment and the student self-assessment did not show any significant changes in executive function. There are many factors that may have contributed to the skewed assessment between the teacher, parent and student including the number of absences the student during the program, the inability of the parent to identify skill changes in the student in such a short timeframe, the different contextual setting of the home environment and the parent or student's ability to understand the content of the assessment questions.

Student 2

Comprehensive Executive Functioning Inventory Results

Student 2 presented as a very large young man with dark hair and a quiet disposition. He was quiet during the pre CEFI assessment and more talkative during the post assessment. After appearing apprehensive at the beginning of each assessment, he became more comfortable with the questions and format, and responded more confidently to the scale items. His physical demeanor changed to a more upright and attentive posture. On the teacher pre-test, student 2 fell in the below average range and ranked at the 7th percentile. On the post-test, student 2 fell in the low average range and ranked at the 19th percentile. Student 2 showed a statistically significant increase on his full scale teacher assessment results. He had a significant increase in five executive functioning skill categories in the teacher assessment including flexibility, initiation, organization, planning, and working memory. The parent results showed no significant changes in executive functioning skills. The self-assessment showed one statistically significant increase in organization skills but no change on the full-scale results (see Table 4.3: Student 2 Assessment Results).

Table 4.3 Student 2 Assessment Results

Teacher Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	78	87	+9	Increase
Attention	78	86	+8	No
Emotional Regulation	114	110	-4	No
Flexibility	80	94	+14	Increase
Inhibitory Control	100	96	-4	No
Initiation	63	79	+16	Increase
Organization	72	84	+12	Increase
Planning	77	87	+10	Increase
Self-Monitoring	65	76	+11	No
Working Memory	69	83	+14	Increase

Parent Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	104	102	-2	No
Attention	104	109	+5	No
Emotional Regulation	123	114	-9	No
Flexibility	100	94	-6	No
Inhibitory Control	119	117	-2	No
Initiation	90	91	+1	No
Organization	95	91	-4	No
Planning	100	98	-2	No
Self-Monitoring	102	101	-1	No
Working Memory	106	105	-1	No

Student Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	111	113	+2	No
Attention	114	105	-9	No
Emotional Regulation	122	110	-12	No
Flexibility	114	126	+12	No
Inhibitory Control	111	102	-9	No
Initiation	103	101	-2	No
Organization	105	125	+20	Increase
Planning	112	120	+8	No
Self-Monitoring	109	106	-3	No
Working Memory	97	110	+13	No

Student 2 Observation Results

Student 2 worked in the laundry, housekeeping, kitchen carts and silverware during his job experience training. He was successful in most areas with the exception of having some difficulty between weeks two and four while working on cleaning the kitchen carts. He struggled in using the hose and having success with less instructional support while attempting to follow the job coach and teacher directions. He never really was completely confident in the job and had difficulty with consistency. It seemed that he struggled most with the many moving parts of cleaning. Although the steps were sequential, the combination of the steps presented challenges for him. He was noticeably frustrated and overwhelmed at times. His memory of the tasks in order and some physical challenges he seemed to have related to his size did not allow him to become completely independent or make significant growth from week to week. Student 2 did have more success in the laundry and housekeeping job descriptions. He responded well to ongoing support from his peers and was most successful working alongside other students (see Table 4.4: Student 2 Weekly Goal-Driven Performance-Based Observations).

Table 4.4: Student 2 Weekly Goal-Driven Performance-Based Observations

Week	**Observation Notes**
1	*Student Goal:* No goal for first week Student 2 was assigned to work in the kitchen for the first week job placement but required large gloves for the job and there were none that would fit his hands. Therefore he was moved to the Laundry (flexibility) where he was assigned to folding and stacking a range of items. Student was observed receiving an excellent report from the staff for his work in the laundry and was noted as working "hard, slow, steady, quiet, and polite" in the teacher's report (attention, organization). Student completed all assigned tasks.
2	*Student Goal*: To be more flexible in the kitchen or laundry room Student was assigned to the kitchen and housekeeping for the second week. He began the day cleaning the kitchen carts and struggled using the hose. He still performed well cleaning the carts. When the carts were finished he was moved to join the housekeeping team (flexibility). Teacher report noted him "smiling about it" on report.
3	*Student Goal*: To work quicker and get more work done. Student began with the kitchen carts again this week and was observed being more successful using the hose this week (working memory). After completing the kitchen carts the student was again placed in the laundry where the teacher reported him "remembering some of the tasks from last time" (working memory).
4	*Student Goal*: To be more motivated in the kitchen. Student was placed in kitchen cart cleaning job with little support this week. Teacher reported him as having "little motivation" (initiation, emotional regulation) and it was observed he needed to be redirected to continue his work a couple times (self-monitoring). He was disorganized and could not see where the cart was wet after he had already sprayed it with the hose, going over the same places twice and not completing the job in a timely fashion (working memory, organization, attention).

Week	Observation Notes
5	*Student Goal*: To have more motivation and stay on task Student was placed in the kitchen on silverware. Teacher reported he "met his goals today!"(initiation, emotional regulation). He stayed on task and looked like he was enjoying the work (attention). He completed all silverware tasks with little support.
6	*Student Goal*: To use the skills I already have and transfer them to new tasks and use my skills wisely. Student was placed in housekeeping and spent most of the day dusting and wiping the furniture and cleaning windows. He worked well with the other students and the teacher discussed with him how cleaning the windows was similar to cleaning the carts and to try and get rid of the streaks (working memory) (self-monitoring) (emotional regulation). He completed all tasks.
7	*Student Goal*: To work independently and at an appropriate standard Student was assigned to housekeeping again today and remembered how to effectively clean the windows at a high standard (working memory). He received good reviews and feedback from his teacher telling him he was doing a great job this week. He completed all tasks.

Student 2 Comparison Results

Student 2 showed significant full scale increases on the teacher executive functioning skills assessment results with flexibility, initiation, planning, and working memory executive functioning increases. He also showed organization skill increases on both the teacher and student self-assessment. These increases can be linked directly to observations of assisted living staff and the teacher's ability to work extensively with him on the kitchen carts job description. There were minimal gains in the self-assessment and no significant changes in the parent assessment. Therefore, the results of the teacher assessment and the parent and student self-assessment do not match. The results may have varied due to the inability of the parent and student to completely

understand response items on the assessment, or in the inability of the parents to see the same skill development in the home environment. The student may have had difficulty holding the same self-perception of his own development of executive functioning skills as the teacher or may not have completely understood the response items in the assessment due to the nature of his disabilities.

Student 3

Comprehensive Executive Functioning Inventory Results

Student 3 presented himself as a dark haired young man who was small in stature with an infectious grin. He was very pleasant and cooperative during both the pre and post CEFI assessments. He appeared thoughtful, taking his time to answer questions to the best of his ability and frequently asking for questions to be repeated and clarified. On a couple occasions he said: "I understand this" during both pre and post sessions. On the teacher pre-test, student 3 fell in the average range and ranked at the 34th percentile. On the post-test, student 3 fell in the low average range in the 19th percentile. On the parent pre-test, student 3 fell in the avage range and ranked in the 53rd percentile. On the post-test, student 3 fell in the average range to the 32nd percentile. Student 3 showed a statistically significant decrease on the full scale teacher and parent assessment results with a decrease in emotional regulation on the teacher report and a decrease in working memory on the parent assessment. Conversely, student 3 was the only student to show a significant increase in executive function on the full scale self-report falling in the low-average range on the pre-test in the 18th percentile and increasing to the average range at the 34th percentile on the post-test. These results indicate student 3 had a positive self-reflection for his own executive functioning skill improvements over the duration of his job experience training and also had a more substantial positive self-reflection of his abilities compared to that of the other participating students (see Table 4.5: Student 3 Assessment Results).

Table 4.5: Student 3 Assessment Results

Teacher Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	94	87	-7	Decrease
Attention	95	91	-4	No
Emotional Regulation	120	108	-12	Decrease
Flexibility	99	89	-10	No
Inhibitory Control	108	108	0	No
Initiation	95	92	-3	No
Organization	82	79	-3	No
Planning	92	84	-8	No
Self-Monitoring	92	81	-11	No
Working Memory	72	67	-5	No

Parent Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	101	93	-8	Decrease
Attention	106	99	-7	No
Emotional Regulation	119	106	-13	No
Flexibility	91	91	0	No
Inhibitory Control	114	105	-9	No
Initiation	101	91	-10	No
Organization	95	94	-1	No
Planning	93	89	-4	No
Self-Monitoring	91	83	-8	No
Working Memory	97	79	-18	Decrease

Student Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	86	94	+8	Increase
Attention	90	94	+4	No
Emotional Regulation	101	103	+2	No
Flexibility	88	103	+15	No
Inhibitory Control	85	87	+2	No
Initiation	90	96	+6	No
Organization	95	101	+6	No
Planning	79	94	+15	No
Self-Monitoring	79	93	+14	No
Working Memory	82	87	+5	No

Student 3 Observation Results

Student three had many different job placements during the job experience training program. He was placed in the kitchen on two occasions where he was successful with simple, straight forward job descriptions including traying pizzas, wrapping cookies and silverware. He was also successful in the housekeeping and grounds work positions and requested to work with other students. Student 3 had more difficulty with the multiple steps involved in the kitchen carts job description, although observation notes document him making progress and completing tasks through the duration of the study and specifically with the tasks associated with cleaning the kitchen carts. Eventually, he was noted having success demonstrating the skills needed to clean the carts to another student (see Table 4.6: Student 3 Weekly Goal-Driven Performance-Based Observations).

Table 4.6: Student 3 Weekly Goal-Driven Performance- Based Observations

Week	**Observation Notes**
1	*Student Goal*: no goal for first week Student 3 was assigned to the kitchen to assist with wrapping bread. The teacher report noted he "worked independently and steadily for the entire" time (attention, organization). He was observed having a positive attitude was determined to finish the tasks which he did (initiation, self-monitoring).
2	*Student Goal*: To continue working hard and stay focused Student worked in the kitchen again cleaning carts, traying pizzas and sweeping. Student was noted on teacher report as "very flexible, eager to try new tasks" and was observed with positive body language. (flexibility, initiation, inhibitory control). Student completed all tasks.

