# A MULTI-YEAR ANALYSIS OF POST-SECONDARY OUTCOMES OF GRADUATES WHO ATTENDED A STATE APPROVED, NON-PUBLIC SCHOOL SPECIAL EDUCATION PROGRAM

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#### Abstract

There are very few published follow-up studies of high school graduates who were classified with a disability from state-approved, Non-Public School (NPS) special education programs. The purpose of this dissertation was to explore the post-school outcomes of a cohort of graduates from a college preparatory, state-approved, special education high school program in a NPS setting. The specialized program provided intensive support of the students' pursuit of the state-standard diploma and subsequent transition to post-secondary college or university enrollment. Twenty graduates completed a post-school outcomes survey and three school professionals completed a transition self-assessment rating scale indicating the presence of evidence-based transition practices. This study was informed by the Taxonomy for Transition Programming and the post-school Quality of Life theoretical models. Results supported positive education and employment experiences: 85% of graduates received a state-standard diploma, 90% enrolled in post-secondary education programs, and half were currently employed. A majority of graduates continued to live with their parents. The graduates' post-school community engagement experiences remained unclear. Transition practices supporting postschool community engagement were indicated as minimally present. Findings suggested the evidence-based transition practices most implemented primarily supported transition to postschool education, with several practices present to support employment and independent living experiences. The data collection process provided an initial assessment of the graduates' postschool experiences and of the evidence-based transition practices implemented in the school setting. The findings support the school professionals' ability to make data-based decisions to adapt the provision of secondary transition services which will improve the post-school outcomes of the graduates with disabilities from the NPS program.

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#### Chapter I

#### Introduction and Overview

#### Introduction

This chapter provides a brief overview of the inherent challenges of educating students with a severe disability or multiple disability diagnoses, the relevance of examining the post-secondary transition planning practices and programming in high school settings, and of exploring the post-secondary outcomes of the students with those disabilities.

In the United States the general expectation of school children as they move through the education system is that they will graduate from high school with the state-standard diploma, or an available alternative, such as an advanced diploma, and then attend a 2- or 4- year college or university academic program. The ultimate purpose of pursuing a higher education is to ultimately acquire a full-time employment position as a step towards establishing a lifelong career. Although these post-school expectations are similar for many children, the variability of different students' abilities, goals, and their subsequent access to a range of transition resources and services that can support their college readiness upon graduating are important and considerable factors. For students with a diagnosed disability that interferes with their ability to learn, this typical academic trajectory and expectation can become unreasonable.

With the re-authorization of the Individuals with Disabilities Education Improvement Act (IDEIA), both the school level transition support services available to students with a disability and their post-secondary outcomes, or goals, were specifically addressed (2004). Indicator 13 (I-13) of IDEIA Part B defines "transition services" as a "coordinated set of activities for a child with a disability" that generally include a "results-oriented process" which is: focused on improving their academic and functional skill development as they transition from school to

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post-school activities (these activities include supported or competitive employment, collegiate or vocational education, continuing adult education or services, and independent living and community involvement), based on their strengths and interests, and includes the transition planning support of instruction, related services, community experiences, and the development of other post-school adult living objectives, such as employment and daily living skills (IDEIA, 2004).

To fully understand the transition planning support and resources available to students with disabilities, the type of special education placement they attend needs to be considered. The typical special education placements range from the "least restrictive environments" (LRE) to more restrictive, yet more supportive, school settings or placements if the general education setting (or lesser restrictive environment) cannot meet the students' needs (IDEA, 2004). When academic progress is not attained in the less restrictive public school setting and the severity and/ or nature of the child's' disability necessitates a more supportive environment, a classroom structure with a smaller student-to-teacher ratio, a separate location from the general education population, and/ or more intensively therapeutic special education program placement are considered.

These programs can be located in a range of settings from private, specialized schools to more therapeutic settings in residential or hospital settings, dependent upon the students' needs.

Students with disabilities, regardless of the severity of their deficits or school setting, are supported and encouraged to work toward graduating from high school with the highest diploma option that is available to them in their education setting. Due to the specialized nature of these more restrictive special education programs, and to their separate location from the general education public school setting, the state-standard diploma might not be available. As a result,

students with either severe, or multiple disability diagnoses, graduate with the state-standard equivalent diploma less often when graduating from more restrictive special education settings (Johnson, Thurlow, & Schuelka, 2012). At the very least, the more restrictive school setting typically offers the student the opportunity to graduate with a diploma that might be a less rigorous alternative to the state-standard high school diploma. These alternative exit options of an IEP diploma or skills certificate, are typically adequate for individuals to attain part- and full-time positions in most service sector jobs after leaving high school.

#### Relevance of Current Study

The setting of the current study is a state-approved, non-public school (NPS) special education program for students with either a potentially severe disability, or multiple disability diagnoses, whom require a small, individualized class setting for academic success. The typical guidelines for an NPS special education setting generally describes it as one appropriate for students who might demonstrate the need for total supervision during daily living activities, intensive practice and reinforcement to sustain their educational gains, intensive programming to meet their educational goals and maintain their educational progress, or intensive programming to accommodate physical and/ or emotional disabilities which interfere with their educational progress.

The IDEIA (2004) outlines specific secondary transition requirements for state education departments and the local school districts to follow and implement. These transition requirements, as outlined by I-13 of the IDEIA legislation, support the students path towards engaging in post-school activities that match their abilities and interests and allow them to openly access employment/ vocational, education/ academic, independent living, and community opportunities.

Identifying evidence-based transition planning and programming practices is a dynamic and developing field and includes involvement with and support of various national organizations and college/ university support. Dr. Paula Kohler, from the Transition Research Institute, has developed a model for planning, implementing, and evaluating transition education, services, and programs titled the "Taxonomy for Transition Programming" (Kohler, 1996). The Taxonomy includes 5 crucial areas for the school, student with a disability, and their family to consider when assessing their transition needs. These five areas are: student-focused planning, family involvement, student development, program structure, and interagency collaboration (Kohler, 1996). The literature intimates that when these areas are considered, supported, and developed with the students active participation as part of their post-secondary transition planning, it is more likely that they will identify realistic post-school goals, acquire the particular skills they need to support working towards those goals, and then take the necessary steps to reach those goals upon exiting school.

Since the IDEIA (2004) regulations specifically require transition planning services, following up with adults with disabilities regarding their post-secondary experiences is a priority when determining the accountability of school professionals. As per Indicator 14 (I-14), states are now federally mandated to collect post-school outcome data on former students with disabilities who had an IEP, within one year after they graduate, or exit by other means, from high school and then annually report a summary of their post-school outcomes information (IDEIA, 2004). In addition to the federal criteria, most states include additional points of interest in their surveys to gain information relevant to all of their education stakeholders.

In addition to the state level data collection of post-secondary experiences, the U. S. Department of Education (USDOE) has also collected national data from this particular

population with the "National Longitudinal Transition Study" (NLTS) and the "National Longitudinal Transition Study-2" (Newman et al., 2010). These studies compared the post-school outcomes of individuals with disabilities to their peers without disabilities across different variables, such as geographic region, state, occupation, academic pursuits, independent living status, and etc. (Newman et al., 2010). As part of this longitudinal research effort, researchers continually polled a national sample of youth with disabilities through five waves of data collection to determine their transition and post-school experiences.

The professional literature identifies the typical, yet specific, post-secondary outcomes experienced by individuals with disabilities. In addition to their post-school experiences included in the I-14 requirements, Halpern (1993) has identified additional Quality of Life (QoL) domains, or areas, that an individual might experience upon graduating that lead to a more satisfactory life, in addition to their successful employment or educational outcomes. These QoL domains include an individuals' physical and material well-being, their performance of adult roles, and their personal fulfillment and general well-being (Halpern 1993; Curtis, Rabren, & Reilly, 2009).

Curtis et al. (2009) found an association between the collection of QoL post-school and transition programming data and overall support for including the QoL areas in post-school data collection procedures.

Both the state and NLTS post-school data collection initiatives do not require or include individuals with disabilities who had graduated from a private school or alternative special education placement in their data collection efforts. Therefore, the state-approved, NPS special education programs are not required to collect and provide an annual report on the post-school outcomes of their graduates with disabilities. As a result, the present research study setting and

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the graduates are not included in any post-school outcomes data collection processes, which leave this populations' post-school path unknown. This also leaves the NPS program administrators, stakeholders, and personnel with no feedback regarding their college preparatory efforts with their students. In addition to the lack of professional validation for their efforts, the accountability of the NPS special education program, which is part of the fabric of being an educator, also remains unknown.

The state-approved, NPS special education program of interest for the present study is a more restricted special education program for students who either experience severe symptoms of a diagnosed disability or multiple disability diagnoses, who are considered to be highly functioning in terms of their deficits, and who are actively pursuing a goal to graduate with a state-standard high school diploma in order to enroll in higher education programming. The uniqueness of this special education program lies within its' specific mission to graduate students with severe, or multiple disability diagnoses, who are college ready, have obtained the state-standard equivalent diploma, and have intentions of transitioning into a 2- or 4- year academic program at the collegiate level that fits their specific needs and interests.

Since the post-secondary outcomes of the graduates of this NPS special education program remain unknown, there is a need to create a process to gain this specific feedback regarding their trajectory.

The current study is an initial effort since the NPS special education program and the private school administrators could potentially take both the design and the results of the current study, expand upon it to comprehensively include all areas of the stakeholders' interests, and then continue the process with each graduating class, which also aligns with the federal requirements, state mandates, and expectations. The findings of this study could also help the

NPS special education program to further develop their secondary transition programming and academic curriculum.

#### **Dissertation Task**

The purpose of this dissertation study is to explore the transition planning experiences and post-secondary outcomes of graduates from a college-preparatory, state-approved, NPS special education program for students with severe or multiple disability diagnoses. The NPS program is located within a private school setting and, as per federal regulations mandated by the IDEIA, neither the state-approved NPS special education program nor the private school are required to collect post-school outcome data regarding their graduates with disabilities.

The Principal Investigator has been employed as a School Psychologist by the setting since 2008 and provides school-based counseling services and transition planning support to the current students.

The study is intended to explore the post-secondary outcomes of the graduates from this NPS program. The findings of this study will provide future recommendations for this state-approved, NPS program and its' transition planning and programming services. For example, the results might indicate that the program needs to engage in a more thorough needs assessment process in terms of the transition programming and implementation, a need to add skills training, curriculum development, or additional services to make the transition planning and programming more comprehensive, a need to put the transition program into an evaluative form, and/ or the need to evaluate the existing transition planning and program services more comprehensively.

This dissertation will also explore and summarize the evidence-based transition planning practices (EBP's) being implemented in the NPS program setting through 2 steps. First, by

analyzing the graduates self-report of their transition planning experiences and how it might have impacted their post-school outcomes and overall life satisfaction. Second, through an analysis and comparison of the existing services in the program and how they align with the identified transition planning EBP's in Kohler's "Taxonomy for Transition Programming". School professionals in the NPS program who are responsible for implementing secondary transition services completed a Taxonomy self-assessment rating scale indicating the level of development and implementation of the transition practices and activities in each Taxonomy area and subarea.

It is important to note that the study findings will be particular to this school setting and context; the findings cannot be generalized to other populations and settings.

Additionally, other school settings who are similar in their setting and resources to the private school and NPS program placement might benefit from the study results to inform their decision making regarding curriculum and transition planning programming for college bound students who experience multiple or severe disabilities.

This study will also inform School Psychology practice in multiple ways. Often School Psychologists are initiating and/ or facilitating transition planning and programming in the school setting. Summarizing transition planning and program services in this particular context could provide additional support for previously identified EBP's, highlight potentially promising practices as a result of the graduates reported experiences, describe transition planning and programming services at the secondary level in this type of setting, and illustrate the experience of taking a theoretical model and applying it to a current program to assess the presence of EBP's.

School Psychologists are also often responsible for providing the mandated counseling or career counseling services as they are mandated on a students' IEP and/ or conduct ongoing progress monitoring and assessments to determine the students' progress, help them to develop their strengths and weaknesses profile, and identify their post-secondary goals as part of the transition process. The post-school outcomes findings can also potentially provide information about the School Psychologists' role and information regarding any beneficial adjustments that could be made in the transition planning process in this setting.

#### Chapter Summary

This chapter discussed an overview of the professional research and literature, the federal legislation requirements, and the resulting state implementation of transition planning and programming and post-secondary outcomes data collection of individuals with disabilities who have graduated from high school with an IEP. Further, how these areas support the dissertation task in a specific state-approved, NPS special education program setting.

The purpose of this dissertation is to explore the post-secondary experiences of graduates from a college preparatory, state-approved, NPS special education program located in an urban setting in the Northeastern region of the United States. An ancillary purpose is to analyze the evidence-based transition programming efforts currently implemented in the NPS special education program.

Recommendations and suggested steps that School Psychologists might take to assist their role in the implementation of best practice post-secondary transition assessment, planning and programming will be identified. The implications of this study for advancement of the professional practice of School Psychology will also be discussed.

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Chapter 2 provides a comprehensive review of the relevant literature in the following areas: the historical context of educating students with disabilities, special education classification categories and school placements, diploma tracks and exit requirements, transition assessment, program planning, and implementation, exploring individuals with disabilities post-secondary outcomes, and additional methodological literature specific to the current research study and design. The review concludes with a summary and critique of the existing literature, followed by a discussion of the specific research questions in this dissertation as supported by the literature review.

#### Chapter II

#### Literature Review

#### **Education Students with Disabilities**

#### **Historical Context**

The education of students both with and without disabilities, and their subsequent success with post-school experiences, has been a focus of policy development and a concern of both stakeholders in the field of education and the broader public for quite some time (National Center on Secondary Education and Transition (NCSET), 2004). After the enactment of the 1975 Education for All Handicapped Children Act (EAHC) (Public Law (PL) 94-142), a focus on supporting students with disabilities and their secondary transition, most particularly with planning for their post-school employment, became a priority (Halpern, 1993). On the heels of this legislation the Council for Exceptional Children (CEC) created a unique sub-organization, the Division of Career Development and Transition (DCDT), whose purpose was to advance the secondary transition field through their state division sites, by conducting and publishing research, creating and providing professional development and training, holding annual conferences for professional learning opportunities, and through supporting legislation to advance and improve secondary transition planning services, programs, and policies.

In 1983, the EAHC amendments titled the Individuals with Disabilities Education Act (IDEA) added new federal support and funding for transition-focused research to identify model programming for all transition needs in schools (Kohler & Field, 2003). The U.S. Department of Education (USDOE) Office of Special Education Programs (OSEP) sponsored a portion of this mandated research and appointed the SRI International organization to conduct the first national level, post-secondary outcomes data collection effort which was called the National Longitudinal

Transition Study (NLTS) (Blackorby & Wagner, 1996). The NLTS looked at the post-secondary outcomes of adults with disabilities who had graduated from special education programs. The NLTS findings showed that, overall, individuals with disabilities were demonstrating certain progress with increased employment rates, wages, continued post-school enrollment, and greater residential independence. However, despite this growth, youth with disabilities were still significantly behind their peers without a disability in the areas of high school completion rates, post-school educational enrollment, employment rates and earnings, community integration, and independent living arrangements (Blackorby & Wagner, 1996; Baer et al., 2003).

As a result of this study, the USDOE Office of Special Education and Rehabilitative Services (OSERS) made the improvement of secondary transition services a priority with the 1990 re-authorization of the Individuals with Disabilities Education Act (IDEA) and its provisions (PL 101-476). Transition support and planning became not only mandatory in the schools, but an inclusive component of the curriculum for all students with disabilities at the high school level, and inclusion was strongly encouraged at the middle school level.

The transition support regulations were again strengthened with the 1997 IDEA amendments which further defined transition as a "results-oriented, student-directed, and coordinated effort of services" and required that each students' IEP include a statement of "transition service needs" with a focus on their desired course of study, such as vocational programs or taking advanced-placement (AP) examinations (PL 105-17).

In the latest reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) transition services and post-school outcome follow-up efforts for individuals with disabilities were again improved upon and expanded to include more comprehensive requirements (PL 108-446). This reauthorization requires that transition services, and any

interagency collaborations and responsibilities necessary to support the students' path towards their post-school goals, are explicitly stated on their IEP at or before the age of 16 years old and that schools make every effort to create access for students to pursue their stated post-school goals. IDEIA also aligned with the No Child Left Behind Act (NCLB, 2001) by holding states and school districts accountable for how well students with disabilities did with not only their inschool state assessments but also in their post-school outcomes and adult experiences.