Week	Observation Notes
3	*Student Goal*: To complete all tasks given to me and work hard Student was placed cleaning the kitchen carts and then in housekeeping cleaning the hand rails. Student followed directions for kitchen carts but had a difficult time remembering the sequence and needed frequent reminders of the steps and proper way to clean the carts (working memory). Teacher report noted student "tried so hard" (emotional regulation). Student completed all tasks.
4	*Student Goal*: I will work quicker Student was again placed cleaning the kitchen carts. Student worked with another student who had not yet worked on carts and demonstrated what to do to clean them (working memory, planning). Student worked well and teacher report noted he "got the job done more quickly than the week before." (initiation, attention, self-monitoring). Student completed all tasks.
5	*Student Goal*: to work well with others Student volunteered to do housekeeping so that he could be assured of working with others. Student did dusting and polishing of chairs, picture frames and doors (attention, organization, self-monitoring). No teacher report notes. Student completed all tasks and worked well with others (planning).
6	*Student Goal*: To work independently Student was noted by teacher report as "really showing initiative" (initiative). The student worked in the kitchen on various tasks including silverware, wrapping bread and cookies and general cleaning. The student remembered how to complete the tasks after being shown once and moved to each next job independently while maintaining his concentration (attention, self-monitoring, and organization). Student completed all tasks
7	*Student Goal*: To work independently with minimal support The student was offered to work on the grounds work by teacher. He collected trash around the building where he worked independently with minimal support (attention, initiation, self-monitoring). Student needed little guidance and no redirection with staying focused on the tasks associated with grounds work (working memory, organization). No teacher notes and student completed all tasks.

Student 3 Comparison Results

Comparison results between the CEFI assessment data and observations provided an unclear picture of student 3 progress in the job experience training program. Although he was the only student to show a decrease on the teacher and parent assessments, he was also the only student to show an increase in his own self-assessment results. The observation notes show increased skill capabilities but the decrease in emotional regulation and working memory on the teacher and parent assessments indicate he actually regressed in those skills over the duration of the job experience training. Student 3 appeared to understand the content of assessment response items and even responded with comfort while taking the assessment so there is some disconnect between how he viewed his skill development compared to that of his teacher and parent.

Student 4

Comprehensive Executive Functioning Inventory Results

Student 4 presented himself as a brown haired young man with an average build. He had a likeable nature with a serious and somewhat intense demeanor. He did not smile regularly but was polite and courteous asking "could you please tell me how long this will last?" He also had a difficult time communicating and spoke with a slight stutter. He took his time to answer questions on the pre assessment, but was noticeably disinterested in the post assessment as he did not take the same length of time to answer the questions. He also seemed more uneasy during the post assessment shuffling around in his seat, looking back at the closed door behind him regularly and acting like he was in a hurry to return to his regular day. Student 4 had no statistically significant changes in the teacher, parent, or student assessments (see Table 4.7: Student 4 Assessment Results).

Table 4.7: Student 4 Assessment Results

Teacher Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	74	76	+2	No
Attention	81	83	+2	No
Emotional Regulation	75	84	-11	No
Flexibility	75	77	+2	No
Inhibitory Control	73	78	+5	No
Initiation	67	71	+4	No
Organization	78	77	-1	No
Planning	79	81	+2	No
Self-Monitoring	82	77	-5	No
Working Memory	67	67	0	No

Parent Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	79	76	-3	No
Attention	80	76	-4	No
Emotional Regulation	78	85	+7	No
Flexibility	86	86	0	No
Inhibitory Control	83	80	-3	No
Initiation	81	74	-7	No
Organization	87	77	-10	No
Planning	77	79	+2	No
Self-Monitoring	82	83	+1	No
Working Memory	74	70	-4	No

Student Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	99	94	-5	No
Attention	99	94	-5	No
Emotional Regulation	101	96	-5	No
Flexibility	106	97	-9	No
Inhibitory Control	96	87	-9	No
Initiation	92	90	-2	No
Organization	99	92	-7	No
Planning	102	96	-6	No
Self-Monitoring	106	104	-2	No
Working Memory	97	97	0	No

Student 4 Observation Results

Student 4 had many different job placements during his job experience training including silverware, kitchen carts, grounds crew and housekeeping. He had the most success working on the silverware and seemed the most content throughout the observations while working in this area. He was also relaxed, detailed, and successful in the housekeeping job description, and was even one of three students to have the opportunity to do some painting. He was successful with all of his detail-related tasks. However, on one occasion student 4 was unprepared for work having not shaven recently for job placement and was placed on the grounds crew as a result. The next week, he was clean shaven and remained that way for the duration of the program. Student 4 responded well to redirection while working a couple different jobs including the difficult kitchen carts job description. He was also noted as "very detailed" on a couple of occasions by his job coach and teacher (see Table 4.8: Student 4 Weekly Goal-Driven Performance-Based Observations).

Table 4.8: Student 4 Weekly Goal-Driven Performance- Based Observations

Week	Observation Notes
1	*Student Goal*: no goals for first week Student began in kitchen rolling silverware and wrapping bread. Student was noted on teacher report as "working independently and steadily with a very good attitude" (attention, organization, working memory). The student was respectful and took suggestions by kitchen staff for improving his work (emotional regulation, flexibility). He completed all tasks.
2	*Student Goal*: To make sure the supplies are organized Student 2 bagged bread and prepared salad as well as portioning cookies. The student was hesitant to use a six-inch kitchen knife but gained confidence by sticking with the task (flexibility, inhibitory control, emotional regulation). No teacher notes and student completed all tasks.
3	*Student Goal*: To get my work done faster Student was placed on grounds work because he forgot to shave (planning). Teacher reminded him of the importance of remembering to shave and noted on teacher report that "he knew straight away that he should have." Student worked well and completed all tasks (emotional regulation, attention).
4	*Student Goal*: To get my work done faster and more independently Student was placed in housekeeping and vacuumed and cleaned windows (organization, attention). The student improved his appearance (working memory, planning) and shaved this week. He worked well with others and communicated effectively. No teacher notes and student completed all tasks.
5	*Student Goal*: To get my work done more independently Student was assigned housekeeping duty and got involved with some wall painting going on in the activity areas. The student took feedback and was slow with his work, but detailed in avoiding the painting going on while completing his dusting and cleaning tasks (inhibitory control, planning). He showed initiative suggesting that the paint crew post "wet paint" signs to warn residents and others (initiation, attention). No teacher notes and student completed all tasks.
6	*Student Goal*: To get my work done faster Student was placed cleaning kitchen carts. He needed some re-direction while cleaning the carts for the first time (working memory), and asked to be moved to the inside of the kitchen instead of outside (initiation, self-monitoring, planning), but teacher report noted "he got on with the job with some reluctance and completed all tasks to good standard (flexibility, inhibitory control, attention). Student completed all tasks.
7	*Student Goal*: To work independently and with more speed and accuracy Student was placed in the kitchen working on Silverware. He worked quickly and accurately. Teacher report noted he "started silverware straight away without prompting, and very little support was required (initiation, attention, working memory, organization). He completed all tasks.

Student 4 Comparison Results

Comparison results for student 4 indicated no impact on executive functioning skills as a result of his participation in the job experience training program. Student 4 was successful working in all job descriptions and even did well working in the difficult kitchen cart cleaning job description. He was also successful with the complexity of painting baseboards and trim on one housekeeping day. Still, the results of the teacher, parent and student self-assessments were unanimously unchanged. Student 4 was successful in the job placements and did everything that was asked of him, but showed no signs of skill development. He was able to take directions, follow directions, and complete all job-related tasks, but there were no assessment results that showed an impact on his executive functioning skills.

Student 5

Comprehensive Executive Functioning Inventory Results

Student 5 presented himself as a well-dressed, brown haired young man with an average build. He had a relaxed nature and took his time to answer questions during both the pre and post assessments. He asked for questions to be repeated or clarified on many occasions during both assessments. On the teacher pre-test, student 5 scored in the average range and ranked at the 37th percentile. On the post-test, student 5's scores increased in the average range to the 47th percentile. Student 5 had a full scale significant increase in executive functioning skills on the teacher assessment with increases in inhibitory control and planning. Student 5 had no statistically significant change in the parent or self-assessments (see Table 4.9: Student 5 Assessment Results).

Table 4.9: Student 5 Assessment Results

Teacher Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	95	99	+4	Increase
Attention	99	96	-3	No
Emotional Regulation	95	100	+5	No
Flexibility	99	94	-5	No
Inhibitory Control	90	101	+11	Increase
Initiation	101	103	+2	No
Organization	94	99	+5	No
Planning	89	99	+10	Increase
Self-Monitoring	97	100	+3	No
Working Memory	92	97	+5	No

Parent Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	102	102	0	No
Attention	95	90	-5	No
Emotional Regulation	101	101	0	No
Flexibility	108	108	0	No
Inhibitory Control	108	113	+5	No
Initiation	103	102	-1	No
Organization	103	104	+1	No
Planning	103	101	-2	No
Self-Monitoring	102	105	+3	No
Working Memory	97	96	-1	No

Student Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	82	87	+5	No
Attention	79	82	+3	No
Emotional Regulation	87	101	+14	No
Flexibility	94	97	+3	No
Inhibitory Control	92	83	-9	No
Initiation	94	90	-4	No
Organization	83	95	+12	No
Planning	85	83	-2	No
Self-Monitoring	83	95	+12	No
Working Memory	70	78	+8	No

Student 5 Observation Results

Student five worked in the laundry, housekeeping and physical therapy room during his job experience training. He was successful completing tasks in each setting, even taking on leadership roles in housekeeping and performing more challenging tasks in the laundry and physical therapy room. He was also noted as having a good attitude and performing job-related tasks with minimal supervision. Student 5 completed every task that was offered to him at the assisted living facility including being asked to deliver the laundry throughout the facility after it was folded. This task needed a more complex skill set to successfully navigate the facility. He was able to communicate effectively with different staff and complete the task. Student five never seemed challenged in the job training program. His goals from week to week were repetitive and did not seem to progress as the program moved forward (see Table 4.10: Student 5 Weekly Goal-Driven Performance-Based Observations).

Table 4.10: Student 5 Weekly Goal-Driven Performance- Based Observations

Week	Observation Notes
1	*Student Goals*: no goals for first week Student 5 began in the physical therapy center cleaning equipment and working with clients. He followed directions and completed all tasks (initiation, attention, organization). He then moved to housekeeping where he completed all tasks (flexibility, self-monitoring). No teacher notes.
2	*Student Goal*: To improve my new skills Student was placed in housekeeping for the day where he learned how to clean windows. He kept a steady pace and completed all tasks (working memory, organization). He was also noted on the teacher's report as having good communication skills (self-monitoring). Student completed all tasks.
3	*Student Goal*: To improve my cleaning and be more precise with my cleaning. Student was placed in housekeeping and teacher noted on report he "worked well but lacked some organization and communication skills so the same job got done twice." (organization, planning, attention). Student completed all assigned tasks.
4	*Student Goal*: Absent
5	*Student Goal*: To improve my cleaning and be more precise. Student was placed in the laundry, folding and putting clean items in laundry closets. Student was noted has having a "good attitude even though it was not his favorite job (inhibitory control, emotional regulation). He remembered the procedures and standards of work (working memory, attention). Student completed all tasks.
6	*Student Goal*: To learn a new skill. Student was placed in the laundry where he performed general folding and sorting duties, but was then asked to deliver the clean linens to various locations in the center. He was noted as "working quickly" (planning, self-monitoring). He completed all tasks in distributing the clean linens throughout the center (working memory, initiation, attention, organization, flexibility)
7	*Student Goal*: To work independently and with less supervision Student worked in housekeeping where he took a leadership position and assigned tasks to the team. (planning, initiation, organization, working memory). He completed all tasks and worked independently. No teacher notes.

Student 5 Comparison Results

Student 5 had a full scale increase on the teacher assessment, which matched his ability to acquire executive functioning skills throughout the job training program. Student five was successful throughout the job experience training. There were no observations of him having challenges completing tasks or taking on new ones. The teacher assessment also found an executive functioning skill increase in inhibitory control and planning. The improvement in these executive functioning skills may have been a result of how well he responded to all his learning opportunities, leadership roles and more complex tasks in different job placements. There are indications from the observations that student 5 could have been challenged more during the job training. There was no change in the parent assessment results and he did not view himself improving on his self- assessment. Therefore, there was not a match between the teacher assessment results and the parent and student results. This may have been a result of the parent or student's inability to fully understand the content of the assessment, or the inability of the student to transfer the skills to the home environment.

Student 6

Comprehensive Executive Functioning Inventory Results

Student 6 presented himself as a tall, blond, energetic and motivated young man. He took his time to provide responses in both the pre and post self-assessments. He asked for about five questions to be clarified during both the pre and post assessments. On the teacher pre-test, student 6 fell in the low average range and ranked in the 14th percentile. On the post-test, student 6 increased to the average range and ranked at the 34th percentile. The student had a statistically significant increase on the full scale teacher assessment with executive functioning skills increases in attention, flexibility, inhibitory control, and

planning. On the parent pre-test, student 6 fell in the low average range and ranked at the 10th percentile. On the post-test, student 6 increased to the average range and ranked at the 73rd percentile. Student 6 had a full scale increase on the parent assessment with executive functioning skill increases in attention, emotional regulation, inhibitory control, initiation, organization, planning, self-monitoring, and working memory. The student had no change in self-assessments (see Table 4.11: Student 6 Assessment Results).

Table 4.11: Student 6 Assessment Results

Teacher Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	84	94	+10	Increase
Attention	89	104	+15	Increase
Emotional Regulation	104	104	0	No
Flexibility	82	105	+23	Increase
Inhibitory Control	86	98	+12	Increase
Initiation	82	92	+10	No
Organization	78	84	+6	No
Planning	80	92	+12	Increase
Self-Monitoring	77	81	+4	No
Working Memory	85	91	+6	No

Parent Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	81	109	+28	Increase
Attention	96	110	+14	Increase
Emotional Regulation	85	111	+26	Increase
Flexibility	100	108	+8	No
Inhibitory Control	80	110	+30	Increase
Initiation	75	110	+25	Increase
Organization	80	108	+28	Increase
Planning	79	106	+27	Increase
Self-Monitoring	63	106	+43	Increase
Working Memory	82	103	+21	Increase

Student Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	100	96	-4	No
Attention	107	100	-7	No
Emotional Regulation	113	101	-12	No
Flexibility	108	106	-2	No
Inhibitory Control	102	98	-4	No
Initiation	96	90	-6	No
Organization	92	92	0	No
Planning	94	96	+2	No
Self-Monitoring	93	89	-4	No
Working Memory	97	102	+5	No

Student 6 Observation Results

Student 6 worked in the housekeeping, kitchen carts, and physical therapy job descriptions. He was successful completing tasks in all placements with increasing responsibilities in the physical therapy activities room. Student six was asked to file client information in the physical therapy room and worked very well with the clients and staff. He was also successful working collaboratively with other students on many separate occasions and took on leadership roles. Student six had the highest academic grade equivalency of the participating students so it was not surprising that he was able to take on more responsibilities with filing patient documents. He was offered summer employment as a result of his performance in the job training program (see Table 4.12: Student 6 Weekly Goal-Driven Performance-Based Observations).

Table 4.12: Student 6 Weekly Goal-Driven Performance- Based Observations

Week	Observation Notes
1	*Student Goal*: no goal for first week Student 6 began in housekeeping and was noted as "working to a high standard". He followed all procedures and assisted other students in what tasks to complete and in what order (working memory, organization, planning, attention). Student also took on a slight patronizing tone in one instance with teacher when asked to clarify what he was doing (inhibitory control). He completed all tasks.
2	*Student Goal*: I will learn new tasks in the physical therapy room. Student was assigned to clean kitchen carts and assisted in the laundry. Teacher noted he was "very flexible when we had a change of plan (flexibility, self-monitoring). Student worked well and completed all tasks
3	*Student Goal*: I will learn new tasks in the physical therapy room Student was placed in physical therapy room to clean equipment and then cleaned kitchen carts and also worked on silverware. Student completed all tasks in all locations. Was noted as "very cooperative and followed directions" (working memory, attention, inhibitory control, self-monitoring, organization).
4	*Student Goal*: I will learn new tasks and work more independently in the physical therapy room Student was placed in physical therapy room where he cleaned and supported clients. He also worked in the kitchen. He completed all tasks and was noted "working well" (planning, organization, working memory, attention).
5	*Student Goal*: I will learn new tasks and work more independently in all areas that I work in. Student was placed in physical therapy where he transported patients and assisted in filing. Report noted he was "very enthusiastic" (initiation, planning). Student moved to housekeeping an completed all tasks (working memory, flexibility).
6	*Student Goal*: I will work independently and increase my speed in housekeeping Student was placed in housekeeping and worked independently. He was observed showing another student how to work and also assisting clients when they had a question (flexibility). He was noted as being "very thorough (organization, self-monitoring, attention). Student completed all tasks.
7	*Student Goal*: To work independently and complete jobs to company standards Student was placed in housekeeping and was noted as being "organization and working to very high standards" (organization, working memory, planning, attention). Student completed all tasks.

Student 6 Comparison Results

Student six showed significant full scale increases on both the teacher and parent assessments and significant increases in many executive functioning skills. These results match his ability to complete all job tasks assigned to him in the job training and take on increased job responsibilities. Student 6 also made weekly goals that progressed and became more focused throughout the study. He was rewarded with a life changing employment opportunity for the summer following the school year. The contradiction was that there was still no change in the student's self-assessment results. Even with an increase in executive functioning skills from his teacher and parent assessments he did not view himself as making significant increases in any skills. These results indicate a disconnect between the ability of student 6 to reach every level of success in his job experience training while still having difficulty with the self-perception of his own accomplishments.

Student 7

Comprehensive Executive Functioning Inventory Results

Student 7 presented himself as a relaxed, black haired young man with a medium build. He appeared disinterested and sat with disengaging, slumping body language and facial expressions during both the pre and post assessments. He did not ask for any questions to be clarified in either assessment and answered quickly to assessment items. He seemed to be interested in getting through the assessment items as quickly as possible. Results showed no full scale changes in executive functioning skills on the teacher or parent assessments, and only a decrease in one executive functioning skill inhibitory control on the parent assessment. On the self-assessment pre-test, student 7 fell in the average range and ranked at the 68th percentile. On the post-test, student 7 increased to the average range ranking in the

30th percentile. Self-assessment results showed a full scale decrease on the student's self-assessment with a decrease in the executive functioning skills of flexibility and self-monitoring (see Table 4.13: Student 7 Assessment Results).

Table 4.13: Student 7 Assessment Results

Teacher Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	88	89	+1	No
Attention	92	97	+5	No
Emotional Regulation	88	95	+7	No
Flexibility	94	84	-10	No
Inhibitory Control	89	89	0	No
Initiation	90	92	+2	No
Organization	87	91	+4	No
Planning	83	80	-3	No
Self-Monitoring	89	89	0	No
Working Memory	88	86	-2	No

Parent Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	60	58	-2	No
Attention	66	70	+4	No
Emotional Regulation	73	65	-8	No
Flexibility	59	53	-6	No
Inhibitory Control	71	57	-14	Decrease
Initiation	55	65	+10	No
Organization	62	64	+2	No
Planning	54	54	0	No
Self-Monitoring	71	63	-8	No
Working Memory	62	59	-3	No

Student Assessment	Pre	Post	Scale Change	Statistically Significant p < .05
Full Scale	107	92	-15	Decrease
Attention	114	107	-7	No
Emotional Regulation	94	79	-15	No
Flexibility	114	85	-29	Decrease
Inhibitory Control	100	98	-2	No
Initiation	103	101	-2	No
Organization	97	81	-16	No
Planning	106	94	-12	No
Self-Monitoring	118	91	-27	Decrease
Working Memory	110	95	-15	No

Student 7 Observation Results

Student 7 spent most of his job experience training in housekeeping with additional job placements in the laundry and grounds work. On one training day he was supposed to be placed in the physical therapy room, but due to director input when arriving at the assisted living facility he was placed in housekeeping. Student 7 completed all his assigned tasks in the assisted living facility but had many observations from his teacher of less positive body language and goals of improving his attitude in the workplace. He also had teacher performance notes that included him having a difficult time paying attention to tasks and not being detailed in his work (see Table 4.14: Student 7 Weekly Goal-Driven Performance-Based Observations).