Each state is then required to provide an annual report, or State Performance Plan (SPP) to the OSERS office summarizing their progress within each indicator area. The Part B, I-13 section requires states to determine the number of students with IEP's aged 16 and above who have generated measurable post-secondary goals based on student-specific transition assessments and on the available transition services that support the child to reach those specific postsecondary goals (National Secondary Transition Technical Assistance Center (NSTTAC), 2008). The SPP Part B I-14 requires that states, within one year of the student with disabilities graduating or exiting a special education public school, collect data and report on the post-school outcomes of youth with disabilities (20 U.S.C. 1416(a)(3)(B)).

Several federally funded technical assistance and research centers were established to support the transition to post-secondary efforts outlined by the IDEIA requirements. The National Secondary Transition Technical Assistance Center (NSTTAC) assists state and local education agencies to implement effective transition services and programming to improve post-school outcomes (Test et al., 2009b). The NSTTAC also conducts ongoing research to identify and validate evidence-based practices in secondary transition. The National Post-School Outcomes Center (NPSO) at the University of Oregon provides guidance for state education departments to create their own practical, yet comprehensive, post-school outcome data

collection process that aligns with I-14 requirements. An ancillary purpose of these data collection efforts is to improve transition services for students in special education.

Numerous reports, studies, and analyses have also impacted the secondary transition movement. In July 2003 two reports were published, the *National Disability Policy: A Progress Report* (National Council on Disability, 2003) and *Federal Actions can Assist States in Improving Postsecondary Outcomes for Youth* (General Accounting Office, 2003) which looked at the current state of transition and secondary education policies and practices. These two reports indicated a need for appropriate accountability measures, greater involvement of youth in the initial development of and then the evaluation of policies and programs, a need to clarify the policy guidance on regulations, and the ongoing challenges due to weak collaborative relationships between schools and community organizations and to a lack of opportunities for students to participate in vocational training (as cited in NCSET Discussion Paper, 2004).

Students with disabilities have continuously been cited as the most "at-risk" population for dropping out of high school. Sanford et al.'s (2011) analyses of the NLTS-2 findings found that high school students with disabilities who are completers, or those who have graduated, are three times more likely to have enrolled in any post-secondary educational programs than their peers who did not complete high school. Similarly, Sanford et al. (2011) found that the youth with disabilities who had graduated were also more likely to gain post-school employment and to have a higher level of community participation and engagement versus those who had not completed high school.

Several transition practices have also been identified to support successful post-school outcomes. Test et al.'s (2009a) meta-analysis of transition practices identified two transition practices, teaching life skills and purchasing skills, with strong evidence. This same study

compared transition practices to the 5 model areas in Kohler's Taxonomy for Transition

Programming (1996), those of student-focused planning, student development, family
involvement, and program structures, and interagency collaboration, and identified 28 practices
with moderate levels of evidence for transition support across the 5 areas.

According to recent data from the USDOE National Center for Education Statistics (NCES), 80 percent of public high school students without disabilities earned a diploma during the 2011-2012 school year, and although the number of students with disabilities obtaining diplomas has continually increased each year, those individuals still lag behind their peers without disabilities in their graduation rates with just 61 percent graduating from high school (Stetser & Stillwell, 2014). The recent trends of improving graduation rates and the notable post-school successes for students with disabilities who complete high school continue to suggest that it is critical to support students with disabilities to obtain a high school diploma.

Creating options for, and increasing access to, vocational and life skills training, transition assessment and planning, community connections, as well as rigorous academic curricula for students with disabilities while they are still in high school, will help them to pursue a range of post-secondary options in education, employment or vocational positions, and/ or independent living opportunities, and ultimately, will lead to an overall promotion of their quality of life.

#### Classification Categories

Individuals with disabilities inherently have an added complexity to their experience due to first, a variety in their learning profiles dependent on their particular disability diagnosis and second, to the severity of the symptoms and challenges they might experience as a result of that disability experience. This creates unique challenges, for both researchers and educators alike,

to develop effective methods of instruction and intervention to adequately and efficiently support those learners and their variety of needs (Gage, Lierheimer, & Goran, 2012).

According to IDEA, students are found eligible for special education services if they are found to have a disabling condition that significantly interferes with their ability to learn (PL 92-142). Within the 13 specific classification categories students can experience multiple disabling conditions that interfere with their academic success, however, it is their primary disability condition that becomes the classification as it is identified on the students' IEP (unless the "multiple disability" classification is the most appropriate choice based on the students inability to learn by the equal severity of two presenting disabilities) (PL 108-446). IDEIA defines "multiple disabilities" as a child who has a combination of more than one impairment that requires a high level of educational need and are not able to be accommodated within a special education academic program designed to meet the need of one of the impairments (PL 108-446). The public school, special education classroom, and programs then need to meet the learning needs of each student and their unique learning profiles.

The multiple disabilities classification can include a combination of both high- and low-incidence disabilities, since it can include a concomitant existence of a combination of most of the 13 categories (IDEIA explicitly states that "deaf-blindness" cannot be considered a multiple disability) (PL 108-446). "High incidence" disabilities are those that occur more often within the population and broadly include students with the diagnosis of any of the following: a Specific Learning Disability (SLD) or Learning Disability (LD), Emotional or Behavioral Disorders (EDBD), Mild Intellectual Disabilities (MID), and more recently an increase in presentation has led to the category of "high incidence" to broaden to include students with Attention-Deficit Hyperactivity Disorder (ADHD), Speech or Language Impairments (SLD), and high functioning

Autism (Gage, Leirheimer, & Goran, 2012). "Low incidence" disabilities generally do not exceed one percent of the school-aged population and include: blindness and other visual deficits, deafness or hard-of-hearing, deaf-blindness, significant developmental delays, other complex health issues, serious physical impairments, multiple disabilities, and Autism (Twenty-Eighth Report to Congress on the Implementation of IDEA, 2006).

The classification identified on the students' IEP represents their primary disability, or the disabling condition that most interferes with their ability to learn, but that student might experience deficits in more than one area. For example, a student could have a diagnosis of Dyslexia, a specific Reading Disorder (SLD,) but also have a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD), which further complicates that students' ability to learn reading strategies. In this scenario, the condition that is the most interfering with the students learning experience, as decided upon by the school special education committee, would be the primary classification (PL 92-412), however, that student would be considered to experience multiple disability diagnoses.

#### **Special Education Placements**

Under IDEA legislation, all students are entitled to a Free and Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE). The appropriate school setting is then determined based on their individual needs (PL 92-142). An additional priority of this legislation is to educate students with disabilities in the general education setting as much as it is possible and still meet their appropriate educational needs. Students with disabilities have dynamic and complex learning profiles, which sometimes cannot be met within the public school setting if their academic challenges require a more supportive (restrictive) classroom setting to provide the adequate support to meet their learning and academic needs (PL 94-142.) The LRE

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is the general education environment, typically within an inclusive classroom setting which includes an evenly distributed student population of both classified and non-classified students for special education services, or a general education classroom with pull out services. The students in the inclusive classroom setting are both exposed to the traditional, state-standard curriculum and are expected to graduate with the state-standard diploma, just like their peers without disabilities.

Students who experience more complex or severe disabilities, or multiple disabilities, make up a unique subgroup within the population of students with disabilities whose presenting problems might be more than the local school district is able to adequately support for their academic success. If the inclusive special education classroom setting is deemed not supportive, or intensive enough, to meet the students' needs, a more supportive educational placement or, a private specialized state-approved non-public school (NPS) program placement, might be considered.

The NPS setting is typically a more restrictive environment than the inclusive setting since it is a state-approved program offering a range of special class and clinical services outside of the local, public school district, and typically has minimal, to no, opportunities for students with disabilities to participate in education activities with their peers without disabilities. However, the NPS programs are still in a partnership with the local school facility by implementing the students' IEP (PL 108-446). These settings could be either residential or day settings and could be part of private facilitates.

The goal of this type of placement is to eventually transition students back to their indistrict setting once they have demonstrated marked growth as a result of their access to the intensive resources available in this setting. Historically, students attending NPS programs are those who experience either a severe disability, or have multiple disability diagnoses, such that they require extensive modification to their education curriculum to learn.

#### **Graduation Requirements and Diploma Tracks**

On average, the individual who completes a college degree has been shown to increase their earnings by approximately one million dollars more over the course of their lifetime than the individual with only a high school diploma (U.S. Department of Commerce U.S. Census Bureau 2002 as cited in Newman et al., 2011). Recent studies have also shown that over 90% of high school graduates have plans to attend some type of post-school academic program and that over 70% of graduating high school students actually attend continuing education programs (Calahan, Ingels, Burns, Planty, & Daniel, 2006). This trend supports a need for accessible and rigorous high school academic programs that prepare students to be college ready and experience success with this path.

When analyzing the NLTS2 data, Newman et al. (2011) highlighted that, in terms of their enrollment in post-secondary education, students with multiple disabilities were less likely (33 percent) than students with other disabilities (61 to 75 percent) to enroll in post-school educational programs. Although improving, students with disabilities participation in post-secondary education remain inconsistent and this is partially due to inconsistent and ever-changing graduation requirements (Newman, Wagner, Cameto, Knokey, & Shaver, 2010; Johnson, Thurlow, & Schuelka, 2012).

In addition to the state-standard diplomas that are awarded with the students' passing of standardized exit examinations, there are a range of alternative diploma options throughout the states in addition to the more traditional state-standard diploma which vary from more advanced and academically rigorous honors diplomas to the meeting of minimal requirements in a

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certificate of completion or skills certificate (Johnson, Thurlow, & Schuelka, 2012). The National Center on Educational Outcomes (NCEO,) a part of the research to practice division of USDOE OSEP, states that there is a "growing body of research that suggests that students with disabilities, who disproportionately receive these nontraditional exit certificates, may have poorer post-secondary educational options as compared to those who receive a standard diploma" (Johnson, Thurlow & Schuelka, 2012, page 7). Additionally, graduating with a state-standard diploma versus a certificate of completion has been supported in the literature to lead to higher rates of post-school employment (Landmark, Ju, & Zhang, 2010). Identifying how to include those students with severe or multiple disabilities who have made gains and demonstrated a work ethic that considers them to be highly functioning in equally rigorous high school programs where they would also meet the LRE exit requirements of the state-standard diploma versus an exit completion certificate, remains a pervasive challenge in special education (Zhang, 2009).

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Special education curriculums meet the student with disabilities needs by modifying the nature of the academic program so that students can learn according to their individualized learning profiles and abilities. The modified academic curriculums typically include both vocational and functional skills training in addition to academic coursework; graduating students with skills and abilities to function in the world but not necessarily with a state-standard diploma. For many students, alternative exit certificates are sufficient, especially when they encompass vocational, functional, and independent living skills and abilities. The LRE exit requirement is the state-standard diploma, so in order to expect students with disabilities to travel the same exit pathways and pursue post-secondary education opportunities, it is naturally appropriate to expect that they will meet the same diploma requirements as their peers without disabilities. However,

the very nature of these students' needs makes the modified, high level of support in the NPS programs the most appropriate, therefore creating the LRE opportunities in this setting difficult.

Additionally, IDEA legislation requires schools to create and include a summary of the students' performance when the student with a disability graduates from high school as a bridge between their high school and adult life (PL 142-94). This exit summary provides the necessary documentation of any disability in accordance with Section 504 of the Rehabilitation Act of 1973 (PL 93-112) so that they might continue to access any accommodations post-school. According to Hughes and Carter (2012), this performance summary typically includes the

"students' level of functioning when leaving school regarding their disability, their eligibility for services and accommodations, the student's postsecondary goals (which indicates the setting where the student intends to enter upon completing high school, such as post-secondary education or employment), their summary of performance (current level of performance of grade level, standard scores, strengths and needs across academic, cognitive, and functional areas, and any information relevant in reading and math skills, problem solving, communication, social and independent living skills, selfdetermination, teachers are also required to describe all accommodations, modifications, or assistive technology that is essential to supporting the student's progress), recommendations (suggestions for assisting student in meeting post-secondary goals and can include accommodations, support services, adaptive equipment, or other supports to enhance success across settings), and student input (input from student with respect to how their disability effects their performance, supports that have been effective in promoting their success, and their view of their own strengths and needs in relation to any identified post-school goals)" (page 34).

Any and all transition services, assessments and planning lead to creating the students' performance, or exit, summary.

## Secondary Transition Assessment and Program Planning Federal Requirements and State Implementation

Transition planning, assessment, and programming are a coordinated set of activities that encompass the federal requirements and are continually modified as ongoing research, at both the national and state level, identify evidence-based and promising practices, and are based upon the availability of resources at the local school district level.

The IDEA (1997) implementation required schools to begin documenting the need for transition services, the individuals' needs, and the projected steps to meet those needs on the IEP starting at 14 years old. At 16 years old, (or sooner if necessary) the students' IEP should state the necessary transition services for pursuing post-school goals and outline how the school setting will support those services through instruction, related services, community experiences, and employment. The stated transition plan needs to identify the community resources available and, prior to their exit from high school, establish a connection with the student through a collaborative transition planning effort by the students' support team (which typically includes, in addition to the student, their family, school staff, adult service agencies, and other community members). Lastly, the transition plan must focus on postsecondary outcomes that are based on the needs, preferences, and interests of the student with a disability. This information can be gained from comprehensive transition assessments.

The re-authorization of IDEA (2004), defines transition services as a:

"Coordinated set of activities for a student that is designed to be within a resultsoriented process that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-secondary activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation, is based on the individual child's needs, which takes into account the child's' strengths, preferences, and interests, and includes instruction, related services, community experiences, the development of employment and of postsecondary adult living objectives, and when appropriate, acquisition of daily livings skills and functional vocational evaluation" (PL 108-446 Section 602, (34)).

IDEIA (2004) requires state education agencies (SEA) to submit a six-year State

Performance Plan (SPP) and Annual Performance Report (APR) to the OSEP addressing 20

indicators related to the successes and needs of students with disabilities, ages 3 to 21 years old,
in their state (PL 108-446). Indicator-13 (I-13) requires that the students' IEP includes
appropriate and measureable post-secondary goals, is annually updated, is based on ageappropriate transition assessments, outlines services that will reasonably enable a student to meet
those goals, and that evidence is demonstrated that the student was invited to their IEP meeting
(PL 108-446).

To determine compliance with these criteria, many states have conducted self-assessments of both school districts IEP processes and the available transition services. Since schools are expected to support students with identifying their measurable postsecondary goals, and then to provide the necessary supports and services that will help the student to learn the skills required to meet those goals, there is more accountability for the local school system's role in students with disabilities success in post-school education, employment, and independent

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living (Morningstar, Gaumer, Lattin, & Wade, 2008). This accountability has also lead to a focus on developing adaptive living skills, social emotional skills and other functional achievement benchmarks identified as post-school success indicators in addition to academic-related skills (Test et al., 2009b).

To support states engagement with the federal mandates, the OSEP office and the National Secondary Transition Technical Assistance Center (NSTTAC) (2008) have created an Indicator 13 Checklist for states to use when analyzing their Transition planning practices and meeting I-13 requirements.

#### **Areas of Consideration**

Since the secondary transition process should lead directly to a student with disabilities post-secondary outcomes and experiences, the transition-related areas need to be considered within the context of both the expected, and the typical, post-school experiences of this population. The IDEA I-14 identifies the post-school outcome (PSO) areas that states need to assess in their surveys as: enrollment in academic programs or other training programs and competitive employment or vocational training (PL 108-446).

Since 1990, the National Center on Educational Outcomes (NCEO) has collected post-school outcome data from prior students with disabilities in the public school system. From their data analyses, they have also created a comprehensive model of 8 outcome areas, or domains, which include the I-14 federal criteria, but are more comprehensive by including additional, typical pathways experienced by the individuals with disabilities. These PSO domains are: (1) employment, (2) education, (3) independent living, (4) quality of life (QoL) indicators, (5) agency connection, (6) in-school experiences, (7) school to work experiences, and (8) transition planning (Curtis et al., 2009).