Table 4.14: Student 7 Weekly Goal-Driven Performance- Based Observations

Week	**Observation Notes**
1	*Student Goal*: no goal in first week Student 7 began in housekeeping where he followed directions but was noted as having "less positive body language" and difficulty adhering to safety procedures by sitting by a door (working memory, initiation, self-monitoring). Student completed all tasks.
2	*Student Goal*: work harder and with a positive attitude Student was placed in housekeeping where he worked hard and kept a steady pace. Student was reported having a "much better attitude and good teamwork" (planning, initiation, working memory). He completed all tasks.
3	*Student Goal*: Make sure everything is sparkling Student was placed in housekeeping and needed a couple reminders for where he was spraying furniture polish and to not spray it on the cushions, walls or floor (working memory, self-monitoring, inhibitory control). Teacher report noted him using "good teamwork and working logically" (working memory, attention, organization). Student completed all tasks.

Week	Observation Notes
4	*Student Goal*: take initiative Student was placed in laundry where he folded and distributed items but looked very tired (planning, flexibility, emotional regulation). Teacher report noted him "needing significant redirection" (working memory, initiation, attention, self-monitoring). Student completed all tasks.
5	*Student Goal*: work quicker Student was placed in housekeeping where he was involved in a wall painting work in the activity room. He seemed annoyed with the tasks although he took direction well (flexibility, emotional regulation). He needed a lot of redirection for watching out for paint (flexibility, attention). Teacher report noted him "rushing a bit" (flexibility, self-monitoring). He completed all tasks.
6	*Student Goal*: Learn new skills in a new department Student was placed in housekeeping although teacher report noted "he was unable to go to physical therapy as planned, flexible with job change" (flexibility, inhibitory control, self-monitoring, emotional regulation). Student worked well, but seemed to lack organization and sat in the middle of the hallway without considering the safety of others and did not check with others to see where next to clean, appeared annoyed (organization, emotional regulation, inhibitory control, attention). He completed all tasks.
7	*Student Goal*: Discuss work routine with partner to ensure the same area does not get done twice and no areas are missed Student was placed on grounds work and worked on trash detail. He had open discussions with others of areas to collect trash (planning, attention, organization). Teacher report noted "flexible to job change" (flexibility). Student used equipment in a safe manner and completed all tasks.

Student 7 Comparison Results

Assessment results for student 7 showed no change on the teacher assessment with a decrease in inhibitory control on the parent assessment. Student 7 scored himself as decreasing skills in his overall full scale results with a decrease in flexibility and self-monitoring. Observation results noted similar findings to the assessments including the student having a sluggish disposition and a hurried attitude toward completing tasks. Both assessment and observation results note student 7 as disengaged and inattentive. These results raise concern for this students' ability to be successful in a workplace setting.

Comprehensive Executive Functioning Results Summary

The CEFI results indicated Students 1 and 2 showed statistically significant increases in executive functioning skills capabilities on the teacher comparison pre and post assessment data. Student 3 showed a statistically significant decrease from both the parent and teacher responses with an increase in capabilities for the self-response forms. Student 5 showed a statistically significant increase from the teacher response forms only. Student 6 showed a statistically significant increase in both the parent and teacher responses. Student 7 showed a statistically significant decrease in the self-responses.

After participating in the seven week job experience training program the full scale results of the teacher comparative assessment data indicated an overall average increase on executive functioning skills for the seven boys participating in the JET program with only one teacher comparative score decrease. These results indicate the teacher was able to identify the boys developing executive functioning skills throughout the duration of the job experience training program. The full scale parent comparative assessment results showed only student 6 made scale score gains between pre and post assessments. It was a significant gain, but was

overshadowed by the number of decreasing scale scores for the other six students. The parent results indicate there was no contextual transfer of skills between the teacher's assessment of the ability of the students to develop executive functioning skills as a result of the JET program and that of the parent perception of the student progress. Additionally, the student self-assessment findings found mixed results with small full scale changes indicating very little self-perception in the students' ability to acquire executive functioning skills in either the context of the workplace or outside of the workplace environment. These findings may also indicate noted limitations in the CEFI assessment used for this study as the student's did not seem to fully grasp the assessment items as noted in the observation notes. Even student 6 who had strong increases in both the teacher and parent comparative assessment results produced no significant gains in his own self-assessment (See Table 4.15 Full Scale Results).

Table 4.15: Full Scale Results

Parent Assessment

	Pre Assessment	Post Assessment	Scale Change	Significant Change p < .05
Student 1	81	77	-4	NC
Student 2	104	102	-2	NC
Student 3	101	93	-8	Decrease
Student 4	79	76	-3	NC
Student 5	102	102	0	NC
Student 6	81	109	+28	Increase
Student 7	60	58	-2	NC

Teacher Assessment

	Pre Assessment	Post Assessment	Scale Change	Significant Change p < .05
Student 1	85	92	+5	Increase
Student 2	78	87	+9	Increase
Student 3	94	87	-7	Decrease
Student 4	74	76	+2	NC
Student 5	95	99	+4	Increase
Student 6	84	94	+10	Increase
Student 7	88	89	+1	NC

Student Self-Assessment

	Pre Assessment	Post Assessment	Scale Change	Significant Change p < .05
Student 1	88	87	-1	NC
Student 2	111	113	+2	NC
Student 3	86	94	+6	Increase
Student 4	99	94	-5	NC
Student 5	82	87	+5	NC
Student 6	100	96	-4	NC
Student 7	107	92	-15	Decrease

Executive Functioning Observation Results Summary

The weekly goal-driven performance based observations documented one hundred and sixty four executive functioning skill-based opportunities while the students were participating in the job experience training at the assisted living facility broken down into separate skills containing: a) attention (31), b) flexibility (15), c) inhibitory control (10), d) planning (18), e) working memory (26), f) organization (24) g) self-monitoring (17), h) emotional regulation (8) and i) initiation (15). (Individual student results are documented in Table 4.16: Executive Functioning Skill Building Opportunities). The observations also documented the ability of each student to complete all tasks assigned to them as reported by the transition resource teacher and job coaches working with the students. (Individual student task completion results are documented in Table 4.17: Completion of Job-Related Tasks). The combined results of the skill building opportunities and the ability of the students to complete job-related tasks paints a progressive picture of the ability of the JET program to provide the participating students with both many opportunities to develop the executive functioning skills to do basic job descriptions in the workplace environment, but to also find success by successfully completing job-related tasks at a high percentage. These results also speak to the intrinsic value of a JET program at an assisted living facility. The students were provided many different executive functioning skill building opportunities in the context of many varying job descriptions. Only student 1 was unable to acquire many observable relationships between executive functioning skill building opportunities and a high percentage of job-related task completions and that was largely due to the number of absences he had at the beginning of the training program. These results indicate a multi-faceted JET opportunity was provided to the students incorporating skill building opportunities with real-world task completion outcomes.

Table 4.16: Executive Functioning Skill Building Opportunities

	Student 1	**Student 2**	**Student 3**	**Student 4**	**Student 5**	**Student 6**	**Student 7**
Attention	3	3	5	6	4	5	5
Emotional Regulation	-	3	1	3	1	-	-
Flexibility	1	2	1	3	2	3	3
Inhibitory Control	1	-	1	3	1	2	2
Initiation	-	2	5	3	3	1	1
Organization	-	2	4	3	5	5	5
Planning	1	-	2	4	3	4	4
Self-Monitoring	-	2	5	1	3	3	3
Working Memory	-	5	3	4	4	5	5
Total Executive Functioning Opportunities	6	19	27	30	26	28	28

Table 4.17: Completion of Job-Related Tasks

	Student 1	**Student 2**	**Student 3**	**Student 4**	**Student 5**	**Student 6**	**Student 7**
Week 1	√	√	√	√	√	√	√
Week 2	Absent	√	√	√	√	√	√
Week 3	Absent	√	√	√	√	√	√
Week 4	Absent		√	√	√	√	√
Week 5	√	√	√	√	√	√	√
Week 6	70%	√	√	√	√	√	√
Week 7	√	√	√	√	√	√	√
completion rate	4/5	6/7	7/7	7/7	7/7	7/7	7/7
	95.7% task completion percentage overall						

CHAPTER 5: DISCUSSION

Overview

The results of this study evaluated the impact of executive functioning skills for students with disabilities while participating in a community-based Job Experience Training (JET) program. This chapter will discuss the results of this study in three parts: a) findings, b) literature conclusions, and c) implications for future research in the field.

Qualitative Findings

Creswell (2005) notes the importance of the ability of mixed method studies to establish quantitative results that support qualitative themes. This study produced four major qualitative findings as a result of the observations of the students while they participated in the Job Experience Training (JET) program: a) high completion rate of job-related tasks, b) opportunities to develop skills in different job descriptions, c) supportive and progressive goal-planning, and d) observable executive functioning skill building opportunities. First, the students had a high completion rate percent of job-related tasks in the JET program under the supervision of the transition resource teacher, job coaches and the assisted living facility director. The program was successful in providing the students with the supervision and support needed in performing the tasks associated with each job description. Second, the students continued to take on new skills and were guided by the teacher and job coaches to learn those skills in a positive manner even when some of the more challenging activities gave the students problems throughout the duration of the study. Every student had the opportunity to gain experience in at least two different job placements while participating in the JET program and most had as many as four or five different job opportunities. Third, the transition teacher was successful in guiding the students through the expectations and goal-planning process of the JET program as the students developed progressive

weekly goals related to their job placements. Lastly, there were many observable opportunities for the students to practice and develop executive functioning skills while participating in the JET program. The construct of the JET program at the assisted living facility offered a wide range of developmental skill opportunities for each student with individualized support and training to meet the objectives of the training program and enhance the employability attributes of the participating students.