In February 2015 the Federal Partners in Transition Workgroup prepared and distributed the "2020 Federal Youth Transition Plan: A Federal Interagency Strategy" (FTP), a new collaborative of the Department of Education, Department of Health and Human Services, Department of Labor, and Social Security Administration. The FTP is a multifaceted, cross-systems approach to provide supports and services to youth with disabilities to improve their adult outcomes by addressing the macro, system level challenges that impact youth in transition through coordinating federal agencies and their respective programs to ensure opportunity and access for this population (Federal Youth Transition Plan, 2015). It includes a new and specific focus on the PSO's of the health of youth with disabilities. The FTP (2015) goals address previous PSO areas and also the new addition of Health to provide an equal opportunity for youth with disabilities to:

"(a) access health care services and integrated work-based experiences in high school to promote an understanding of how to manage their physical, mental, and emotional well-being, (b) to enhance their job readiness skills and career planning, (c) develop self-determination and engage in self-directed individualized planning to prepare them for post-secondary education, health care management, vocational training, and/ or employment, be connected to programs, services, activities, information, and supports for which they are eligible that prepare them to self-manage their health and wellness, (d) develop leadership and advocacy skills needed to exercise informed decision-making and personal and community leadership and (e) have involvement from families and other caring adults with high expectations to support them in achieving their goals" (p. 8).

The FTP also outlines the existing agencies and procedures available, the existing strategies in action with various federal agencies, and the policy areas for future focus.

The use of assessment to determine learning and interest profiles are the foundation of the student with disabilities transition planning. Hughes and Carter (2012) noted that the students active role in their process, inclusion of cultural considerations, and the focus on a collaborative and ongoing effort, are all important and integral parts of the assessment process.

Traditionally, the goal of the secondary transition assessment is to fully understand the students present levels of performance (PLP) regarding their academic abilities, their self-determination and self-advocacy skills, their vocational potential, and their overall adaptive functioning skills (Mazzotti et al., 2009) which leads directly to creating their post-secondary IEP goals (Hughes & Carter, 2012). Assessments can include both formal and informal data collection procedures, and to increase the reliability of the data, should include multiple data points from a variety of assessments, over different days, and with different professionals working with the student.

Formal transition assessments can range from career aptitude tests and interest profilers to achievement and cognitive testing from psycho-educational evaluations. Some informal assessments include classroom or work observations, one-on-one interviews with students, or Curriculum Based Assessments (CBA), such as a portfolio review or work sample analyses (Mazzotti et al., 2009). The idea is that the assessment process is creating a profile of the students' strengths, needs, and interests, in order to set future goals and to create a school plan to try to meet those post-secondary goals.

Goals can vary dependent on the students' learning needs and interests profile. An example of an education goal could be to achieve a state-standard diploma or to attend a

community or technical college or university. Employment post-secondary goals might include competitive, which include full time or part-time with wages above the federal minima wage, supported employment, which is competitive work but potentially with a job coach or mentor, or sheltered employment, such as an accredited work activity center that employ individuals with disabilities and are certified under special provisions of federal minimal wage laws. Regarding the student with disabilities independent living, any goals that increase their ability to live independently, such as their personal care, leisure activity management, learning home maintenance, or engaging in community participation can be appropriate (Mazzotti et al., 2009). The student's active involvement in the transition and the IEP process is crucial to create realistic and appropriate future goals and to create a school plan to try to meet those goals.

The NLTS-2 study looked at students with disabilities attendance and their participation at IEP meetings and found that 6% attended, 25% attended but with minimal collaboration with the IEP team, 58% were moderately active participants, and 12% of students demonstrated a leadership role in their meetings (Wagner, Newman, Cameto, Levine, & Garza, 2006). This indicates that although many students attend their meetings, most are not comfortable with being an active member of the team and with their transition planning process.

For schools to be able to successfully increase their students with disability's selfdetermination and advocacy skills so that they attend and actively participate in both their IEP meetings and their post-secondary planning, identifying the Evidence Based Practices (EBP's) and the promising practices for successful transition planning is critical.

An important component, yet not often a priority consideration, of transition assessment and programming include the personnel responsible for implementation and their transition specific training. Since many states continue to not meet the IDEA's transition requirements, the

CEC's DCDT division published a position statement on transition and career development personnel preparation to provide a rationale for quality transition personnel training programs (Blalock et al., 2003). Similarly, one of the systemic change agents for implementing transition programming with literature support was promoting the competence of the personnel implementing the services (Kochhar, 1999 as cited in Blalock et al., 2003).

Based on the Taxonomy for Transition model (Kohler, 1996), the DCDT included the areas of student-focused planning, family involvement, student development, program structure, and interagency collaboration as the five core content areas addressed in training programs. Since one transition coordinator could not possibly implement the transition services and program to support all of the student needs in a school setting, the DCDT also strongly suggest that any additional professionals in the building who will be helping to implement these services needs to become a trained transition specialist, which can potentially include both special and general education teachers, administrators, school counselors, paraprofessionals and related services personnel (Blalock et al., 2003).

The DCDT EBP recommendations include: including higher education professionals as integral members of the transition team, the state and local education agencies to create a process that is appropriate for the setting but aligns with the most current secondary transition regulations and reform, the school setting to conduct ongoing self-assessments to meet the specific needs of the school community, pursue personnel preparation grants potentially provided under IDEA Part D, and provide ongoing professional development and transition training aligned with newly identified EBP's (Blalock et al., 2003).

The CEC has also recently created the Advanced Special Education Transition Specialist criteria that include specific proficiencies, key elements, knowledge, and skills in the areas of

assessment, curricular content knowledge, programming, services, outcomes, research and inquiry, leadership and policy, professional ethical practice, and collaboration (CEC, 2013).

### **Evidence-Based Transition Practices**

EBP's are those practices and interventions that demonstrate effectiveness through applied, quality research (Kratochwill & Shernoff, 2004). As EBP's are identified and developed, schools will be better able to select efficient, appropriate, and individualized services that incorporate the students' needs and specific goals and lead to more successful secondary transition and post-school outcomes (Test et al., 2009b).

To improve educational outcomes for students with disabilities, it is critical to identify the EBP's in general education, special education, and education training programs. In 2002, the Education Sciences Reform Act created specific federal criteria and standards for research in education in order to identify EBP's (ESRA PL 107-279). As a result, applied educational research studies need to include: (a) a systematic design with an objective methodology, (b) consider reliability and validity, and (c) summarize and communicate research results appropriate to the design methods and the population. As a partner to the act, the USDOE's Institute of Education Science (IES) established the What Works Clearinghouse (WWC), which is a searchable website devoted to providing access to evidence-based educational programs and practices that have met the WWC standards and have been successful through the use of well-designed research studies and evaluations.

The Taxonomy for Transition Programming (Kohler, 1996) is a particularly well-accepted framework in the field of secondary transition EBP's, services, and education. The Taxonomy was developed through a concept mapping process, a review of the supporting

evidence in the literature, and by analyzing transition programming evaluation studies (Kohler, 1993; Kohler, 1996).

When implementing the Taxonomy model in school settings, there are five studentrelated areas that need to be considered and supported through implementing EBP's focused in
each area. The first, student-focused planning, focuses on the students' self-determination and
involvement with the transition assessment, planning, and future goal-setting. The area of
student development integrates both school- and work-based experiences as a means of helping
the student with disabilities to develop their academic and daily living skills. With the students'
family support and involvement, the students' planning and goals become more practical and
realistic, and are continually supported when they are not in school. The inclusion of
interagency community collaboration coordinates resources that help the student and their family
to pursue their plan and lastly, the special education program structure relates to the resources
available within the transition-focused school setting (Kohler, 1996).

Each of the five transition areas includes sub-categories, which further organize the transition practices by each student-focused area (see Appendix A for the comprehensive Taxonomy areas and sub-categories). There are a wide array of transition-related practices and activities that can be implemented in each transition area and subsequent sub-area, approximately 150 activities in the general Taxonomy model (Kohler, 1996). The availability of practices and the variety in the implementation processes of those practices make it difficult for researchers to identify EBP's that support specific transition plans and PSO goals (Test et al., 2009a). Further identifying which of those EBP's can predict specific adult experiences remain a priority research focus for the field of transition and PSOs.

Test et al. (2009b) have identified a cluster of 16 EBP's in the Taxonomy that can be considered in-school predictors that lead to specific post-school success for students with disabilities in one, multiple, or all of the outcome areas of Education, Employment, and Independent Living. The 16 practices and the subsequent post-school outcome experiences they were shown to predict are also displayed in the Taxonomy model in Appendix A. The 16 practices include supporting the students' skill development in the areas of: self-advocacy and self-determination, career awareness, self-care, social skills, vocational education, occupational courses, student support, community experiences, work study experiences, paid employment or work experiences, interagency collaboration, parent involvement, exit exam requirements/ diploma status, inclusion in the general education curriculum, programs of study, and transition program (NSTTAC; Test et al., 2009b; Kellems & Morningstar, 2010). The list of indicators can be used by school professionals to determine which transition areas are strong and which need more improvement in their particular school settings.

Kellem & Morningstar (2010) looked at the 16 practices and also at the "home-grown" transition services that practitioners were using in school settings that aligned with EBP's to create a "Transition Tips" database located on the <a href="https://www.transitioncoalition.org">www.transitioncoalition.org</a> website. This database was established to help guide curriculum development, transition assessment, and planning, by increasing student and family involvement, including assistive technology, promoting interagency collaboration, and providing resources specific to certain disabilities.

Landmark et al. (2010) conducted research that "re-substantiated" Kohler's original Taxonomy and the included practices (p. 167; Kohler, 1993). Ongoing support was found for the following eight practices: both paid and unpaid work experiences leading to stable long-term positions, student participation in employment preparation programs (both vocational and

employment), inclusion of students with disabilities in the general education curriculum as much as possible, family involvement and adult support throughout the transition planning process leading to working more hours, earning higher wages, and living more independently, functional training in social skills and daily living skills to learn adaptive everyday skills, self-determination training such as problem-solving and goal-setting skills, and lastly, community or inter-agency collaboration, however, this has been the least empirically supported (Landmark, et al., 2010).

Continually, when researchers compare, analyze, and research the Taxonomy areas, the interventions with the greatest empirical support are in the areas of student-focused planning and student development (Test et al. 2009a; Landmark et al., 2010). The support for developing students with disabilities self-determination and personal responsibility as a leader in their transition planning process is proving to be crucial for their post-school success.

As evidence-based strategies are identified, considering where the practices and interventions fit within the Taxonomy model framework and what school level resources are available to implement the transition practices will help school personnel to determine what secondary transition support to implement in their setting.

## **Challenges to Implementing Services and Programs**

Although the IDEIA comprehensively defines secondary transition support, it does not provide state and local education agencies with examples of specific services (Kellems & Morningstar, 2010). As cited by IDEIA, the minimum requirements for transition programming are specific, yet they only provide the broad criteria that needs to be met and do not provide schools with instructions on how to implement good transition practices, nor how to conduct comprehensive data collection on post-school outcomes.

Although the intent of the regulation is to provide transition services in the schools that will lead to the best possible outcome for students, schools continue to encounter a number of challenges that make it difficult to fully implement comprehensive, evidence-based secondary transition services. The research literature has supported implementing transition practices starting in middle school, which could lead to their increased knowledge about transition processes and ultimately to more participation in their own process (Hasazi, et al., 1999). However, the federal criterion mandates states to start these services at the age of 16, which limits the available resources to implement these services earlier.

Finding schools with the resources to provide both a state-standard diploma track and vocational training curricula to support all of the various learners, their deficits, and interests is difficult (Hasazi, Furney & DeStefano, 1999). Some other challenges to implementation include school programs not using their PSO data to inform strategic decisions to better their transition programming, a lack of consistent transition-related professional development in the schools, or not having an identified transition coordinator specialist in the school to manage the transition program implementation efforts (Hasazi, et al., 1999.)

Additionally, although work experiences, functional skills curriculums, and communityfocused curricula are transition supports that have been shown to lead to post-secondary
employment (Blackorby & Wagner, 1996), enrollment in vocational or work opportunities tends
to be optional for students or funding resources have become more limited (Baer et al., 2003).

### **Implementation Recommendations**

Upon their review of the literature, policies, and outcome information, the NCSET found support for the aforementioned challenges to implementing successful secondary transition for students with disabilities. Their discussion paper, "Current Challenges Facing the Future of

Secondary Education and Transition for Youth with Disabilities in the U.S." summarizes these challenges and provides strategies and recommendations to improve many of the challenges. Their suggestions include: starting in the elementary grades to promote students' selfdetermination and self-advocacy, which will provide opportunities to make decisions and selfdirect their learning process, making general education more accessible through classrooms, curriculum, and assessments which also includes providing accommodations and modifications only when appropriate and necessary, increasing high school completion rates by focusing on drop-out prevention, rely on transition assessments and students needs and interests to consider diploma options and make graduation decisions, identifying community agencies and resources prior to graduation that will provide students with access to, and the opportunity to fully participate in, post-secondary education and employment, provide parent trainings to support and increase their active participation and involvement in the planning and decision making process, clarify roles, policy, and resources, improve teaming efficiency and collaboration of the students' multi-disciplinary team, and link the student to vocational rehabilitation. All of these suggestions promote the efficiency of the students' secondary transition process and will, ultimately, improve post-school outcomes (NCSET Discussion Paper, 2004).

# **Post-Secondary Outcomes**

### Federal Requirements and State Implementation

T IDEIA (2004) Part B, Iindicator-14 (I-14) requires SEA's to also submit APR's regarding their PSO data collection efforts and findings. The I-14 mandate requires states to annually report on the

"Percent of youth who had IEP's, are no longer in secondary school and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school" (20 U.S.C. 1416(a)(3)(B)).

It is then under the discretion of each state education department to design a PSO data collection process to gain information of their former students with disabilities.

The NLTS (1985) and the NLTS-2 (2005) were two national studies mandated by the U.S. Congress as part of PL 98-199 the Education of Handicapped Children Act Amendments (1983) and were sponsored by the USDOE OSEP. The purpose of these national studies was to collect data regarding the transition experiences and post-school outcomes of a national sample of youth with disabilities which would provide the ability to compare their experiences to their peers without disabilities regarding post-school education, employment and independent living experiences (Blackorby & Wagner, 1996). The NLTS-2 was a large, longitudinal study that implemented 5 waves of data collection over the course of 10 years with a focus on the different experiences of youth with disabilities, ages 13 through 16 at the onset of the study, and their achievement levels, school characteristics, parent involvement, transition experiences, and then post-school outcomes as a 21 to 23 year old at the close of the study (Wagner, Newman, Cameto, Garza & Levine, 2005; www.nlts2.org).

When comparing the results of the two NLTS studies, Curtis, Rabren & Reilly (2009) found "a 15% increase from 55% of the students in the first cohort group in 1987 to 79% in the second cohort in 2003 who worked for pay during their first few years after high school" (p. 32). Yet, when comparing their employment rate to their same-aged peers without disabilities, the young adults with disabilities had a significant lower rate at 41% compared to 68% (Curtis et al., 2009).

The I-14 requirements do not require alternative special education settings located outside of the public school district to collect PSO data from youth who had an IEP who exited from those settings. Additionally, most state education departments do not require private or parochial school settings to collect PSO data regarding their graduated, or exited, youth with disabilities. The National Association of Private Special Education Centers (NAPSEC) does independently conduct follow-up research to support the accountability of private, special education programming, however, the NAPSEC Outcomes survey focuses on only a segment of students, those in out-of-school district placements, therefore those students with disabilities who attended a NPS program in the private sector are not necessarily included in the data collection process.

### **Areas of Consideration**

In addition to the previously mentioned PSO domains of enrollment in Education or other training programs and competitive Employment identified by the IDEA regulations the 8 comprehensive PSO domain structure provided by the NCEO were included in the NLTS2 and are also included on many state surveys. Those 8 areas are: employment, post-secondary education, independent living, agency connection or community engagement, Quality of Life (QoL) indicators, in-school experiences, school to work experiences, and transition planning (NCEO, 1994; (Curtis et al., 2009).

The QoL indicators included in the 9 PSO domains are 14 indicators that were identified by Andrew Halpern (1993) as areas an individual might experience after high school that lead to a more satisfactory life, in addition to the previous focus on successful employment or educational outcomes. The 14 QoL domains are:

- A. "An individual's physical and material well-being, such as (1) physical and mental health, (2) food, (3) clothing, (4) lodging, (5) safety from harm, and (6) financial security.
- B. Their performance of adult roles, such as (7) mobility/ community access, (8) career and employment, (9) leisure and recreation, (10) relationships and social networks,
  (11) educational attainment, (12) spiritual fulfillment, and (13) citizenship and social responsibility.
- C. An individual's personal fulfillment, which includes (14) satisfaction and general well-being" (as cited in Curtis et al., 2009.)

# **Post-Secondary Outcomes Data Collection**

In addition to the onerous efforts of identifying the well-documented, empirically supported post-school outcome domains, there are various challenges to collecting the mandated post-school outcome information. The IDEIA provision outlines the minimal requirements yet, similar to the I-13 mandates, does not offer guidance with or examples of data collection procedures and measures for states to use to meet the requirements. However, through USDOE funding, the National Post School Outcome (NPSO) center provides the technical assistance and guidance to help states to develop and distribute a post-school outcomes data collection process under I-14.

### **Evidence-Based Practices**

According to Halpern (1993), the QoL content areas are a framework that can also be used to "structure and evaluate transition programs", in addition to their inclusion as a PSO domain in data collection processes (p.490).

The inclusion of the QoL indicators in 41 post-school outcome studies indicated that PSO survey questions most often included the 6 areas of: career and employment, financial security, educational attainment, relationships, social networks, and satisfaction out of the 14 QoL indicators. The presence of these indicators in most state surveys supported their inclusion as a PSO domain in data collection efforts (Halpern, 1993; Curtis et al., 2009).

Identifying comprehensive outcome indicators can help to improve both the transition services experienced by students in special education settings and their adult outcomes.

According to Kohler (1996), determining the EBP's in transition activities that directly correlate with successful post-school outcomes has become the focus of many research effots. In order to do this effectively, program evaluation efforts need to become an integral part of educational research to improve the accountability in transition-focused programming and its impact on students with disabilities outcomes.

An evaluation study of 31 transition-related outcome studies that included measuring the PSOs of Employment, Education, Independent Living, and Halpern's 14 QoL indicators was conducted according to EBP and the federal standards (Education Sciences Reform Act, 2002) framework of evidence-based research and found empirical support for graduates with disabilities positive PSO's in the transition areas of: (1) student-focused planning and (2) student development, and moderate support for vocational training with specific job skills (Cobb & Alwell, 2005). These findings indicate that providing EBP's clustered in those targeted areas would benefit students adult experiences across the range of domains.

### **Study Rationale**

The setting of the present study is a state-approved, NPS special education placement for students with severe disabilities, or multiple disability diagnoses, who are planning for and

pursuing a state-standard diploma and continued enrollment in higher education. It is a unique special education setting due to the college preparatory mission and an academic curriculum that, although modified to address the students' needs, supports the students' access to the LRE diploma and opportunities for attendance in higher education programs.

Since both private school and NPS special education programs are not required by the federal requirements to collect PSO data from their graduates, and since the NAPSEC organization include only a small portion of private schools with special education programs in their follow-up studies, there was no established process for following up with graduates with disabilities from the particular NPS program setting.

Additionally, the literature support for evidence-based secondary transition practices also indicates an ancillary purpose of PSO data collection efforts to gain feedback regarding the presence of transition services that supported the graduates to plan for and pursue their future goals and, subsequently, have more positive post-school experiences.

Exploring the PSOs and experiences of the graduates with disabilities from this NPS program are important for two reasons. Historically, the nature and severity of the students' disability, or their multiple diagnoses of disabilities, would create deficits and challenges so complex and great that they would attend a more supportive and restrictive special education school setting in order to support their various academic, functional, and social needs. This more typical trajectory would limit their access to the general education curriculum and, subsequently, to the opportunity to graduate with a state-standard diploma. As a result, the primary academic focus would be on vocational training and building functional life skills, while working towards an alternative diploma or a certificate of completion from high school, which are less rigorous academic curriculums. The students with disabilities who attended this NPS program do

experience those deficits and still benefit from building their daily living, social, vocational, and life skills, yet they have demonstrated significant academic gains, a regimented work ethic, and a high motivation to pursue a state-standard diploma with the intention of attending a 2- or 4- year college or university program.

Therefore, it is critical to determine whether the students who graduate from this state-approved, NPS special education program, with its college preparatory focus are 1) Transitioning to post-secondary education programs, 2) are finding full-time, meaningful employment as a result of their educational foundation, 3) are independently living and supporting their interests, and 4) are experiencing satisfaction with their quality of life in a variety of areas.

Second, exploring the graduates' secondary transition-related experiences while they were still a student can identify those practices and services that were potentially supportive and beneficial to the individuals' pursuit of their goals.

This exploratory study, and the subsequent descriptive analyses, can illustrate strategies that contribute to more successful post-secondary outcomes for this specific population of students with disabilities graduating from this particular NPS special education program. And while the current study will not determine any cause and effect relationships between transition-related interventions and the graduates with disabilities post-school outcomes, the results will be useful for both the private school and the NPS special education program administrators to further develop a transition program that meets the students' needs, satisfies the NPS programs mission, and meets federal guidelines for I-13 and I-14.

An additional benefit to this study includes the ability to compare the graduates' PSO's with a sample of their peers with disabilities at the national level who were included in the NLTS-2 research study.

In addition, the study findings will provide the administrators and personnel of the NPS program with the opportunity to strengthen and develop their pre-existing transition-related efforts to provide, or strengthen, the EBP's supported in the literature that are present in the school setting.

The challenges faced by the students in this program are not unique to other students with similar disabilities in other special education settings, however, the "college bound" nature of their academic curriculum and transition goals are. The study goes beyond the scope of just determining if the students are graduating or starting a collegiate level program, but attempts to explore what exactly they are doing.

## **Implications For School Psychologists**

The implications for the field and practice of School Psychology are numerous. The identified secondary transition EBP's and the inherent challenges to implementing those practices have demonstrated the need for transition specialist level training. Although the CEC (2013) has recently created standards for transition specialist training, the inclusion of secondary transition planning and program training and specialist certification are not necessarily required components of graduate training programs in special education, school psychology, or other related fields. Often this is a skill set that is learned on the job and through professional development courses offered by either the local school district, the state department of education, or through state and/ or national level professional organizations who offer workshops, training, and resources, such as the CEC. Typically, a School Psychologist becomes identified school personnel for coordinating or facilitating these types of services.

Overall, the PSO findings of the present study could illuminate various roles and responsibilities specific to the School Psychologist. Although this particular study will not

produce findings that are generalizable to a broader population of students with severe, or multiple disability diagnoses, special education programs might find it useful to compare details and components of the current study that are align with their own experiences, populations, or settings.

## **Research Questions**

The purposes of this dissertation study are to explore the use of evidence-based, secondary transition-related practices in a specific NPS special education setting, and to explore the post-school outcomes of Education, Employment, Independent Living, Community Engagement, and the satisfaction with QoL experiences, of a 5- year cohort of graduates with severe, or multiple disability diagnoses from a college bound, state-approved NPS special education program in an urban location in the Northeastern region of the U.S..

The research questions are:

- 1. What are the post-school outcomes of a 5- year cohort of students with disabilities after they graduate from the state-approved, NPS special education program?
- 2. When comparing the graduates' post-school outcomes and disability classification, are there any differences in experiences?
- 3. What are the graduates' perceptions of the relationship between their secondary transition-related experiences while still a high school student and their current postschool experiences?
- 4. What are the graduates' perceptions of their life satisfaction in various Quality of Life (QoL) areas?
- 5. Which evidence-based secondary transition-related practices are being implemented in this state approved, NPS special education program?

### **Methodological Issues and Considerations**

Since there are no studies exploring the PSO's of this particular population it is necessary to address some methodological issues.

The present study was conceptualized, and subsequently designed, with the purpose of exploring the graduates' experiences, but also with the goal of being comprehensive, systematic, and inclusive of the potential range of experiences for this population both while still a high school student and then as an adult with a disability.

Therefore, both quantitative and qualitative design research methodologies were included in the survey development to address the dynamic and complex nature of this population and their unique educational context. Through the use of an online survey, quantitative data addresses and explores both the transition-related services and the PSO domains, which provide specific answers from the participants. Open-ended questions then glean rich and descriptive anecdotal information which captures the complexity of the graduates' perspectives and PSO experiences (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). According to Reviere, Berkowitz, Carter, & Ferguson (1996), "combining qualitative and quantitative approaches in the same study simultaneously benefits from the respective advantages of depth and breadth, understanding and generalizability, and closeness to context, as well as standardization across settings" (p. 69). Therefore, using a mixed-methods design structure appropriately and effectively addresses each research question, in a standardized manner.

## **Respondent Agreement**

When navigating the special education system, there is a particular persistence and patience that students with disabilities and their parents need to maintain as they complete the appropriate paperwork and logistical steps to gain the appropriate services, and seek out

information to support their understanding of their rights to effectively advocate for themselves and secure the services appropriate for their disability experience. The often early diagnosis of a disability and the onerous nature of the special education process, typically places the parents in the role of the primary advocate. The childs' reliance and dependence on their parents could, subsequently, delay the child's development of their own disability awareness, self-determination, and advocacy skills that are necessary for their involvement in transition planning. Despite the intention to focus the transition process on facilitating the students' self-determination and self-advocacy skills, the logistical process of special education can nurture an reliance of the student on their parent, which could potentially turn into an over-reliance on their parent rather than the preferred transition of the responsibilities and involvement from the parent to their child with the parents' ongoing support.

For these, and other reasons, parents are often the target population in many post-school follow-up studies. Although parents are often easier to contact and can speak to the transition experiences, they might not have the most current and accurate information regarding the graduates employment, education, and independent living experiences (Levin & Edgar, 1994), A high respondent agreement has been demonstrated between parents and graduates with disabilities in post-school follow up studies for most areas (employment, post-secondary enrollment, place of residence, marital status, and children) and a low agreement was observed regarding the graduates amount of hours worked, their benefits, and salary (Levin & Edgar, 1994). Due to this high respondent agreement between the parents and youth with disabilities, the graduates of the NPS program were the target population for the present study, rather than their parents.

## Survey Research

Investigating a topic includes gathering information in a way that is representative of both the target context and the population (Brantlinger et al., 2005). This information gathering is often facilitated through observational methods, case studies, or through the use of well-designed surveys or structured interviews. When information needs to be gathered from many individuals, surveys become the most time and resource efficient method, while focus groups or one on one interviews might not be feasible without access to the extensive resources of time and money.

The IDEIA (2004) mandates and the state interpretations of I-14 have led many states to create their own post-school outcomes survey. Typically the state surveys are developed based on the federal requirements and with the guidance of technical assistance (TA) centers.

When considering the most appropriate survey for the present study, most state surveys were not available for open use and most did not include all of the relevant questions that would support the exploration of the present study research questions. A careful review of the available state surveys, the literature support for evidence-based transition practices, and the established PSO domains through the various national organizations and TA centers was conducted to field for appropriate and relevant survey items related to secondary transition and PSO experiences. The specific items that addressed the research questions were then included in the design of the PSO survey measure for the present study.

Since the present study looks at a particular group of graduates with disabilities from a particular special education program, it is essentially an exploratory, qualitative design case study. These types of case studies are not implemented with the purpose of generalization to the broader public, but with the purpose of exploring unique and specific concepts and experiences

(Brantlinger et al., 2005). If there are similar programs with similar populations, those stakeholders can make conclusions about the present research findings and what information might be relevant to their particular setting.

# Online Survey: Strengths and Limitations

There are strengths and limitations to using an online survey versus using a survey by mail or telephone. Gathering large amounts of data, in a time resourceful way, and in a standardized manner is a strong characteristic of the online survey (Evans & Mathur, 2005). Most web-based surveys instantly aggregate the data, which make the analyses process readily accessible. These websites also provide the researcher with easy access to descriptive statistics with the availability of tables, graphics, and displays that are visually pleasing to the audience reviewing the data findings (Evans & Mathur, 2005).

Since in-person interviewing can create several social concerns, online surveys can provide an opportunity for the respondent to not have to interact with a person in order to participate in the study, which can alleviate anxiety or concerns related to the social aspect.

Online surveys also allow participants with the ability to think and respond at their own pace.

Alternatively, it is important to consider the relevance of the information that can be gained from implementing a focus group or in-person interviews. These types of data collection processes can glean more accurate and in-depth information since the researcher can clarify participants' answers or probe the respondents to expand and elaborate on their ideas.

Therefore, online surveys can also present a limitation as a result of the lack of contact with a person, since there is an inability to clarify a question or concern that could result in their non-completion of the survey. The quality control becomes a concern since there is no interviewer present to prevent the participant from skipping questions. When developing a web-

based survey, it can be beneficial to include the option of a forced answer choice for survey items in an attempt to control for any non-response of particular items. Additionally, if the length of the survey is not carefully considered, participants might not complete the survey (Evans & Mathur, 2005).

## **Maximizing Participant Response**

When the effort is taken to increase the response rate, or the number of respondents participating in the survey, the findings can better represent the target population and context. For PSO data collection efforts, states typically choose to use online or mail surveys as the primary method, but can experience low response rates due to a difficulty locating current mailing addresses (Smith & Bost, 2007). It then becomes a challenge to provide both descriptive narratives about graduates with disabilities and their transition and PSO experiences that could be useful to make transition service improvements. The NPSO center provides various strategies to improve and maximize response rates when making design and methodology decisions (Smith & Bost, 2007).

Developing a user-friendly survey with straightforward and jargon-free language, a moderate number of items focused on only the most important questions so completing the survey is not overwhelming to the respondent, and adjusting the readability and/or reading level for the appropriate developmental age and abilities of the audience, such as second language learners, or individuals with disabilities, are beneficial strategies. It is also useful to pay particular attention to the visual presentation of the survey materials presented to the potential respondents, so that they are visually pleasing, organized, and engaging (Smith & Bost, 2007).

How the participant will take the online survey is equally important and ensuring confidentiality through the survey website needs to be a priority. Using more personal language

so that the participant feels as though the researcher is speaking to them and personalizing other communication with fresh signatures, handwritten envelopes, thank you notes, or supportive signatures of personnel the participants might have worked with can all help to increase the respondents' interest in participating in the study and therefore, increase the response rate (Smith & Bost, 2007).

Using an announcement flyer or a phone call ahead of time to inform the participants that they will be receiving the survey in the coming weeks can help to increase response rates. This "pre-notification" provides an opportunity for the participants to ask any clarifying questions or voice their concerns so that they fully understand the purpose of the survey and can make an informed decision to participate (Smith & Bost, 2007). The NPSO center supports the use of online surveys for PSO data collection since recent years have lead to a higher comfort level and ease of use with web-based learning and tools.

An incentive for respondents to complete the survey can be enticing for participation, such as a gift card or credit towards a purchase. However, providing an incentive can also be difficult dependent upon the funding resources available and the size of the target population.

Sending multiple follow-up reminders to complete the online survey has been shown to maximize the response rate, potentially by almost 90% with up to three follow-up reminders (Dillman, 2000 & Borg et al., 2006 as cited in Smith & Bost, 2007).

## Reliability and Validity of Online Surveys

Online surveys allow participants to report their experiences, and due to the subjective nature of their self-report, increasing the reliability and validity of the measure becomes an important step towards gaining meaningful information (Evans & Mathur, 2005). When developing a survey, several steps may be taken to increase the reliability and validity of the

measure. Increasing reliability strategies include: demonstrating that over time, people in comparable situations will answer questions in similar ways (possibly by pre-piloting a survey), standardizing all materials and the process associated with survey completion (which has become easier with online survey research design websites (Smith & Bost, 2007)), and creating clearly written questions that mean the same thing to each respondent.

Reliability is also improved by including clear and explicit questions that leave no room for interpretation by the respondent about what is being asked. If the survey refers to terms that might be unfamiliar or unclear to the participant, including a key with both definitions and concrete examples provides support for the participant to refer to while completing the survey (Reviere et al., 1996).

A variety of response options will increase the reliability as well. Using a forced response design, which requires a response for the participant to move on to the next question, and providing an "I don't know" response choice, allows for both accurate, and complete, responses (Reviere et al., 1996).