Quantitative Findings

The quantitative results of the Comprehensive Executive Functioning Inventory (CEFI) assessment showed a broad spectrum of results for each individual student who participated in the JET program. The most significant CEFI results were found in the teacher results which indicated a significant increase in executive functioning skills in four out of the seven participating students. These results show the transition teacher was able to see an increase in executive functioning skills for the students through the job experience training program and in the context of the assisted living facility workplace environment. However, results of the parent and student CEFI assessments found little data that showed the students were capable of transferring those skills to environments outside the context of the assisted living facility. Further, the student self-assessments found virtually no change in the student's self-perception of executive functioning skills development as a result of the time they spent participating in the JET program.

Literature Conclusions

The results of this study support the work-based learning theories of Billett (2001), and the contextual learning processes noted by Hodkinson, Colley & Malcolm (2003). The more training and consistent feedback each student received at the assisted living facility, the more capable they became at completing the tasks associated with each job description. For example, student 3 had a difficult time remembering the sequence of cleaning the kitchen carts in weeks two and three. He needed frequent reminders of the steps involved with cleaning the carts, but in week four he was capable of cleaning the carts on his own and also capable of demonstrating the steps involved with cleaning the carts to another student. The results of this study also support the results of Curtin's (2008) dissertation of increased motivation, personal presentation, and social competence for students with disabilities through community-based learning opportunities. In week four, the teacher noted that student 2, had "little motivation" while working in the kitchen carts job description. In the following weeks, student 2 had job placement goals to increase his motivation and was placed in a different job description working on the silverware and in housekeeping. In the process he was noted as "looking like he enjoyed the work" and meeting his personal goals.

The results of this study also support the results of Blackorby, Hancock, and Siegel (1993) finding students who have high self-care skills were more likely to be engaged in post-school employment outcomes. In week three, Student 4 showed up for the job placement with an unshaven appearance and was placed on the grounds crew after the transition teacher brought the student's appearance into question. The student was receptive to this learning opportunity and was clean shaven for the remainder of the JET program.

Individualized support

The results of this study support the claims of Woolsey and Katz-Leavy (2008) on the importance of establishing person-centered planning that leads to work exposure and career options that are rewarding to individuals with disabilities. During the course of this study the JET program provided the students with opportunities to meet individualized planning goals before each weekly job placement. Each week, most of the students were successful in finding a job placement that matched their individual goals. In addition, the results of this study support the findings of Wehmeyer & Schwartz (1997) that students with higher self-determination skills were more likely to be engaged in post-school employment outcomes. Throughout the JET program most of the students were capable of improving or building on their previous weeks' goals. For example, student 7 became active in his individualized goal planning process and established progressive goals that helped him attain specific person-centered planning practices. Student 7 began the seven week job placement with an elementary broad goal of "work harder and with a positive attitude." As his goals progressed through the weeks, his goals grew to become more objective and measurable, including "learning new skills in a new department" and "discussing work routines with a partner to ensure the same area does not get done twice and no areas are missed." These later goals were more specific to the job descriptions proving to his teachers that his person-centered practices were improving over the duration of the study.

Flexibility, although a key executive skill needed in the work place, presented a challenge for the students in the JET program. This disconnect was discovered while analyzing the process of goal-planning and the goal's correlation to actual job placements. For example, Student 7 drafted the goal "learn a new skill in a new department." However once the day began student 7

was placed in an environment that he had previously gained a lot of experience in and thus did not get to reflect back on the daily goal he made for himself. This can lead to the valuable lesson of flexibility but undermines the effectiveness of the goal planning process.

White & Weiner (2004) found students who participated in natural on-the-job training environments were more likely to be engaged in post-school employment outcomes, but the results of this study note the challenges of matching individual student goals to the context of the working environment. On occasion, the transition teacher noted the challenges of community-based instruction in that there was not always a match between the students' weekly goals and the job placement. Due to the obligations the facility director had to meet the needs of his clients the students would be placed in the jobs that helped complete his objectives of the day. Therefore, it could be said that one of the potential setbacks of community-based instruction is that the JET program was forced to function within the parameters of the job placements available for each student on any given training day. In this study the students had the opportunity to do many jobs at the facility but the jobs were still narrow in scope as most of the students were unable to make new goals specific to their job placements. This resulted in many of the student's weekly goals as unspecified and generalized, including: a) "working harder," b) working faster," and c) "working more independently." These circumstances should be considered as influential factors while analyzing the student's self -assessments on making growth towards stronger executive functioning skills. Thus, it is important to note that if the goals were written with motivation for growth the students were unable to experience the reflective process needed when feeling the positive effects of establishing their weekly goals.

Transition Support

The results of this study highlighted the ability of the JET program to support student development and provide opportunities to assist students with disabilities in preparing for life after high school. This study showed evidence of Dewey's (1916) theory of personal identity in the workplace, Vygotsky's (1978) zone of proximal development, and Gardner's (2000) righting mechanism theories. While the students completed job-related tasks that were modeled to them in the environment of the assisted living facility they established connections with residents, job coaches and other acquaintances within the facility. These connections led to repeated practice and automated skills development for many of the students, especially those working extensively in the laundry, kitchen, and housekeeping areas. Luecking and Fabian (2000) found work behaviors during internships for students with disabilities was one of the best predictors of full-time employment outcomes after graduation. The nature of the disability did not make a significant difference in the ability of the student to be successful. Student 5 seemed to have more complex language processing disabilities than many of the other students and ended up spending most of his seven week placements in only two job descriptions, the laundry and housekeeping. Student 5 received good feedback on his performance from his job coach and transition teacher on a repeated basis, seemed comfortable in the job descriptions and improved on his previous week's performance throughout the study. As a result, student 5 was able to establish a personal identity through his job placements and was only one of two students to show an increase (+5) in the self-assessment. His personal assessment echoes the point that when a student's goals are matched with their workplace opportunity then their self-assessment may reflect the positive correlation between goal planning and daily experiences.

Outside Agency Support

This study identified the ability of the students to complete tasks, develop skills, and transfer those skills to other contexts lies in the ability of these transition areas to work collectively. For example, the lack of involvement from an outside agency was fulfilled by the level of family involvement in driving the students to and from the job site. Repetto, Webb, Garvan & Washington (2002) found students with disabilities who are supported by parent networks and interagency collaboration agreements were more likely to be engaged in postsecondary educational opportunities. Many of the support services of an outside agency were provided by the parents who volunteered to drive students to and from the school and the assisted living facility staff who provided the job coaching. At no point in the study was there any indication of state or federal outside agency support for the participating students including job coaching, transportation, or other functional requirements of the JET program. Williams-Diehm & Lynch (2007) note the importance of school personnel *and* outside agency support for students with disabilities attempting to achieve transition goals. The ability of the students to navigate the complexities of the JET program was facilitated by the relationships between the students, parents, school personnel and the business community. The correspondences between the other workers, family members, clients, and other general acquaintances at the assisted living facility were observed as positive relationships. The director of the assisted living facility showed respect and care while hosting the students. He discussed extending the JET program through the summer so the students would have the opportunity to continue their training. The collaborative findings of this study document the importance of the community of stakeholders to provide developmental skill opportunities that meet postsecondary training opportunities for students with disabilities.

A Successful Model

Dawson and Guare (2010) note children struggling with the flexibility to regulate executive functions in classroom environments are likely to do better in social environments in which the number of children whom they have to interact is reduced and the degree of adult supervision is increased. Student 6 was the only student to show a significant increase in the parent and teacher assessments. His ability to take direction, perform job-related tasks, and establish a positive relationship with the faculty and residents of the facility provided a successful learning opportunity that may not have happened in the traditional classroom setting. On the last week of the training, the director of the facility offered student 6 summer employment as a result of his performance in the JET program. The success of student 6 demonstrated the inherit value of a community-based JET program for students with disabilities. Kohler's Taxonomy for Transition Programming (1996) describes transition implementation for students with disabilities in five areas: a) student-focused planning, b) student development, c) interagency collaboration, d) program structures, and e) family involvement. The results of this study have validated the importance of each of these areas for students with Language Impairments and their ability to navigate the complexities associated with a JET program model. The results of this study support the social validity concerns of a job experience training program for a community of stakeholders. As school administrators are trying to figure out how to design programs that meet the needs of students with disabilities, educators are doing their best to provide students with disabilities with the educational opportunities, and parents are wondering how their child will someday live independently, the establishment of a community-based JET program provides a lifetime of learning outcomes.

Future Research Implications

This ten week study measured the impact of a JET program on the executive functioning skills for students with disabilities. Future research in the field should continue to expand on this study in four ways: a) establish a longitudinal study of the impact of a JET program on the executive functioning skills of students with disabilities, b) establish a study that measures the effectiveness of a JET program across multiple job sites and job placements in the community, c) measure the rate of transferability of employability skills from the context of the workplace to other real-world applications including the home and school environment, and d) take a closer look at the mentoring relationships between JET job coaches and the participating students.

A Longitudinal Study of Executive Function

Barkley (2001) notes executive function would best be measured by shifting the control of behavior from an immediate context to an evolutionary lens of social future. In this regard, the contextual application of time spent in the assisted living facility could be measured over the duration of a student's lifetime and not through the relatively short duration of this study. Similarly, Isquith, Roth and Gioia (2013) note performance-based measures and rating scale measures provide complementary information with regard to the individual's level of executive function. A better measure is in the practical application of the program and by the impact of the training on the future capabilities of each individual student over the course of their lifespan. Therefore, a future longitudinal comparison study utilizing the CEFI assessment could be administered in the same manner, but may provide very different results after a year or more of workplace training. Additionally, an extension of the relatively short duration of the job training in this study may also contribute to the minimal impact on the parent and student self-

assessments. The transition teacher was able to see growth and development over a relatively short period of time, but the parent and student themselves may not have been able to fully recognize the full impact of the JET training program in such a short timeframe.