Providing simple, yet comprehensive, answers that cover the range of potential responses will improve reliability as well. Many researchers include close-ended questions which allow the researcher to easily analyze the data since it is categorical and can improves the reliability of the measure (Reviere et al. 1996).

Open-ended questions are often interpreted and answered in a variety of different ways, for this reason, it can be hard to group answers into similar categories for the purpose of data analysis. However, these types of questions provide the participant the ability to express their exact thought or experience (Brantlinger et al., 2005).

Piloting the survey with individuals who have knowledge of the topic can help the

researcher to gain feedback about language, structure, and the process so that they can revise their survey prior to its' official distribution (Brantlinger et al., 2007).

Validity may be understood as the extent to which a particular survey is measuring the construct the survey designers set out to measure. Different methods are used to determine the validity for surveys that seek objective information in contrast to surveys that measure subjective information. Yet, since surveys are asking for participants to report their unique experiences, it is difficult to understand and confirm the level of subjectivity with other sources of information (Reviere et al., 1996).

Validity is harder to address and measure than reliability, since a survey or questionnaire could be reliable, producing the same response each time, but the information gained might not align with the questions being asked, thus making it not valid. Attempting to create questions that address one topic or domain at a time and then grouping those questions helps to identify any questions that are too similar in nature or that might be considered two questions within one (Reviere et al., 1996).

## **Interpreting and Communicating Data**

When interpreting mixed-method design studies, both the statistical comparisons generated by the data collection and the rich, narrative data need to be analyzed and presented to the reader in a clear and engaging way (Reviere et al., 1996). The two priority considerations with each step of the data analyses include viewing the question and the relation it has to the study research questions and considering the question and the type of scale used, such as nominal, ordinal, interval and ratio ("Approaches to the Analysis of Survey Data", 2001).

Statistical analyses and regression models are typically used to address the quantitative component of survey data collection, and descriptive and inferential statistics are useful when

analyzing and presenting qualitative findings (Reviere et al., 1996). The researcher needs to determine how to interpret the data in a way that it accurately represents the findings, answers the research study questions, and can be communicated to a variety of audiences and in a meaningful way.

To interpret qualitative data, a thematic analysis allows the researcher to look at the data, identify any common themes or patterns, and interpret those themes in a meaningful and related way to the target population, setting, and research questions so that specific recommendations lead to data-based decision making (Reviere et al., 1996).

Online survey data analyses can include computing frequencies, percentages, proportions, means and standard deviations and the use of tables, graphs or charts to display data visually and computing. Descriptive statistics include an item-by-item analyses and thematic analyses to organize and summarize the findings in a way that creates a narrative addressing the research questions.

When considering how to present research study findings, the areas of need assessment and program evaluation can provide guidance and recommendations for the process. It is important to understand who will be receiving this information when creating a thorough, understandable, straightforward, and pertinent narrative. The school Principal and Director of Special Education might receive a more comprehensive and complete version of the findings of the present study, versus other school personnel or current students with disabilities who might benefit from a much shorter version or, perhaps, from only a visual presentation with verbal explanations (Morris, Fitz-gibbon, & Freeman, 1987).

It is likely that information will need to be presented in different mediums dependent upon the audience, for example, school administrators might not have an interest in reading the

complete dissertation study narrative, but perhaps would benefit from an executive summary report outlining the identified themes and main findings (Morris, Fitz-Gibbon, & Freeman, 1987).

### **Chapter Summary**

This chapter explored the related concerns and characteristics of students with disabilities, in general, and more specifically those with a severe, or multiple disability diagnoses, and their special education placements and graduation trajectories. The federal requirements for both the secondary transition planning practices and PSO data collection processes, were discussed. The evidence-based practices related to secondary transition identified in the literature were summarized, as well as, the specific challenges to implementing those practices in school settings. The two theoretical frameworks, the Taxonomy for Transition Programming (Kohler, 1996) and satisfaction and QoL indicators (Halpern, 1993), the I-13 and I-14 federal mandates, and the recommendations for designing PSO measures from the NPSO center, provided the structure for systematically exploring the secondary transition-related and PSO experiences of the target population of the present study. The potential implications of the findings were discussed, which include adding to the professional literature to support secondary transition practices and the advancement of the professional practice of School Psychologists, provision of descriptive information for the school personnel and administrators to make improvements and adapt their secondary transition practices to improve the PSOs of the individuals graduated from the NPS program. The use of a mixed-method design and the subsequent methodological concerns and considerations were discussed related to the development and use of an online survey measure. The data analysis procedures unique to the present study were summarized as well.

### Chapter III

### Method and Design

### Introduction

The present study is an exploratory study examining the post-secondary outcomes and transition-related experiences of graduates from a state-approved, NPS special education program for students with severe, or multiple, disability diagnoses who exit high school with a state-standard diploma. The target population included 104 graduates with disabilities from the 2010 to 2014, 5-year cohort of graduated students.

Prior to initiating the data collection process, all steps were taken to follow the Rutgers
University Institutional Review Board (IRB) protocol for conducting research with human
participants. A survey was developed in order to specifically address the research questions as
they relate to the specific NPS setting and the student population it serves. Any relevant
methodological concerns were considered and addressed throughout the study design process.

Additionally, a transition self-assessment rating scale based on the Taxonomy for Transition Programming (Kohler, 1996) was configured into a web-based scale for school professionals, who were responsible for facilitating the transition practices in the NPS program, to complete which rated the level of development and implementation of the evidence-based transition practices from their perspective.

### **Participants**

The potential participants completing the post-school outcomes (PSO) survey were a 5-year cohort of graduates who had exited the state-approved, NPS special education program in the years of 2010, 2011, 2012, 2013, and 2014. With a 100% response rate, 104 graduates would have participated in the PSO survey. This population was chosen both as a sample of interest

due to an identified need to explore their PSO experiences, and one of convenience due to the Principal Investigators' employment status as a School Psychologist in the setting.

The students who had prematurely exited or who had changed their special education program placement prior to completing their graduation requirements were not included in the study sample. The participants were all male due to the all-male student demographic of the larger private school setting.

At any given time, the NPS program enrolls approximately 100 students whose disability experiences include a mix of both high- and low- incidence disabilities and, regardless of the severity of their deficits due to their disability experience(s), are considered to be motivated learners with an interest in attending collegiate level academic programs upon being graduated from high school.

Due to the specificity of the NPS program, the study findings cannot be generalized to the broader field of special education, other NPS program settings, or to other populations of graduates with disabilities. It is purely exploratory and will be informative to the school administrators and personnel to inform their transition-related practices and program decision making in the particular NPS program setting.

## **Study Setting and Location**

The NPS program was located in a large, urban area in the Northeastern region of the United States. It maintained a classroom structure with a 12 students to 1 Special Education Teacher and 1 Teacher Assistant ratio (12:1:1) and was housed within a general education setting in a private, all boys high school.

### Design

The design of the present study was guided by survey research aimed at investigating the

PSO experiences of individuals with disabilities.

Both state-specific PSO surveys and the national survey protocols were not, typically, available for use with independent data collection efforts. Additionally, a review of the available PSO surveys did not reveal a state survey that comprehensively addressed all of the present research study questions. Therefore, it was necessary to create a PSO survey that would address the research questions and the specific needs of the NPS setting and characteristics of the student population the NPS program served.

The purpose of the study-specific Post-Secondary Outcomes (PSO) Survey is to collect information regarding graduates post-school experiences from the NPS program and also to explore their high school transition-related experiences that potentially supported their attendance in post-secondary education (or other post-secondary areas).

The survey was designed as a result of examining and considering the relevant transitionrelated evidence-based practices and the PSO domains in the professional literature. The survey
questions were aligned to meet the new I-14 requirements for the Part B State Performance Plan
(SPP) and the Annual Performance Reporting criteria (IDEIA, 2004). These requirements
include annually reporting the percent of youth who are no longer in secondary school, who had
an IEP at the time of their exit and were enrolled within one year of leaving high school in a
higher education program or some other postsecondary education or training program, or
competitively employed or in some other employment (IDEIA, 2004).

To address the research questions in the present study, the survey development went beyond the scope of solely including the I-14 requirements. Upon completion of a review of the model frameworks for transition, the Taxonomy for Transition Programming (Kohler, 1996) and for PSO domains, the 14 Quality of Life (QoL) indicators (Halpern, 1993), content-specific

questions were included in the PSO survey.

The survey was then refined further with a comparison of both the content and structure of published and accessible state PSO surveys and the established post-secondary areas experienced, or domains, as highlighted by the NPSO Center and the NCEO.

After the initial draft of the PSO Survey protocol, questions were adjusted to include an open-ended "Other, please specify" response option for participants to add their specific experiences or their opinion.

An additional, and equally important, consideration was given to the reading level of the survey protocol, and the other study-relevant materials and documents used to communicate with the graduates. Since the target participant population are graduates of a college bound high school program, meaning they are expected to attend a collegiate level post-secondary institution, it was deemed appropriate to assume that those individuals had achieved an academic achievement level commensurate with their peers without disabilities and would be expected to understand, at the most, reading materials at the grade 12 level. To be confident that the survey respondents could adequately consent to participate in the study and accurately read the survey questions, the Flesch-Kincaid Grade Level Readability Test was conducted with the final draft of each of the study documents.

The Flesch-Kincaid uses a formula that considers the text word length, sentence length, and syllables, to identify the Grade Level of the text. For each of the study documents the participants' would be expected to read a Flesch-Kincaid of a 12.0 Grade Level, which stands for the first month (month "0") of the twelfth grade year. The readability of each document for this study will be noted in the appropriate parts of both the Design section and in the appropriate Appendix sections.

The Consent Letter (Appendix B) yielded a Flesch-Kincaid readability at a12.0 Grade Level and the PSO Survey Protocol (Appendix D) an 8.8 Grade Level.

The web-based survey company, <a href="www.surveymonkey.com">www.surveymonkey.com</a>, was used to create and then distribute the PSO Survey. The informed Consent Letter (Appendix B) included all criteria as outlined by the Rutgers University IRB research protocol requirements when working with human participants. The individuals' choice to participate in the study was voluntary and their responses remained completely anonymous. The website option was specifically selected to prevent any connection with the individual responses and their Internet IP address. The participants were informed of their right to refuse or to withdraw from the study at any time and the contact information for both the Rutgers University IRB office and the Principal Investigator were provided if they had further questions or concerns. There were no anticipated risks for participating in this study. The Consent Letter, which comprehensively outlined both the study and the IRB consent protocol details, was mailed to the most recent mailing address in the school records for each potential participant.

When clicking the survey link, the first screen prompt was the PSO Survey Introduction Page (Appendix C) which also provided the purpose of the study, the confidentiality details, the anticipated completion time, and the incentive for completing the study. The Survey Introduction Page yielded a Flesch-Kincaid readability at a 12.0 Grade Level.

The PSO Survey Protocol (Appendix D) included of a total of 65 questions. Three demographic questions identified the participants' year of graduation, their primary disability classification category, and the type of high school diploma they received. Despite the college-bound philosophy of the NPS program and a curriculum supporting the students' pursuit of a

state-standard diploma, the option to indicate either a local diploma or a state-standard diploma was included since both graduation options remained available to students.

The remainder of the survey was then divided between two, comprehensive sections.

The first section provided the PSO experiences items and the second provided the secondary transition-related planning experiences items.

Specifically, the questions numbered 5 through 15 explored the participants' post-school education experiences, 16 through 23 addressed their post-school employment, 24 and 25 addressed their independent living experiences, and number 26 asked about their community integration.

The Transition-Related Experiences section first asked the participants to try their best to recall their experiences while still a high school student in the NPS program. The following definition was then provided to ensure that the participant was oriented to and fully understanding of the concept. Transition-Related Experiences are:

"any transition services which are activities related to supporting you as you explored post-school options, transition planning which can include attending your Individualized Education Plan (IEP) meetings and/ or actively creating your IEP and Senior Exit Summary, completing career or vocational assessments or questionnaires, or training/ practice experiences".

The Transition questions asked about the students' involvement with transition planning, including: identifying their transition needs, developing post-secondary goals for their IEP, and whether their current experiences were identified as a goal during their IEP development.

The remaining Transition questions asked the respondents a variety of questions related to the availability and helpfulness of the transition services in the NPS program, such as those services they might have used, those that were potentially helpful towards reaching their current experiences, what type of services might have changed their experience if it were available, and general questions related to the helpfulness of the NPS program curriculum and professionals with preparing the graduate for a variety of post-secondary activities.

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Additional items then asked the participant about their school community involvement with clubs, sports, or volunteer work and any impact that participation might have had on reaching their future goals.

The second to last section of questions asked the respondent to provide feedback related to their satisfaction with different areas of their post-school life. The last question asked the respondent to provide any additional information or feedback that they might like to provide that might be helpful to the study.

Once the survey development was complete, a draft was given to the school Principal and the Director of Special Education so that they could review the question content and language and suggest additions, omissions, or revisions for the final PSO survey.

After the administrators endorsed the PSO survey protocol, a pilot administration of the survey was conducted with the School Psychologists who worked with the student population in the NPS program setting. They were also requested to provide feedback regarding the structure, language, content, and length of the survey in order to make improvements.

### Validity and Reliability

Since survey results are most meaningful when the measure is reliable and valid, several precautionary steps were taken during the survey development to try to increase the reliability

and validity. Using the same protocol through the survey link

https://www.surveymonkey.com/s/PostSchoolExperiences standardized the measure. The effort was taken to create clearly written questions that were near the expected reading level of the participants. The pilot test asked relevant school professionals who have worked with this population for feedback to further refine the wording of the questions, structure, and the language use. A careful consideration was given to include "I don't know," "I'm not sure" and open-ended response options to maximize response accuracy. Additional steps were taken to clarify each question by refraining from using jargon, abbreviations, or multi-step questions.

#### Procedure

With permission from the school Principal and under the supervision of the Director of Special Education, the graduates' home address was accessed through schools records. The Principal also authorized the use of the school letterhead and the use of the school mail room to mail all research materials.

Once the research study protocol was approved by both the Rutgers University IRB committee and by the dissertation committee members of the present study, a Study Notification Pre-Announcement Letter (Appendix E) was mailed to the participants' home. The pre-announcement letter included a shortened version of the full study details and the informed consent information with a Flesch-Kincaid Grade Level of 11.7.

The purpose of the pre-announcement letter was to alert the participants that a survey link would arrive in their mailbox shortly with the intention of piquing the participants' interest in the study and, subsequently, maximizing the number of respondents. Approximately 2 weeks later, the full Informed Consent Letter (Appendix B) which outlined the study description, purpose, benefits and risks, limitations, survey instructions, and provided the www.surveymonkey.com

link was mailed to the participants' home. If they chose to participate, the respondents then needed to type the link into a computer browser and complete the survey. After approximately another two weeks, a follow-up letter, which was a copy of the original Consent Letter with a new, introductory reminder statement to participate if they would like to, was mailed to the graduates' home. After an additional two weeks, a final follow-up reminder letter was mailed. The pre-announcement letter, informed consent, and the two follow-up reminder letters all served the purpose of maximizing respondent participation.

All letters were sent on the NPS program letterhead stationery and in envelopes stamped with the school insignia and return address.

The survey link remained active for a total of 6 weeks. An incentive to potentially win one of two \$25.00 <a href="www.Amazon.com">www.Amazon.com</a> gift cards was offered to those participants completing the survey in its entirety. Providing the incentive also supported maximizing the graduates' participation in the study. The instructions for entering the gift card drawing were provided on the last page of the online survey. To ensure their anonymity, they were instructed to send an email to the Principal Investigator with their name, email, and home address. At the close of the survey the names were randomly selected and the winners were notified via their email address that the gift cards had been mailed to their home.

## Plan of Statistical Analyses

The statistical analyses of the present study incorporated descriptive statistics to address a mixed-methods design study with specific percentages, frequencies, means, and other quantitative data and after conducting an item-by-item analysis, a narrative summarized the respondents' reported experiences.

To interpret the qualitative data, a thematic analysis highlighted common themes or patterns that supported each research questions and could be meaningfully interpreted for the stakeholders in the NPS program setting. Tables, graphs, and charts were used when necessary for to convey the analyses. The consideration was also made to vary the presentation of the item-by-item analyses so as to keep the reader engaged in the study findings.