More Job Training Site Comparisons

A second implication of future research on transition services could measure and compare more job training opportunities at different job training sites for the participating students. There are endless possibilities for the structure and competency of a JET program and how students with disabilities are affected by their participation in different program models. Repetto et al. (2002) found no positive relationships between the *characteristics* of a transition program and post-school employment outcomes for students with disabilities in the state of Florida. New federal funding is available for a wide a range of transition programming options, but it will be important for all active stakeholders to provide program formats that are effective for students with disabilities. The results of this study may have been able to assist educators in developing and modeling a community-based JET program in the context of an assisted living facility, but more research is needed to compare different job sites and JET program models in the United States and other parts of the world.

Transferability

Johnson, Stodden, Emanuel, Luecking & Mack, (2002) note youth with disabilities who receive vocational training are better prepared for a successful transition into adulthood, and have a better chance of becoming a contributing member of society. This study revealed that the students with Language Impairments struggled to transfer their executive functioning skills from the context of the workplace environment to that of the home environment. These results

are supported by Domaracki and Lyon (1992) who found high school students who participated in housekeeping and janitorial work skills development in naturalistic and simulation contexts did not generalize their responses in a multiple probe design. The results are contradicted by Branham, Collins, Schuster & Kleinert (1999), and Cihak, Alberto, Kessler & Taber (2004) finding students with cognitive impairments were successful in generalizing skills taught in community-based instructional settings to other contexts. In a review of literature on community-based instruction across grade levels Walker, Richter, Uphold, and Test (2010) found 87% of studied were done on students with mental retardation. The authors note a need for community-based instruction studies on participants with other disability labels and for more research in the vocational community. Future research that can expand on the abilities of students with pragmatic Language Impairments to transfer skills between contextual learning environments could further the universal impact of school-to-work transition programs.

Mentoring

Haworth (1986) notes personal autonomy in the workplace environment is based on the naturally occurring contingencies of reinforcement (Haworth, 1986). The relationship between the instructional mentor and student is a vital component of most JET program models because it provides a direct link to the student's autonomy in the workplace. The mentor aspect of this study stood out as being a key factor in the ability of the students' to meet their weekly goals and complete job-related tasks. Successful relationships in the workplace create a comfortable learning environment assisting the student in bridging the gap between their individual disability profile and workplace success. Vandercook (1991) found peer responses and skill development for students with disabilities could be linked through systematic provisions of instruction. Many students with pragmatic language impairments lack the expressive and

receptive skills needed to clarify or synthesize information. Their ability to relate to their coworkers is necessary for them to gain skills within the work environment. Therefore, future research would be useful in providing more insight into the mentoring relationships that exist between the students and their job coaches, employers and the business community. Investigating how job coaches mentor and establish successful relationships may provide more insight into the effectiveness of a JET program.

Summary

The findings of this study are consistent with the literature and landscape of community-based JET programs for students with disabilities. The study expanded on past research by evaluating participants in a JET program and measuring their growth in their ability to acquire executive functioning skills. The results of this study show evidence that executive skills were able to be taught and retained during each job placement but the overall majority of students could not transfer those skills into other contextual settings. The study and literature indicate that the students' inability to transfer skills could be due to their lack of self-perception. Naglieri and Goldstein (2013) note future research should continue to define, understand and develop clinical strategies and interventions to facilitate the development and operation of the executive functioning system. Mentorship continues to be the most effective teaching tool to guide students with disabilities to success in multiple workplace settings. Future implications recommended would be a longitudinal study across multiple job sites that evaluates and measures the students' ability to transfer knowledge using mentoring as the core teaching strategy to meet the needs of JET programs.

APPENDIX A:
INSTITUTIONAL REVIEW BOARD APPROVAL DOCUMENT

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Christopher M. Elliott**

Date: **March 28, 2013**

Dear Researcher:

On 3/28/2013, the IRB approved the following human participant research until 3/27/2014 inclusive:

Type of Review:	UCF Initial Review Submission Form
Project Title:	Job Experience Training for Students with Intellectual Disabilities
Investigator:	Christopher M Elliott
IRB Number:	SBE-13-09281
Funding Agency:	
Grant Title:	
Research ID:	N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at https://iris.research.ucf.edu .

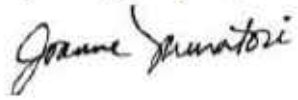
If continuing review approval is not granted before the expiration date of 3/27/2014, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 03/28/2013 09:31:10 AM EST



IRB Coordinator

APPENDIX B:
PARENT INFORMED CONSENT FORM

University of Central Florida

Job Experience Training Program Study

Informed Consent

Principal Investigator: *Christopher M. Elliott*

Faculty Supervisor: *Dr. Suzanne Martin, PhD*

Sponsors: *UCF Department of Child, Family and Community Sciences*
National Urban Special Education Leadership Initiative

Investigational Site(s): *Providence Academy Non-Profit Educational Foundation*

How to return this Consent Form: *Please complete and return to Study Primary Investigator*

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being asked to allow your child to take part in a research study which will include about eight people at the Providence Foundation. Your child is being invited to take part in this research study because he or she is a student currently participating in the Job Experience Training Program at the high school. Your child has been identified as having disability which impacts his/her ability to make decisions or judgments that are in his/her best interest.

The person doing this research is Christopher Elliott, a doctoral candidate at the University of Central Florida. Because the researcher is a doctoral student, the researcher is being guided by Dr. Suzanne Martin, a UCF faculty advisor with the Department of Child, Family, and Community Sciences, and coordinator of the National Urban Special Education Leadership Initiative.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should allow your child to take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you or your child.
- Feel free to ask all the questions you want before you decide.

Purpose of the research study: The purpose of this study is to understand the ability of students with intellectual disabilities to increase employability skills development by participating in a community-based job experience training program at an assisted living facility.

Permission to Take Part in a Human Research Study

What you will be asked to do in the study: You will be asked to complete an executive functioning skill assessment inventory based on the strengths or weaknesses of your child before and after completion of his/her job training program placement.

What your child will be asked to do in the study: Your child will be asked to complete the same assessment before and after participating in the job experience training placement with the questions facilitated and clarified by the primary investigator of the study. During the study your child will be asked to participate as usual in his/her job experience training program placement.

Study Design:

- This study is designed to last for eight weeks with a six week student job placement observation.
- The child will be expected to interact with the primary investigator during pre- and post assessment inventories, and otherwise be expected to have normal interactions while participating in the Job Experience Training Program. (Your child does not have to answer every question or complete every task.
- You or your child will not lose any benefits if your child skips questions or tasks.
- The study will conclude at the end of the 2012-2013 school year.
- No experimental procedures will be used in this study.

Location: This study will be conducted at the Providence Academy Foundation East Campus and observation will take place at an assisted living facility.

Time required: We expect that your child will be in this research study for eight weeks. You will be asked to complete a pre- and post Comprehensive Executive Functioning Inventory Assessment with one hundred Likert scale items for the students' present level of functioning. This scaled assessment should take between ten to twenty minutes to complete and will need to be completed once before and after the six week job placement observation sessions. The student will be asked to complete the same one hundred question inventory, but will have questions clarified by the primary researcher and transition coordinator to ensure understanding of assessment items. The student will be asked to sit down with the primary researcher and transition coordinator before and after the six week job placement observation for about thirty minutes to complete the same assessment inventory. There are no additional time requirements or obligations for either the parent or student as part of the study. Student job placements are part of their regular school day and a requirement of their participation in the Job Experience Training Program.

Risks: There are no risks or discomforts involved in taking part in this study.

Benefits: The possible benefits include increased knowledge for stakeholders involved in the child's employability skills development including parents, teachers, school staff, etc.

Alternatives: If you do not wish to be included in this study, you may continue to participate in the Job Experience Training Program.

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Compensation or payment: There is no payment or extra credit for taking part in this study.

Confidentiality: This is a confidential study. No participant names or other personal information will be used. We will limit your personal data collected in this study to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of UCF.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt your child talk to:

Christopher M. Elliott (primary investigator)
407-951- 2703
Christopher_elliott@knights.ucf.edu

Heather Nelmes (Transition Coordinator)
hnelmes@providence-academy.org

Dr. Suzanne Martin
407-823-4260
Suzanne.martin@ucf.edu

Alicia Braccia (President Providence Foundation)
abraccia@providence-foundation.org

IRB contact about you and your child's rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Withdrawing from the study:
You may decide not to have your child continue in the research study at any time without it being held against you or your child. If you decide to have your child leave the research, please contact the primary investigator so that the investigator can remove the student from further assessments or observations. The person in charge of the research study can remove your child from the research study without your approval. Possible reasons for removal include dismissal from the Job Experience Training Program or the student's inability to continue in the job training placement due to illness or personal injury. We will tell you and your child about any new information that may affect your child's health, welfare or your choice to have your child stay in the research.

Permission to Take Part in a Human Research Study

Your signature below indicates your permission for the child named below to take part in this research.

DO NOT SIGN THIS FORM AFTER THE IRB EXPIRATION DATE BELOW

_____

Name of child participant

_____

Signature of parent or guardian*

_____

Printed name of parent or guardian*

_____

Date

Assent

__ Obtained verbally

* Note on permission by guardians: An individual may provide permission for a child only if that individual can provide a written document indicating that he or she is legally authorized to consent to the child's general medical care. Attach the documentation to the signed document.

Please keep a signed copy of this consent form for your records.

UCF IRB Version Date: 01/2010

APPENDIX C:
HOUSEKEEPER JOB DESCRIPTION

Housekeeper Job Description

Position Overview

Provides daily housekeeping services to the residents to ensure a safe, clean and sanitary environment in accordance with laws, regulations and facility guidelines.