When communicating the study findings to the school stakeholders, the Principal and the Director of Special Education, any expected or unexpected outcomes were considered and factored into the presentation of the study findings. Similar considerations will be made when presenting the dissertation components to the Dissertation Committee of the present study and the Rutgers University community.

At the culmination of the research study, the data was archived in a manner consistent with ethical record keeping procedures for future reference if requested by any relevant professional.

### **Chapter Summary**

The participants, study site and location, study design and PSO Survey development, validity and reliability concerns and limitations, and the data collection procedures were outlined. The statistical analyses of the mixed-method design were also discussed.

### Chapter IV

#### Results

#### Introduction

The survey results are presented as outlined in the Chapter III Method and Design sections. The survey was sent to 104 graduates with disabilities from the state-approved, NPS special education program. Twenty individuals (19.2%) chose to participate in the online survey.

The findings are presented in the order in which they appeared in the survey. The results from each question are summarized and, where appropriate, one-way tables or narratives are used to present the descriptive statistics such as percentages and means. Any open-ended responses provided by the graduates are summarized and presented in addition to any emergent themes. It will be noted when graduates chose to not participate in a particular survey item. Any inferential connections and potential generalizations, and any other factors that might have influenced the results are properly discussed in Chapter V, the Discussion of the Results.

The graduates with disabilities demographic information is presented first to orient the reader to the overall characteristics of the participant sample who completed the PSO survey. As the item-by-item analysis is presented, the results categorically relate to the Post-Secondary Outcome Domains of Education, Employment, Independent Living, and Community Engagement, and the satisfaction and QoL experiences in the areas of Physical and material well-being, Performance of adult roles, and Personal fulfillment and Satisfaction followed by the respondents' Secondary Transition-Related Experience.

In addition to this item-by-item analysis, an additional comparison by the graduates' identified primary disability category was conducted to highlight any patterns or differences

between experiences with a specific disability classification and either their Post-Secondary Outcomes or their Transition-Related Experiences.

# **Post-Secondary Outcomes Survey Findings**

**Table 1**Demographic Characteristics of Participants, Survey Items 1-3

Item	Demographic Characteristics	Study Sample	Percent	
		N = 20	%	
1	Graduation Month Year		•	
	June 2010	6	30%	
	June 2011	8	40%	
	June 2012	2	10%	
	June 2013	0	0.0%	
	June 2014	4	20%	
2	Primary Disability Classification			
	Speech or Language Impairment (SLI)	7	38.9%	
	Other Health Impairment (OHI)	3	16.7%	
	Specific Learning Disability (SLD)	2	11.1%	
	Emotional Disturbance (ED)	0	0.0%	
	Hearing Impairment	0	0.0%	
	Visual Impairment	0	0.0%	
	Autism	5	27.8%	
	Traumatic Brain Injury (TBI)	1	5.6%	
3	Diploma Type			
	State-Standard*	17	85%	
	IEP	3	15%	

*Note.* Two respondents chose not to respond to Survey Item 2, N = 18.

The information from Survey Items 1 through 3 is summarized in Table 1. This includes the respondents' year of graduation, primary disability classification category, and the high

<sup>\*</sup> Indicates the use of general descriptors instead of the actual state-standard diploma title for confidentiality purposes.

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school diploma type they received when they were graduated from the NPS program. The graduating class of June 2011 was the most represented (40%), followed by the class of June 2010 (30%), then the class of June 2014 (20%), and, lastly, the class of June 2012 (10%). There were no graduates representing the graduating class of June 2013, therefore, those graduates are not included in the discussion of the survey findings. Approximately 70% of participants were graduated four to five years prior to the study year.

For Survey Item 2, which asked the graduates to identify their primary disability classification, 2 of the 20 respondents skipped this question and, in addition to their primary classification selection, four respondents selected the "Other, please specify" option and provided the following comments: "Asperger's Syndrome" (which would be grouped under the OHI category if this additional response were to be included, however, this response is considered anecdotal information only), "Speech Impairment" as a secondary classification, one unintelligible response, and a comment about the graduates' related services which stated, "Speech but it was not needed. Speech Therapy did not improve my speaking skills at all. I was taught more in forms of writing than actual speech therapy throughout my periodic school attendance".

Examples of each disability classification category were provided with the intention of supporting the graduates' ability to accurately recall and identify their primary classification. While an exhaustive list of the potential disability experiences in each category were not provided, the more common disabilities as related to each category were noted. The Speech or Language Impairment category included the examples of an Expressive, Receptive, or Mixed Expressive and Receptive language impairment, the Other Health Impairment (OHI) category included Attention Deficit Hyperactive Disorder (ADHD), Inattentive, Hyperactive, or

Combined types, or a Pervasive Developmental Disorder (PDD), such as Asperger's Syndrome, the Specific Learning Disability (SLD) category included specific Reading Disorders, such as Dyslexia, specific Math Disorders, such as Dyscalculia, or a Written Expression Disorder, the Emotional Disturbance (ED) category noted any type of mood and/ or behavioral difficulty, such as Anxiety or Depression, and the Traumatic Brain Injury (TBI) category was defined as an experience resulting from a surgery or an accident.

No respondent identified having three of the disability classifications, ED, Visual Impairment, or Hearing Impairment, as their primary disability. Therefore, these categories are respectfully excluded from the results and ensuing discussion of the graduates with disabilities from the NPS program.

Item 3 indicates that 85.0% of the graduates with disabilities reported that they were graduated with the state-standard diploma, while 15% reported that they were graduated with the IEP diploma option.<sup>1</sup>

### Education

Regarding their enrollment in any type of training program or college courses since leaving high school (Survey Item 4), 12 graduates (60%) reported having been enrolled full-time (9 or more college credits), 1 graduate (5.0%) reported being enrolled part-time (9 or less college credits), 5 graduates (25%) reported having had both full- and part- time enrollment, and only 2 graduates (10%) had not been enrolled in any type of education program.

<sup>&</sup>lt;sup>1</sup> The use of the "state-standard" diploma title is noted in the narrative as a difference from the PSO Survey language which used the specific name of the state- standard diploma.

**Table 2**Enrollment in any type of training program or college courses, by Disability Category
Survey Item 4

Disability Category	,			
	Full-time (9 or + Credits)	Part-time (9 or – Credits)	Mixed	Never Enrolled
SLI	6	1	0	0
OHI	0	0	2	1
SLD	2	0	0	0
Autism	2	0	2	. 1
TBI	1	0	0	0

*Note.* Two respondents chose not to respond, N = 18.

The rate of the graduates' post-school education enrollment by their identified disability classification category is summarized in Table 2. Generally, more respondents with a SLI (30%) reported enrolling, both full- and part- time, in higher education than graduates in any other disability category. Those graduates who identified their primary disability as one within the OHI category, such as ADHD or PDD, had the lowest level of post-school education enrollment, with only two graduates (10%) reporting a mixed part- and full- time enrollment and one (5%) reported never having enrolled. Overall, only two graduates reported having never been enrolled, one with an OHI and one with an Autism classification.

Regarding continuous enrollment, 35% of graduates (7 respondents) reported having continuously been enrolled in 6 semesters or more (Survey Item 5). The year the respondents were graduated could be a factor in the graduates' continuous post-school enrollment experiences, since some graduates are further in their collegiate career than others as a function of the amount of time that has elapsed since high school. The additional information gained from this item is small and can be generally understood through the previous survey item, which

explored the graduates' mixed enrollment experiences. Professionals who collect future postsecondary outcome data might consider omitting Survey Item 5.

**Table 3**Graduates' post-secondary education program type by Disability Category
Survey Items 6-7

Education	Disability Category					
Program Type	SLI	ОНІ	SLD	Autism	TBI	
Survey Item 6, $N = 18$	n = 7	n = 3	n = 2	n = 5	n = 1	
4- Year	5	1	0	2	1	
2- Year	2	1	1	1	0	
Educ. or training program						
Program at least 1- yr.	0	0	1	1	0	
Program less than 1-yr.	0	0	0	0	0	
None	0	1	0	1	0	
Survey Item 7, $n = 4$						
Vocational, Technical or						
Trade School	1	0	2	1	0	

Since leaving high school, 50% of the graduates with disabilities had enrolled in, or attended, a 4- year college or university program, while 30% of the graduates had enrolled in or attended a 2-year college or university program. Two graduates (10%) reported enrolling in another type of education or training program that lasted at least one academic year since graduating from high school.

When considering by disability classification category the type of post-school education enrollment, such as a 2- or 4- year academic program or a training program that requires at least one academic year, the graduates with a SLI reported mostly attending 4-year colleges or universities (71.4%) and 28.6% had attended 2- year college programs, while graduates with an

OHI classification (3 respondents) reported an equal attendance in a 4- (1 respondent) and 2- (1 respondent) year academic program, and 1 respondent had not attended. Those graduates with a SLD reported equal attendance as well between a 2-year college and university (50% or 1 individual) or another education or training program that lasts at least one year (50% or 1 individual). Of those graduates with an Autism classification (5 respondents), 40% attended a 4-year (2 respondents), 20% attended a 2-year (1 respondent), 20% attended another training program lasting at least one year (1 respondent), and 20% had never been enrolled (1 respondent), and the 1 respondent with a TBI classification reported only having been enrolled in a 4-year college or university.

When the graduates were asked, "What type of training program they were enrolled in if they are not currently or had not ever attended a 2- or 4- year college or university", (Survey Item 7) 4 respondents reported attending vocational, technical, or trade school, however, those 4 respondents did not include the 2 respondents who reported attending a training program lasting at least 1 academic year or the 2 respondents who reported they did not attend any post-school education programs. The 4 graduates who responded to this question included respondents who had also reported attending either a 4- or 2- year program (1 SLI and 1 SLD), in addition to 2 respondents who reported attending a training program (1 SLD and 1 with Autism). This lack of clarity in the graduates' experiences is due partially to the absence of a "Not applicable" response choice for Survey Item 8 so those respondents who were currently working could indicate that specific experience. Eight respondents skipped this survey item, which also suggests a potential lack of clarity with what the item was asking. Clarifying the graduates' experiences with attending vocational, technical, or trade schools could be useful. Adding a potential question to understand their vocational, technical, or trade school attendance regarding

timing would also clarify whether those graduates who dropped from a full-time status were supplementing their experience with vocational training. Or the opposite could occur, for those graduates who reported both attendance in 4- or 2- year colleges or universities or vocational, technical, or trade school programs.

Two additional comments were provided in the "Other, please specify" answer option; 1 respondent wrote "Associates degree in Carpentry" and another commented that they were "no longer enrolled due to financial constraints and vision problems". Both comments provide additional information supporting the graduates' attendance/ non-attendance, although this survey item might not have been the most appropriate place to add those comments. When considering the graduates' disability classification category, both of the graduates with a SLD attended a vocational, technical or trade school, 1 graduate with Autism, and 1 graduate with a SLI. This information is compared in Table 3.

When asked about their highest level of education plans regardless of their current college or university attendance status, 2 graduates (11.1%) planned to complete either technical. or trade school programs, 6 graduates (33.3%) planned to complete a 2-year Associates degree, 7 graduates (38.9%) planned to complete their 4- year Bachelor's degree, and 3 graduates (16.7%) planned to complete their Master's degree. While two respondents chose to skip this question, two additional respondents provided "Other" comments of: "60 college credits no degree" and "high school", which were answer options not provided on this survey item. For future data collection efforts the additional answer options of "earning credits without a obtaining a degree" and "high school diploma" should be added to Survey Item 8.

The respondents were asked to provide the type of training program or career major that they have either completed or are pursuing (Survey Item 9). While 6 respondents reported that

they were not in a training program or attending a college or "Other" and 2 respondents skipped this question, 12 graduates indicated pursuing training in the following areas: HVAC, Criminal Justice (2 respondents), Marine Engineering/ USCG Engine License, Carpentry, Finance, Business, Computer Science, BA in Marine Operations with a US Coast Guard Engine License, EMT/ Paramedic, Recreation Therapy, and Economics.

A majority of graduates (45%) were maintaining a college or university Grade Point Average (GPA) of 2.5 to 2.9 while 6 graduates (30%) had a 3.0 to 3.4 GPA, 1 graduate (5%) had a 3.5 to 4.0 GPA, 1 graduate (5%) reported having a GPA of 2.0 to 2.4, and none reported having a GPA below 2.0.

**Table 4**Use of College or University supports for Individuals with Disabilities
Survey Item 11

Disability Support	Response Percent	Response Count N= 20
Extended time for Tests	65%	13
Separate location for Tests	55%	11
Tutoring Services	45%	9
Note-taker during class	15%	3
Appointments with a		
Curriculum Specialist	15%	3
Assistive Technology Devices	5%	1
Have not used any supports	20%	4
Currently not enrolled	10%	2

The graduates were asked to indicate their use of any, and all, classroom supports or test accommodations that were offered in their college or university setting for students with disabilities. The most to least endorsed supports and accommodations that the graduates reported using in their college or university settings are listed in Table 4. Extended time for tests

was indicated as the most used accommodation and the use of Assistive Technology devices such as a recording pen, read-aloud texts, etc., were indicated as the least used supports.

Comparing the use of additional support or test accommodations by disability classification category, the choice whether to use or not use supports was evenly distributed with about 1 respondent per category reporting that they had not used any supports.

Of the 3 graduates with disabilities who Survey Item 12 was applicable, which asked the graduates to indicate their reason for not receiving any type of training or education since leaving high school, 2 reported that this was due to their decision not to pursue any further education and 1 reported that they had been working or employed full time since leaving high school. The following choices were not endorsed: cannot afford further training or education, transportation challenges, and not meeting admission requirements.

When they were asked to consider which disabilities or disorders continue to present challenges to their current academic success, 7 graduates responded with "None, I have earned efficient strategies to support my disability", with the most endorsed current challenge to be the categories of: SLI (6 respondents), Autism (3 respondents), SLD (3 respondents), OHI (2 respondents), and ED and Visual Impairment were each reported by 1 graduate to be a current challenge to their academic success. Initially, the disability classification categories of ED and Visual Impairment were not identified as a primary disability classification while still a high school student for any graduates who participated in the study. This indicates that these experiences are new challenges for those individuals as adults, or perhaps those were secondary experiences that were not the primary interference to their academic success as a high school student, but they have become more of a concern in their adult lives.

# **Employment**

Ten graduates (50%) reported having worked an average of 20 or more hours per week since leaving high school, while 4 (20%) have worked less than 20 hours per week, and 6 graduates (30%) have never worked. Additionally, since leaving high school 6 graduates reported not working at all, 5 Graduates reported working only about half of the time, 4 reported working consistently, 2 each reported working less than 1 month and most of the time, while only 1 graduate reported working only during summers.

A majority of the graduates (47.4% or 9 graduates) had worked the longest in Competitive Employment (an application was required for the position), while 2 graduates reporting having worked in a family business, and 1 graduate each reported being self-employed or in Supported Employment (paid work in the community with helping people always around support them). Ten graduates (50%) reported earning more than the minimum wage, and 2 graduates (20%) each reported earning exactly the minimum wage and less than the minimum wage.

The most endorsed reason for not working since leaving high school, by 6 of the 15 graduates responding to Survey Item 16, was due to attending school or training programs to prepare for future work. Eight Graduates indicated that the question did not apply to them due to their current employment status, 1 indicated that they do not want to work, and 5 skipped the question. Additional comments indicated that they were a "police officer", which does not completely align with what the question was asking, and one stated that they were reliant on Social Security Disability, which is a response choice that should be considered for future data collection endeavors.

Thirteen graduates with disabilities indicated additional reasons for why they are not currently employed (Survey Item 17). The desire to look for a better job was the second most endorsed (38.5%), followed by low wages (23.1%), the inability to find a job (15.4%), and both the reasons of not getting along with a boss or coworkers and dislike of the working conditions were the least endorsed reasons (7.7% each).

When examining the graduates' responses to the set of employment items by their disability classification category, the following findings were noted.

Graduates with a SLI. Of those with a SLI (7 graduates), 71% had worked either more or less than 20 hours per week and those not currently working reported their full time school or training program attendance as the main reason. Of those who had worked, 1 graduate each worked in competitive employment, a family business, and supportive employment. Two graduates reported not working at all, 2 worked about half of the time, and 1 graduate each reported only during summers, most of the time, and consistently since graduating. Five of the seven graduates with a SLI classification earned at least minimum wage or higher.