Basic Qualifications

Education & Certification:

High school diploma or equivalent.

Skills & Requirements:

Must possess the ability to read, write and speak the English language, must be patient, friendly, courteous and respectful to residents in any situation, including difficult ones; must be able to make independent decisions when necessary; must have the ability to follow housekeeping guidelines as outlined by the facility; must be able to move frequently throughout the workday; must be able to lift 30 lbs floor to waist; lift 10 lbs waist to shoulder; lift and carry 30 lbs; and push/pull 30 lbs.

Experience:

Prior experience in housekeeping at a large establishment; health care experience preferred.

Working Conditions

Primarily works throughout the facility, including resident rooms; bends, lifts, sits, stands and moves frequently throughout the shift; deals with frequent interruptions and possibly upset residents and family members; works regularly scheduled shifts with possible weekends, holidays and other hours based on resident needs; participates in required continuing education programs; subject to odors, falls, burns and exposure to infectious diseases, waste, etc., including AIDS and Hepatitis B viruses.

Competencies of Position

Professionalism: Reports to work on time and as scheduled; works in unison with all staff; displays a willingness to help others; embraces constructive criticism.

Resident Rights: Promptly reports resident grievances to supervisors; treats all resident care information with confidentiality; continuously monitors assigned areas to ensure residents are treated fairly and with dignity and respect at all times.

Safety Awareness: Follows safety program guidelines; immediately reports accidents and incidents to supervisors; identifies unsafe working areas and promptly reports to supervisors; promotes safety by working as safely and efficiently as possible; consistently follows infection control and universal precautions and other guidelines; identifies and corrects or reports hazardous conditions to supervisors; understands facility emergency and evacuation protocols; operates equipment with care and safety; maintains clean and safe work areas; properly disposes of trash; follows facility guidelines for safety and sanitation.

Customer Service: Treats all residents, families, co-workers and supervisors with dignity and respect and takes initiative to exceed customer expectations; professionally represents the facility, self and position to visitors and residents; demonstrates a positive attitude and willingness to help to all visitors and residents; remains sensitive to all needs through listening, observing and responding appropriately for the position held; respects resident personal items.

Essential Job Duties

1. Provides daily housekeeping duties as assigned.
2. Closely follows daily, weekly and monthly cleaning schedules.
3. Cleans floors, including dust mop, wet mop, sweeping, polishing and vacuuming.
4. Cleans furnishings which are moveable or stationary through the facility, including light fixtures, water fountains, etc.
5. Dusts, disinfects, washes and polishes vents, shelves, doorways, corners, etc.
6. Empties, disinfects and places new liners in waste containers or garbage cans.
7. Cleans bathroom fixtures, floors, sinks, tubs, walls mirrors and toilets.
8. Cleans hallway floors, rails and walls, stairways, and elevators.

Other Job Duties

1. Monitors inventory of supplies to ensure the adequate quantities are available to perform daily tasks.
2. Reports any repairs needed to the Housekeeping Supervisor.
3. Replenishes bathroom and other supplies, including tissues, toilet paper, soap, paper towels, etc.; changes light bulbs as needed.
4. Cleans curtains in resident rooms based on facility schedule.

APPENDIX D:
PLANT OPERATIONS ASSISTANT JOB DESCRIPTION

PLANT OPERATIONS ASSISTANT

Position Overview

Assists with facility maintenance, including physical plant, mechanical, electrical and resident care equipment to help provide a safe environment for residents, staff and visitors in accordance with laws, regulations and facility guidelines.

Basic Qualifications

Education and Certification:

High school diploma or equivalent.

Skills & Requirements:

Must possess the ability to read, write and speak the English language, must be patient, friendly, courteous and respectful to residents in any situation, including difficult ones; must be able to make independent decisions when necessary; must have the ability to follow maintenance department guidelines as outlined by the facility and other regulations governing maintenance of a long-term care facility; must be able to move frequently throughout the workday; must be able to lift 40 lbs floor to waist; lift 20 lbs waist to shoulder; lift and carry 40 lbs; and push/pull 40 lbs.

Experience:

Minimum of one year experience with physical plant, mechanical, electrical and plumbing systems; long-term care or other health care setting experience is preferred.

Working Conditions

Primarily works in an throughout the facility; bends, lifts, sits, stands and moves frequently throughout the shift; exposed to both inside and outside weather conditions and temperatures; deals with frequent interruptions and possibly upset residents and family members; works regularly scheduled shifts with possible weekends, holidays and other hours based on resident needs; primary responsibility is service to the residents but also deals with visitors, government personnel, etc.; participates in required continuing education programs; subject to odors, falls, burns and exposure to infectious diseases, waste, etc., including AIDS and Hepatitis B viruses.

Competencies of Position

Professionalism: Reports to work on time and as scheduled; works in unison with all staff; displays a willingness to help others; embraces constructive criticism; presents a friendly and professional attitude.

Resident Rights: Promptly reports resident grievances to supervisors; treats all resident care information with confidentiality; continuously monitors assigned areas to ensure residents are treated fairly and with dignity and respect at all times (e.g., knocking on resident doors before entering room).

Organizational and Communication Skills: Ability to multi-task and is detail-oriented; possesses the ability to effectively prioritize matters promptly and appropriately; understands the importance of follow-up; builds rapport with residents and families through listening attentively and effectively following up; able to effectively communicate individually or as a group.

Safety Awareness: Follows safety program guidelines; immediately reports accidents and incidents to supervisors; identifies unsafe working areas and promptly reports to supervisors; promotes safety by working as safely and

efficiently as possible; consistently follows infection control and universal precautions and other guidelines; identifies and corrects or reports hazardous conditions to supervisors; understands facility emergency and evacuation protocols.

Customer Service: Treats all residents, families, co-workers and supervisors with dignity and respect and takes initiative to exceed customer expectations; professionally represents the facility, self and position to visitors and residents; shows genuine concern for the residents; proactively identifies needs of the physical plant; demonstrates a positive attitude and willingness to help to all visitors and residents; remains sensitive to all needs through listening, observing and responding appropriately for the position held.

Essential Job Duties

1. Assists with all areas of maintenance, including heating and air, water, gas, electrical, mechanical, carpentry, repairs, painting, renovations, deep cleaning and overall physical plant care.
2. Assists in maintaining a log of repairs and associated costs.
3. Identifies, diagnoses and assists with repairing technical and mechanical problems.
4. Works closely with outside contractors and vendors.
5. Assists in ensuring compliance with building and safety codes.
6. Assists with maintaining facility grounds to ensure a neat and clean curb appeal.
7. Assists with ordering supplies and equipment for maintenance department.
8. Assists with emergency needs related to physical plant.
9. Responsible for testing and maintenance of the power system to ensure entrances, exits, fire alarms, extinguishers and life support systems are operational at all times.
10. Maintains all facility equipment to ensure safe operation.

Other Job Duties

1. Assists with security of the building when on-site.
2. Assists with incoming and outgoing freight deliveries/shipments.
3. Assists with moving furniture or other heavy equipment upon request.
4. Assists with repair of items on work orders to meet resident needs.
5. Follows a schedule for equipment inspections and preventative maintenance.
6. Assists with department inspections to provide a safe and clean environment for residents and staff.
7. Makes recommendations to the Maintenance Supervisor regarding repairs and maintenance needs.
8. Notifies the Maintenance Supervisor when supplies are low.
9. Assists with set-up of tables, chairs and other items for events, training, etc.

APPENDIX E:
LAUNDRY AIDE JOB DESCRIPTION

LAUNDRY AIDE

Position Overview

Provides daily laundry services for the residents to ensure a safe, clean and sanitary environment in accordance with laws, regulations and facility guidelines.

Basic Qualifications

Education & Certification:

High school diploma or equivalent.

Skills & Requirements:

Must possess the ability to read, write and speak the English language, must be patient, friendly, courteous and respectful to residents in any situation, including difficult ones; must be able to make independent decisions when necessary; must have the ability to follow housekeeping guidelines as outlined by the facility; must be able to move frequently throughout the workday; must be able to lift 30 lbs floor to waist; lift 10 lbs waist to shoulder; lift and carry 30 lbs; and push/pull 30 lbs.

Experience:

Prior experience in laundry services at a large establishment; health care experience preferred.

Working Conditions

Primarily works in the laundry department and throughout the facility, including resident rooms; bends, lifts, sits, stands and moves frequently throughout the shift; deals with frequent interruptions and possibly upset residents and family members; works regularly scheduled shifts with possible weekends, holidays and other hours based on resident needs; participates in required continuing education programs; subject to odors, falls, burns and exposure to infectious diseases, waste, etc., including AIDS and Hepatitis B viruses.

Competencies of Position

Professionalism: Reports to work on time and as scheduled; works in unison with all staff; displays a willingness to help others; embraces constructive criticism.

Resident Rights: Promptly reports resident grievances to supervisors; treats all resident care information with confidentiality; continuously monitors assigned areas to ensure residents are treated fairly and with dignity and respect at all times.

Safety Awareness: Follows safety program guidelines; immediately reports accidents and incidents to supervisors; identifies unsafe working areas and promptly reports to supervisors; promotes safety by working as safely and efficiently as possible; consistently follows infection control and universal precautions and other guidelines; identifies and corrects or reports hazardous conditions to supervisors; understands facility emergency and evacuation protocols; operates equipment with care and safety; maintains clean and safe work areas; properly handles soiled laundry; follows facility guidelines for safety and sanitation, including hand washing after contact with soiled laundry.

Customer Service: Treats all residents, families, co-workers and supervisors with dignity and respect and takes initiative to exceed customer expectations; professionally represents the facility, self and position to visitors and residents; demonstrates a positive attitude and willingness to help to all visitors and residents; remains sensitive to all needs through listening, observing and responding appropriately for the position held; respects resident personal items.