Graduates with an OHI. Out of the 3 graduates with an OHI classification, 100% had worked at some point since graduating from high school, with 1 graduate working an average of 20 or more hours per week and 2 working less than 20 hours per week. 1 graduate indicated having worked in Competitive employment, 1 in a family business, and 1 added a comment with a specific location that was not included to preserve the study setting anonymity. If they were not currently working the reasons for their status was due to being a student, not wanting to work, and the inability to find a job. One graduate each reported working less than 1 month, about half of the time, and consistently since graduating from high school, although 2 graduates

reported earning less than the minimum wage and only 1 graduate with an OHI earned more than minimum wage.

Graduates with a SLD. Both reported working an average of 20 or more hours per week, most of the time or consistently since leaving high school, and one graduate reported a Competitive Employment position and one reported being self-employed.

Graduates with Autism. Of the 5 graduates with Autism, 40% have worked since graduating from high school, with 2 working an average of 20 or more hours per week, in Competitive Employment, and for pay more than minimum wage. One graduate reported working for less than 1 month, 1 reported working about half of the time, and 3 graduates had never worked since leaving high school. Of those who had not worked, 2 graduates reported that their current school or training program student status was the main reason and 1 reported that their reliance on Social Security Disability was the main reason.

**Graduates with a TBI.** The one graduate with a TBI indicated that they had never worked due to their full time enrollment in a college or university program.

## **Independent Living**

When asked where they currently live, 17 Graduates (85%) reported living with their parents, while 3 Graduates (15%) reported living in a college dormitory. Those who lived in a college dormitory were 2 graduates with a SLI and 1 graduate with an Autism classification.

When asked how they pay for their living expenses, a majority of graduates (11 respondents, 57.9%) reported completely relying on their caregivers, partner, or spouse, 5 graduates (26.3%) reported relying completely on their own salary and wages, 2 graduates (10.5%) reported doing so partially with their own salary and partially with the support of their

parents or other caregivers, and 1 graduate (5.3%) reported doing so partially with their salary and partially with government subsidies.

### **Community Engagement**

At some point since graduating from high school, 6 graduates (31.6%) had used vocational rehabilitation services, 4 graduates (21.1%) received services through Social Security Administration, 3 graduates used food stamps, 1 graduate received services through Medicaid and Title 19 resources, and 1 graduate received services through the Department of Social Services. About half of the graduates (52.2%) reported not receiving any help or services and 1 graduate reported not knowing that any agencies were available to provide any support or services.

# **Transition-Related Experiences**

# **Student-Focused Planning**

When asked about identifying their "Post-Secondary Goals" on their IEP (Survey Item 23), 74% of graduates (14 respondents) did not recall their specific goals, while 5 graduates indicated the following goals in their comments: "to become a police officer", "own my own construction company", "to be successful in college", "to be able to attend a post-secondary institution", and "to either attend a 4-year or 2- year college".

When thinking about their current employment, training experience, academic setting, or living arrangements, 11 graduates did not recall which of those experiences were identified as Post-Secondary Goals on their IEP, while 2 graduates indicated their current employment setting or job was an identified goal, 2 had identified their training as a goal, 5 had identified their academic setting, none had indicated their current living arrangement, and 1 graduate reported that none of those experiences were identified as goals on their IEP.

Almost all of the graduates (18 respondents) reported that they did not recall what "Transition Needs" they had identified on their IEP.

When indicating the type of transition services or supports the graduates used while they were still high school students (they needed to check all of the services or supports that applied, therefore, the percentages relate to the percentage that service was endorsed), an internship experience was endorsed by 7 graduates (53.8%), 4 graduates (30.8%) used recreational experiences, 2 graduates (15.4%) used social opportunities, and 1 graduate each (7.7% each) endorsed employment or vocational training, navigation of adult service providers, vocational or career assessments, and entitlement programs such as SSI, while 1 student reported not using any transition services or supports while a student. Seven participants skipped answering this question, which perhaps might indicate that the survey item was not clearly worded or perhaps another factor. The transition-related survey items were also the last section of the survey, which could indicate a fatigue effect with items near the end of the survey having lower response rates.

For Survey Item 27, 14 graduates responded (6 skipped this item) and indicated which, and every, transition-related services they received as a high school student. Half of the graduates (7 respondents) received career counseling, 6 graduates (42.9%) received college or university enrollment planning support, 5 graduates (35.7%) worked with someone on resume building and interview skills, and 2 graduates received guidance with understanding their IEP, their disability classification, and related psycho-educational evaluation results and report. No graduates endorsed receiving the following transition-related services: job coaching or shadowing, transportation or travel training, or information regarding their rights as a person with a disability and the law.

When asked who was the most helpful professional or person in their life with creating their transition plan in order to meet their post-secondary goals after high school, a majority of the graduates (64.7%) reported a parent or a family member, 3 graduates endorsed a related services provider such as a School Psychologist (17.3%) or a Speech and Language Pathologist (11.8%), and 1 graduate reported a teacher. Three participants skipped this question.

About half of the graduates (52.9%) indicated that they did not attend their IEP meetings as a junior or senior and that they are "just fine" with that, 5 graduates (29.4%) reported not attending their IEP meeting, but wishing they had, 2 graduates (11.8%) reported that they did attend but only one year, and only 1 graduate (5.9%) reported attending their IEP meetings both in their Junior and Senior years. When asked what their high school would have needed to do to gain their attendance, 10 graduates reported "nothing, I did not want to attend my meetings", 2 reported that they had attended their meetings, and 4 graduates commented: "I am not sure", "Asked me to go", "My parents attended my meetings in Junior and Senior Year of high school, I was not present", and "I was not told that I can attend my IEP meetings. I did refuse services in Junior/ Senior year". Again, some of the additional comments do not completely align with the intention of the specific survey item. That, coupled with the large number of skipped responses, indicated potential issues with the survey item, including its wording, its relevance to the graduates' high school experiences, and/ or its position in the survey.

For those who attended their IEP meetings, 4 graduates indicated that they actively helped their team to create their goals, 5 graduates reported not actively helping and that their parents created their goals, 1 reported their teachers created their goals, and 2 reported that their School Psychologist created their goals. Eight participants skipped this question.

**Table 5**Helpfulness of the state-approved, NPS special education program in preparing students with skill development, Survey Items 32-47

Answer Option	Excellent	Satisfactory	Unsatisfactory	Not Taught
Use of everyday math	52.6%	42.1%	0	0.05%
Read/ Understand				
written material	47.3%	42.1%	0.05%	0.05%
Filling out forms/				
write letters	57.8%	31.6%	0.05%	0.05%
Listen so to understand				
others	47.3%	42.1%	0.05%	0
Ability to verbally				
express self	47.3%	47.3%	0.05%	0
Ask meaningful				
questions	42.1%	52.6%	0	0.05%
Use computers for				
everyday use	68.4%	26.3%	0.05%	0
Cope with				
frustration	52.6%	31.6%	10.5%	0.05%
Understand Consequences	63.1%	26.3%	10.5%	0
Find solutions to				
problems	47.3%	47.3%	0.05%	0
Have working relationship	os			
with authority	68.4%	26.3%	0.05%	0
Share and work in				
groups	57.8%	36.8%	0.05%	0
Be a productive				
worker	57.8%	42.1%	0	0
Know what can				
so well	57.8%	36.8%	0	0.05%
Access community				
services	31.6%	21%	15.7%	31.6%

Note: N=19

When the graduates were asked to identify the helpfulness of the NPS program with preparing them to attain various skills and execute specific tasks, their responses ranged from "Not Taught" to "Excellent", with the "Satisfactory" and "Excellent" answer options the most

endorsed (Table 5). Almost all of the 19 graduates responding to these questions reported that the program was "Satisfactory" or "Excellent" with preparing them to: use everyday math, read and understand written materials, fill out forms and write letters, listen to and understand others, verbally express themselves, ask meaningful questions, use computers for everyday use, cope with everyday frustration, understand consequences, find solutions to their problems, have working relationships with authority figures, share and work in groups, be a productive worker, and know what can they can do well. The only area the graduates did not endorse as "Excellent" (32%) or "Satisfactory" (21%) was their access to community services, with an equal agreement that this was "Not taught".

**Table 6**Graduate experiences with the state-approved, NPS special education program, Survey Items 48-54

Question	Strongly Agree	Agree	Disagree	Strongly Disagree
My high school education was individualized				
to meet my needs.	26.3%	63.1%	10.5%	0
My teachers challenged me to do my best work.	57.8%	42.1%	0	0
My teachers seemed to care about me as an				
individual.	63.1%	36.8%	0	0
I was taught how the things I was learning apply				
to real life.	36.8%	52.6%	0.05%	0.05%
My school provided me with information about				
career options.	31.6%	31.6%	15.8%	21%
The information was useful in helping me to				
pursue my career or education goals.	31.6%	26.3%	15.8%	21%
Being a classified student helped me to pursue				
my career or education goals.	36.8%	26.3%	21%	10.5%

*Note:* N = 19

The graduates endorsed both participating in and having access to a wide range of experiences in the NPS program (Table 6). A majority of graduates "Agreed" (63%) that the

program was individualized to meet their needs and that they were taught how what they learned could be applied in their real, everyday life. All of the graduates "Agreed" that the teachers challenged them to do their best work and seemed to care about them as an individual. There were more varied responses from "Agree" to "Disagree" regarding: the provision of career information, help with pursuing career or education goals, and the helpfulness of having a disability classification with pursuing their career or education goals.

When asked about their engagement with their high school community and participation in extra-curricular activities while a student, 16 graduates responded with 10 graduates (62.5%) involved with school clubs, 31.3% participating in both athletic teams and the honor society (5 graduates each), and 8 graduates (50%) participating in volunteer work.

Half of the graduates reported that their school participation had "Somewhat" of an influence on the direction of their future goals, while 16.7% each reported it was "Greatly" influencing on their future goals and it had "No influence", and 2 graduates reported that they did not participate in any extra-curricular activities while a high school student.

**Table 7**Graduates satisfaction with their post-school experiences, Survey Items 57-64

Satisfaction Area	Very n	Somewhat n	Not at all n	Response Count N
Your work	12 (70.5%)	5 (29.4%)	0	17
Your education or training	15 (83.3%)	3 (16.6%)	0	18
Where you live	15 (83.3%)	2 (11%)	1 (.05%)	18
Your friends	13 (76.4%)	3 (17.6%)	1 (.05%)	17
Your family life	16 (88.8%)	2 (11%)	0	18
Your community life	13 (72.2%)	4 (22.2%)	1 (.05%)	18
Your free time	15 (83.3%)	3 (16.6%)	0	18
Your transportation	11 (61.1%)	6 (33.3%)	1 (.05%)	18

### Satisfaction & Quality of Life (QoL) Experiences

Survey items 57 through 64 asked the graduates about their satisfaction with their PSO experiences (Table 7). Overall, approximately 80% of the graduates reported a "Very" or "Somewhat" level of satisfaction in most areas. The only areas that a high level of satisfaction was not reported and the responses of "Somewhat" and "Not at all" received endorsement were the areas of: their work, friends, community life, and transportation. Graduates reported their family life to be the most satisfying part of their post-school experiences.

### Additional Questions or Feedback

Six graduates provided feedback or suggestions in response to the last survey item, which was an open-ended question asking graduates to provide any additional information that they felt might be helpful to the research study.

Course offerings. One graduate noted that he would like to have more input in course selection and others felt that their high school courses were too easy.

**Post-secondary experiences.** One graduate shared that he was a freelance artist who hoped to make a full-time career out of the opportunities to sell some of his work and to also perform at local events. Another graduate shared that they had opened up their own construction company after completing their 2-year degree at a state school.

The following post-school experience was also reported by one of the graduates:

"Before I left (the high school) my mother obtained a Personal Care

Assistant through Medicaid because I am attending a college hours away
from my home. He is a year older than me & lives in the next dorm. He
pushes me to do things I would never have attempted living at home &
attending local community college. He makes me find my classes and

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communicate with my professors. I go to parties now. He helps me make friends in my class so we can study together in the library. He helped me ask a girl out on a date. He made me go to Universal Studios in Florida even though I was hesitant to go on a plane. I had a great time. He's helping me with all the social stuff I need when I graduate and obtain employment."

Suggestions. One graduate indicated that the program was "very effective" for them stating, "It helped me learn how to think analytically and deal with others. If I was having trouble in certain classes there was always extra help available and the teachers would break down the material in an organized and logical order for me to understand the material." This same graduate had more insight to offer on other topics as well, noting that although he had felt prepared to get through his high school coursework, he was "unprepared to face college level material especially in an engineering field". That graduate also recommended that the high school program "improve upon their SAT preparation, provide an added emphasis on resume building, add support for completing college applications, add support for job placements, and provide an exploration of career opportunities".

Another graduate mentioned establishing long-term friendships with both former classmates and teachers and having "fond" memories in the social aspect. That same graduate felt that the high school did not prepare them for the "real world". This student went on to state,

"The program does not accommodate to the higher functioning students like myself. Now I understand that having higher functioning students diversified with the lower functional students is beneficial for the lower functioning students, but what about us higher learning students?

Why treat us the same when we all have different problems?"

That graduate felt unfairly segregated and labeled due to a difference in scheduling, free periods, and course availability as compared to the general education students in the private school setting. This graduate also expressed concern with the students not being able to take college level classes as a high school student. They stated that they taught themselves to "survive" in college, something they felt the school program should have taught. Additionally, this graduate strongly felt that if the school allowed students to integrate into the general education classes it would buffer their status and feelings of "being labeled". The graduate reported understanding the benefit to both the "higher" and "lower functioning" students taking classes together, learning from each other, and mutually benefitting from the interaction.

## **Chapter Summary**

The survey data was presented in this chapter through an item-by-item analysis that presented percentages, response rates, and graduates' specific responses summarized into both narratives and tables, where appropriate.

The next chapter includes a summary and discussion of those themes that became evident while examining the survey data. The graduates are also compared with their peers with disabilities at the national level in terms of their post-secondary education, employment, and independent living experiences.

### Chapter V

#### Discussion of the Results

#### Introduction

Chapter V reviews the study purposes, specific research questions, and the reasonable predictions based on the premise of the academic focus of the NPS program philosophy and mission. The survey findings are discussed within the framework of the five research questions and in consideration of any factors that might have an impact on the findings.

The graduates with disabilities are then compared to a national sample of their peers with disabilities regarding their post-secondary employment, education, and independent living experiences. The findings are then considered within the context of the established empirical support in the respective fields of secondary transition and post-secondary outcomes as previously highlighted in the review of the literature chapter.

The following discussion is setting and population-specific to this particular NPS special education program and the graduates with disabilities who participated in the present study from the school program. The findings cannot be applied to a broader population of students, or graduates, with disabilities attending special education programs, or to secondary transition practices and programming implemented in other special education settings. It is recommended to use professional judgment when making comparisons with the information gleaned from the present study to other populations or settings.

# Study Purpose

The two purposes of this exploratory study were to explore the use of, and the experiences of using, evidence-based, secondary transition-related practices in an NPS program, and to explore the PSO experiences of a 5-year cohort of graduates with either severe, or

multiple, disabilities who pursued a state-standard high school diploma and subsequent enrollment in post-secondary collegiate-level education programs.

The research study included the use of a Post-School Outcomes (PSO) Survey designed with both quantitative and qualitative methodology components. The quantitative data were collected to determine the percentages and numbers of those graduates exiting with a state-standard diploma and attending post-school education programs, maintaining employment, and pursuing independent living experiences as per the IDEIA, Part B I-14 annual requirements. The qualitative component of the survey gleaned more comprehensive information from the graduates to better understand both their secondary transition-related experiences while still a high school student, and their post-school outcomes.

#### **Research Questions**

- 1. What are the Post-School Outcomes of a 5-Year Cohort of Students with Disabilities after They Graduate from the State-Approved, NPS Special Education Program?
- 2. Are There Any Differences in Experience when Comparing the Graduates' Post-School Outcomes by Disability Classification?
- 3. What Aare the Graduates' Perceptions of their Secondary Transition-Related Experiences
  While Still a High School Student?
- 4. What Are The Graduates' Perceptions of their Life Satisfaction in Various Quality of Life (QoL) Areas?
- 5. Which Evidence-Based Secondary Transition-Related Practices Are Implemented in the State Approved, NPS Special Education Program?