Essential Job Duties

1. Provides daily laundry services to residents in an effective and efficient manner.
2. Gathers and weighs soiled personal items, linens, garments, etc. and places in appropriate containers.
3. Sorts stained items for treatment/stain removal.
4. Irons garments as needed.
5. Folds, hangs and distributes personal items, linens and garments to resident rooms.
6. Coordinates laundry services with nursing department.
7. Maintains laundry equipment by emptying filters, etc.
8. Follows the facility laundry schedule to ensure timely service to the residents.

Other Job Duties

1. Monitors inventory of supplies to ensure the adequate quantities are available to perform daily tasks.
2. Reports any repairs needed to the Laundry Supervisor.

APPENDIX F:
FOOD SERVICE AIDE JOB DESCRIPTION

FOOD SERVICE AIDE

Position Overview

Assists with food preparation and dining services in conjunction with the Dietary Manager and Cook and in accordance with laws, regulations and facility guidelines.

Basic Qualifications

Education & Certification:

High school diploma or equivalent

Skills & Requirements:

Must possess the ability to read, write and speak the English language, must be patient, friendly, courteous and respectful to residents in any situation, including difficult ones; must be able to make independent decisions when necessary; must have the ability to follow dietary service guidelines as outlined by the facility; must be able to move frequently throughout the workday; must be able to lift 20 lbs floor to waist; lift 10 lbs waist to shoulder; lift and carry 20 lbs; and push/pull 20 lbs.

Experience:

Minimum of six months experience in dining services is preferred.

Working Conditions

Primarily works within the dietary department and throughout facility; bends, lifts, sits, stands and moves frequently throughout the shift; exposed to cold and heat of the kitchen environment; exposed to freezing temperatures when entering the cooler; deals with frequent interruptions and possibly upset residents and family members; works regularly scheduled shifts with possible weekends, holidays and other hours based on resident needs; primary responsibility is service to the residents but also deals with visitors, government personnel, etc.; participates in required continuing education programs; subject to odors, falls, burns and exposure to infectious diseases, waste, etc., including AIDS and Hepatitis B viruses.

Competencies of Position

Professionalism: Reports to work on time and as scheduled; works in unison with all staff; displays a willingness to help others; embraces constructive criticism; presents a friendly and professional attitude.

Resident Rights: Promptly reports resident grievances to supervisors; treats all resident care information with confidentiality; continuously monitors assigned areas to ensure residents are treated fairly and with dignity and respect at all times.

Safety Awareness: Follows safety program guidelines; immediately reports accidents and incidents to supervisors; identifies unsafe working areas and promptly reports to supervisors; promotes safety by working as safely and efficiently as possible; consistently follows infection control and universal precautions and other guidelines; identifies and corrects or reports hazardous conditions to supervisors; understands facility emergency and evacuation protocols; operates kitchen equipment with care and safety; maintains clean and safe work areas; properly disposes of food and waste; follows company guidelines for safety and sanitation.

Customer Service: Treats all residents, families, co-workers and supervisors with dignity and respect and takes initiative to exceed customer expectations; professionally represents the facility, self and position to visitors and residents; demonstrates a positive attitude and willingness to help to all visitors and residents; remains sensitive to all needs through listening, observing and responding appropriately for the position held.

Essential Job Duties

1. Provides and collects menu cards in accordance with facility guidelines and timeframes.
2. Prepares meal trays, food carts and dining room based on planned menus and dietary orders.
3. Delivers food carts, meal trays, etc., to specified resident areas and serves residents in dining room area.
4. Prepares and delivers scheduled snacks to residents.
5. Collects food trays, clears dining room tables, etc., and places in dishwashing area.
6. Follows facility guidelines for food alternates or substitutions.
7. Assists with meal preparation, special events, etc. as needed and under the direction of the cook.
8. Washes dishes and utensils to ensure supplies are readily available for next scheduled meal.

Other Job Duties

1. Maintains food storage areas in a neat and orderly fashion.
2. Rotates stock in refrigerator to ensure dates are not expired.
3. Cleans coffee pots, urns, toasters, carts, trays, etc.
4. Replenishes condiment containers at the completion of each meal.
5. Cleans shelving and other storage areas.
6. Assists in the maintenance of dietary equipment, working space, etc., to ensure compliance with all safety and sanitary guidelines.
7. Assists with daily cleaning duties within the dietary department, including coolers, refrigerators, work stations, etc., in addition to sweeping and mopping.

APPENDIX G:
ACTIVITIES ASSISTANT JOB DESCRIPTION

ACTIVITIES ASSISTANT

Position Overview

Assists the Activities Director in providing quality activity programs that meet the physical, spiritual, social and intellectual needs of the residents served; may provide routine daily nursing care to assigned residents in accordance with applicable state and federal laws and regulations as well as facility's established nursing care guidelines.

Basic Qualifications

Education & Certification:

High school diploma or equivalent; successfully completed a state-approved Certified Nursing Assistant (CNA) program, possess a current certification in good standing or be able to obtain certification within four months of employment, if allowable by the state; must have CPR certification.

Skills & Requirements:

Must possess the ability to read, write and speak the English language, communicate resident condition to others and make independent decisions as needed; must have common working knowledge of all rules, laws and regulations as defined by the state as it relates to activities programs and skilled nursing services; must be patient, friendly, courteous and respectful to residents in any situation, including difficult ones; must be able to move frequently throughout the workday, answer resident call lights, assist with toileting, feeding and personal grooming of the residents; must be able to handle sensitive situations related to the emotional well-being of the residents with patience, dignity and respect; must be able to lift 40 lbs floor to waist; lift 10 lbs waist to shoulder; lift and carry 40 lbs; and push/pull 40 lbs.

Experience:

Minimum of six months experience in a long-term care or other geriatric care environment is preferred.

Working Conditions

Works throughout the facility; bends, lifts, sits, stands and moves frequently throughout the shift; deals with frequent interruptions and possibly upset residents and family members; works regularly scheduled shifts with possible weekends, holidays and other hours based on resident needs; primary responsibility is service to the residents but also deals with visitors, government personnel, etc.; participates in required continuing education programs; subject to odors, falls, burns and exposure to infectious diseases, waste, etc., including AIDS and Hepatitis B viruses.

Competencies of Position

Professionalism: Reports to work on time and as scheduled; works in unison with all staff; displays a willingness to help others; embraces constructive criticism; presents a friendly and professional attitude; keeps open communication with direct supervisors to ensure quality care of the residents; promotes teamwork, takes part in problem solving and displays a positive, caring attitude; consistently attends staff meetings, required in-services and other committees.

Resident Rights: Promptly reports resident issues to the nursing supervisors; treats all resident care information with confidentiality; continuously monitors assigned areas to ensure residents are treated fairly and with dignity and respect at all times; conducts nursing care in privacy, including knocking on the door prior to entering a resident's room.

Organizational and Communication Skills: Ability to multi-task and is detail-oriented; possesses the ability to effectively prioritize matters promptly and appropriately; understands the importance of follow-up; builds rapport with residents and families through listening attentively and effectively following up; able to effectively communicate individually or as a group.

Creativity and Motivational Skills: Gathers input from residents and families for planning activities which reach personal goals and objectives; provides a broad variety of activities, including arts, crafts, music; promotes interest in activities in a positive manner; displays a cheerful and outgoing disposition; offers an atmosphere of warmth with a positive attitude.

Safety Awareness: Follows safety program guidelines; immediately reports accidents and incidents to supervisors; identifies unsafe working areas and promptly reports to supervisors; promotes safety by working as safely and efficiently as possible; consistently follows infection control and universal precautions and other guidelines; identifies and corrects or reports hazardous conditions to supervisors; understands facility emergency and evacuation protocols; utilizes safe driving techniques and ensures vehicle maintenance schedule is followed.

Customer Service: Treats all residents, families, co-workers and supervisors with dignity and respect and takes initiative to exceed customer expectations; professionally represents the facility, self and position to visitors and residents; demonstrates a positive attitude and willingness to help to all visitors and residents; remains sensitive to all needs through listening, observing and responding appropriately for the position held.

Essential Job Duties

1. Assists with the planning, development, organization and delivery of quality activity programs within the facility.
2. Monitors resident behaviors, mental status and involvement in resident activities.
3. Documents resident progress, behavior, mood, etc., timely and accurately in charts.
4. Assists with discharge planning and implementation of activity care plans.
5. Arranges transportation for residents as needed.
6. Assists with development of resident activity plans.
7. Invites and escorts residents to and from activities and events.
8. Assists with ensuring that activity programs fit the individual interests and needs of the residents; encourages arts, crafts and music participation.
9. Promotes intellectual and educational development through reading, teaching, movies and other events.
10. Promotes spiritual development through scheduling religious services, spiritual reading materials, etc.
11. Provides cleanliness of water pitchers and provides refills of fresh water as needed.
12. Places water containers within reach of residents at all times to promote satisfactory hydration.
13. Provides assistance with lifting, turning, moving, transporting or transferring residents.
14. Monitors incontinent residents to ensure bed linens and clothing are clean and dry.

15. Reduces the risk of bedsores by promptly reporting observations of skin breakdown and pressure areas.
16. Communicates changes and ensures plan of care if being followed through effectively recording changes in charts.

Other Job Duties

1. Adheres to facility admission, discharge and transfer policies and prepares resident rooms for arrival.
2. Visits resident rooms as necessary to promote interest in facility activity programs or to include those who are not able to attend facility activities.
3. Labels, organizes and stores resident's personal belongings, clothing, etc.
4. Provides support and assistance for dying residents and post-mortem care.
5. Promotes interdepartmental teamwork to meet resident needs.
6. Schedules events, movies, activities, parties, etc.
7. Plans, organizes and participates in external facility events.
8. Provides quality nursing care to residents.
9. Delivers meals and performs feeding assistance to residents.
10. Performs vital sign monitoring/charting and observes residents for changes in condition or behavior and reports to nursing supervisors.
11. Assists residents in making appointments or scheduling errands.
12. Answers resident call bells promptly and courteously.
13. Promotes an environment of positive public relations by displaying a calm, caring, warm and friendly atmosphere in department and on each shift.

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