It is reasonable to predict, based on the premise of the philosophy, mission, and curriculum structure of the NPS program, that a majority of graduates will have exited with the

state-standard diploma and enrolled a post-secondary education program, such as a 2- or 4- year collegiate academic program or a training program. Additionally, the presence of specific evidence-based secondary transition practices related to the various PSO areas of Education, Employment, Independent Living, Community Engagement, and the QoL areas, should support the graduates with disabilities subsequent experiences in those post-school areas.

#### Discussion

The findings are considered as they relate to each of the underlying research questions.

### Research Question 1

What are the post-school outcomes of a 5-year cohort of students with disabilities after they graduate from this state-approved, NPS special education program?

Post-Secondary Education. The NPS program maintains a mission and curriculum philosophy to support students to graduate with the state-standard diploma and transition to attend a post-secondary collegiate-level education program. Due to the college preparatory nature of the NPS program, success is defined as participation in any post-secondary education program, which includes enrollment in a 2- or 4- year education program or a training/ certification program lasting at least one academic year, both part- and full-time enrollment status, and an attendance at any time since they were graduated from high school.

A majority of the graduates (89 percent) enrolled either part- or full-time and in 2- or 4-Year college, university, or training programs lasting at least one academic year since graduating from high school. For those graduates not attending 2- or 4- year colleges or universities, about one third attended a vocational, technical, or trade school versus a short-term education or employment training program such as Job Corps, or participating in a religious or church-sponsored mission.

Graduates are pursuing a wide range of expertise, degrees, and licensures in a number of fields including: Criminal Justice, Business, Finance, Economics, Computer Science, Marine Engineering, Carpentry, Cost Guard Engine License, EMT certification, and HVAC technicians. Additionally, many graduates plan to complete their 4- year Bachelor's degree, and three graduates are prepared to pursue a Master's degree in their chosen field.

The graduates are maintaining successful college grade point averages (GPA's) as well, with 30 percent reporting to have a 3.0 to 3.4 GPA and half maintaining a 2.5 to 2.9 GPA. This indicates that the graduates post-school education is important to them, they are motivated, and implementing the work ethic necessary to achieve success. To support their academic success, a majority of graduates use college and university level supports and test accommodations for individuals with disabilities, such as extended time and separate location for examinations or tutoring services. The use of those services indicate that the graduates with disabilities exit the high school program with an understanding of their disability, their needs, how to use various supports and accommodations, and the necessary self-advocacy skills to seek out those services in their college or university setting.

The graduates who were not attending an academic or training program indicated their full-time employment position as the primary reason. Only one graduate was not attending a post-secondary education program, or maintaining employment, due to their reliance on social security disability services.

About one third of the graduates with disabilities were not currently experiencing any symptoms related to their disability or disorder that interfered with their academic success and they felt they had gained efficient strategies to compensate for any deficits and symptoms. The disability classification category reported to be the most interfering with their academic success

was a Speech or Language Impairment (SLI). There were two disability categories endorsed as presenting a current challenge to their academic success which were not initially reported as primary challenges while still a high school student, that of a Visual Impairment and an Emotional Disturbance (ED). The newly reported presence of these experiences does not indicate that they were or were not present for those graduates while they were still a high school student; they were just not identified as the primary disability interfering with the individuals' academic success while attending high school.

The analyses revealed that there were no items asking the graduates to identify, if any, specific high school courses or experiences they felt supported their path to post-secondary education. Understanding this component of their high school program further could highlight beneficial components of the high school curricula that not only helped the students to graduate with their state-standard diploma, but also supported their post-secondary course work. Some graduates felt that the NPS program did not provide them with enough preparation for the rigor of their college level course work and that they needed to pursue summer preparation courses to further support their transition to college. Exploring this area further might be beneficial with future PSO data collection events.

The preliminary findings suggest that graduates are pursuing post-secondary education programs at a high rate. They are using strategies they have learned to support their disability and strategically rely on their awareness of and understanding of their unique profiles to pursue a variety of programs, fields, and education experiences that fit their needs and interests.

**Employment.** About three fourths of the graduates had worked at some point since leaving high school and the rest of the graduates had never worked. About half of the workers

had worked 20 or more hours per week; while one-fourth had worked less than 20 hours per week, and the other graduates only worked during summers.

Most of the graduates were competitively employed, two worked with a family business, one was self-employed, and one worked in a supportive employment setting. About half of the graduates were earning more than the minimum wage, while a smaller group of graduates were earning exactly the minimum wage or below. About half of the working graduates have worked either half of the time or consistently since leaving high school.

The graduates who were not working indicated the reason to be primarily due to their full time attendance in an education program (with one individual relying on social security disability).

In terms of disability classification categories and the graduates' experience, all of the graduates with a SLD were working and not attending any academic programs, those with a SLI were split between working full-time and attending school full-time, with some of the graduates with a SLI only working during the summers. Those with an OHI classification reported to have worked either more or less than 20 hours per week in both competitive and supportive employment or with a family business, those who had not worked full-time indicated this to be due to their full-time student status. However, the graduates with an OHI classification endorsed responses to different questions that were in conflict with each other. Despite all of the graduates with an OHI indicating that they had worked, one indicated that they were currently working, and one graduate indicated that they were not working due to their student status. This conflict could be due to a poorly worded survey item or to the difference in work experiences across different school semesters. Collecting more anecdotal information would help to clarify the understanding of the graduates' experiences with their mixed school attendance and work

status and further support an understanding of their decisions to work and not work with different college semesters.

The graduates with an Autism classification also experienced a variety of employment.

Both graduates worked competitively and were paid more than the state minimum wage, but one worked more than 20 hours per week and one graduate worked less than one month total. The graduate with a TBI was a full-time student only.

Overall, the graduates with disabilities seemed to primarily choose between maintaining employment and attending an education program. However, a large number of graduates seemed to maintain participation in both. The preliminary findings don't allow for a complete understanding of the graduates' experience with maintaining both an enrollment in a post-secondary education program and a part- or full- time employment position. The survey item wording focused on one area or the other. The findings indicated that despite some graduates ongoing experiences with symptoms and difficulties as a result of their disability, they had the life skills needed to competitively work and the motivation to maintain those positions.

Some additional factors should be considered regarding the graduates' experiences with post-secondary education program enrollment versus maintaining employment. When deciding to attend collegiate-level programs or to pursue employment, g their financial resources and needs, regardless of their own interests, might have been the primary consideration.

Lastly, exploring the graduates' work experience while they were still a high school student could add to the understanding of the graduates' pursuit of post-secondary education and employment experiences. No survey items assessed the graduates' high school work experience.

Independent Living. A majority of the graduates continued to live at home with their parents, while 3 graduates lived in a college dormitory. When considering disability

classification categories, the graduates who lived away at college were those with a SLI (2) and Autism (1). Despite a majority of graduates living with their parents, only about half financially relied on their parents, caregivers, or partner, about a quarter completely relied on their own salary and wages for their living expenses and the remaining graduates relied partially on themselves and partially on their parents, partner, or on government subsidies.

When interpreting their independent living experiences, their delayed independence needs to be considered partly as a function of the time that has elapsed since leaving high school. Since the financial demands for an individual to independently support themselves are great, many young adults tend to live in their parents' home for a longer period of time to save money, which applies to both individuals with and without disabilities (Curtis et al., 2009). The graduates had exited high school up to 5 years prior to the study, which might not nearly reflect the time needed to establish the finances necessary to support independent living experiences. Collecting this PSO data over a longer period of time could provide additional information to understand the typical post-high school independent living experiences and trajectories of this population. Alternatively, the graduates with disabilities who did not participate in the research study survey might not have had the opportunity to do so if they had independently established themselves outside of their parents' residence and, consequently, did not receive the research study information at their most current mailing address. In the absence of a larger sample of graduates, it is difficult to know what factors impacted the graduates independent living experiences.

Although most of the graduates continued to live with their parents and several received financial support from their family, most were reliant on themselves, which indicates a high motivation to pursue an independent living status.

A comprehensive understanding of how the graduates felt about their independent living situation, and their potential plans for future independence, were not well understood since the survey did not include items assessing those perspectives. Gaining a greater understanding of the graduates' perspective on their current living status, financial independence, and their future plans also relates to their physical and material well-being and overall quality of life.

Community Engagement. The graduates' level of community involvement was the least supported PSO area both within the survey, with only 1 item assessing their experiences, and with the graduates' actual level of community engagement. The data analysis process revealed that the item included in the survey was not even particularly relevant to the level of overall community "engagement" but rather to the graduates' use of available community resources and other services available for individuals with disabilities.

About half of the graduates had not used any community support or services and the other half had used a variety of support since graduating from high school. Those included vocational rehabilitation services, support from Social Security, Medicaid, or the Department of Social Services.

The preliminary findings do not provide a comprehensive understanding of the graduates with disabilities involvement with community organizations, resource centers, religious communities, volunteer work, or other social and recreational venues. Including additional survey items to assess the graduates' involvement with these various social and recreational outlets could not only highlight those individuals connectedness to their communities, but could help to better understand their overall quality of life and satisfaction. When reviewing state-level PSO surveys, this area was continuously under-developed, or even unrepresented, and only included minimal survey items.

The PSO data collection process conducted as a component of the present study met all Indicator-14 criteria by gaining a percentage of the graduates with disabilities who were: (a) enrolled in higher education, (b) competitively employed, or (c) enrolled in other post-secondary education or training programs or some other employment, within one year of leaving the NPS program.

## **Research Question 2**

When comparing the graduates' post-school outcomes, are there any differences in experiences by their disability classification?

**Post-Secondary Education.** Graduates with a SLI, overall, were solely enrolled in post-school education programs versus those graduates with an OHI or SLD classification who were mostly working since graduating from high school.

When looking at the graduates with SLI further, they mostly attended 4-year colleges or universities, while those graduates with a SLD and OHI classification were evenly split between 2-year colleges and training programs, and 2- and 4- year colleges or universities, respectively. The most varied post-school education experiences were those graduates with an Autism classification who were varied across the experiences of attending 2- or 4- year academic programs, training programs, or never having been enrolled.

Employment. When comparing the graduates employment experiences by their disability category, all of those with an OHI and SLD had worked in some manner, and for more than 20 hours per week, since leaving high school, while a majority of the graduates with a SLI were the next largest group to have worked (70 percent), and those graduates with an Autism classification were the least likely to work. No differences by disability category were found in the range of their pay; all experienced employment positions with pay below to above the state

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minimum wage, or in their position, all maintained a range of work from supportive to competitive employment.

Independent Living. When considering the graduates independent living status, those with a SLI were the most likely to live in a dormitory followed by those with an Autism classification. The graduates' ability to financially support themselves based on their own salary and wages was evenly distributed across the disability classification categories, except for the graduate with a TBI classification who reported only attending school.

### **Research Question 3**

What are the graduates' perceptions of the relationship between their secondary transition-related experiences while still a student in high school and their current post-school experiences?

For successful secondary transition, the students' participation is a critical part of the process (Kohler, 1996). This participation can range from completing career inventories and other skill or interest assessments, to actively engaging in their IEP process, creating their individualized goals, exploring and using various resources and training experiences, and engaging in the college application process.

Many of the transition-related survey items had a low response rate compared to the earlier survey items, which is important to consider when addressing the limitations of the survey and making adjustments for future data collection endeavors. The lower response rate for the transition-related questions could potentially be a result of a variety of factors such as: poor survey item wording, item placement towards the end of the survey, or perhaps the graduates' choice to skip the transition-related questions could indicate a potential lack of knowledge of the

process, which potentially indicates a lack of involvement in that process while a high school student, or the inability to accurately and easily recall their high school experiences.

Secondary transition-related practices and services. Those graduates that responded, indicated an internship experience as the most used transition support or service. The graduates indicated the least used transition services as: recreational experiences, social opportunities, and, employment or vocational training, navigation of adult service providers, vocational or career assessments, and entitlement programs such as SSI.

Although every student is expected to have completed the NPS program senior internship experience as a graduation requirement, only half of the graduates considered this work experience to be a part of their transition process. Structured work and community experiences of apprenticeships and work-study programs have been identified as predictors of successful post-school employment experiences (Test et al., 2009b).

Graduates endorsed career counseling, college or university enrollment support, and resume building and interview practice as the transition-related services they received the most, although several graduates expressed concerns with not receiving enough of career-related transition support. Exploring, and increasing the awareness of, careers has been demonstrated to be an evidence-based practice that supports students' positive post-school education and employment experiences (Test et al., 2009b). The transition practices the graduates had no experiences with while a high school student were job coaching or shadowing, transportation or travel training, or receiving information regarding their rights as an individual with a disability under the law.

The role of a parent or family member in the transition process is an additional wellsupported evidence-based practice and a critical part of the students' process that can greatly parent or family member was indicated as the most helpful person when creating a transition plan that could help them to meet their post-secondary goals. A broad range of additional student support such as academic support or through related service providers or friends, have been identified to support the students' success with all of the PSO areas of education, employment, and independent living (Test et al., 2009b). The graduates' felt that the related services providers they worked with, both the School Psychologists and Speech Pathologists, were the second most helpful when creating the students' transition plans.

Participation in the IEP process. Overall, only one graduate had attended their IEP meetings in both their Junior and Senior years as part of their transition planning. A majority of the graduates did not recall attending their IEP meetings, but one third of the graduates wished that they had. Generally, graduates indicated that they would have attended if they had been "told" or "asked" to go, and those that did not wish to go were just fine letting their parents or other related service providers take care of their educational needs.

When considering both the students' self-determination and self-advocacy abilities, two sets of skills whose effectiveness are highly supported in the evidence-based secondary transition research literature, participation in IEP planning is crucial to the students' post-school success (Test et al., 2009b). The graduates with disabilities low IEP meeting attendance rate, their lack of awareness that their role was important in that process, and most importantly, their lack of interest in participating in their transition process, needs to be a priority consideration for future data collection procedures in order to better understand what is impacting the lack of participation. Understanding those factors will also help with the implementation of secondary transition practices and service delivery with the current students so that their participation and

determination can be facilitated. It is also important to consider how the graduates accurate recall and self-report of their experiences could have been impacted by the amount of time that had elapsed since they had been in that process.

Some of the graduates' responses regarding their participation in the IEP process were mixed across similar survey items. Despite only three graduates initially indicating that they had attended any of their IEP meetings, 12 graduates reported that they had participated in either their meetings or goal setting when responding to later survey items. Only four of those who had attended actively worked with their team to create their IEP goals and transition plans, and the remaining 12 indicated that their parents, teachers, or the school psychologists created their IEP goals. The mixed responses to the survey items makes it difficult to understand the graduates' actual participation in their transition planning and IEP process when they were a high school student.

To account for the mixed nature of the graduates' responses and experiences, it is important to consider that it might not be necessary for the high school student to attend their IEP meeting in order to create their post-secondary goals. The goal-setting might be an inclusive component of other related service meetings or transition practices within the classroom or school-based counseling meetings. This type of planning would indicate students being a "part of the IEP process" without having actually attended their meeting. For future data collection procedures, the survey item assessing this area should be better worded to allow for specific identification of their participation in the IEP process by identifying which activities they had participated in and in what context within their school day.

A majority of the graduates did not specifically recall their post-secondary IEP goals, while half of the graduates endorsed their current employment, training experience, academic

setting, and/ or living arrangement as one of their identified IEP post-secondary goals. This finding suggests that those graduates who participated in their planning and goal setting, might have potentially received the specific and necessary support to achieve that post-secondary goal.

Graduate perspectives of the NPS program. Developing a variety of life skills such as social skills, self-determination and decision-making skills, and self-care skills, have been identified as predictors of more successful PSO experiences in all of the areas (Test et al., 2009b). Developing additional skills such as leisure skills and flexibility with using learning strategies, while not found to have evidence-based support as a specific predictor, are a component of the Taxonomy for Transition Programming and considered evidence-based transition practices for transition planing (Kohler, 1996).

The graduates identified the NPS program to be helpful with their attainment of a variety of skills and abilities. Almost all of the graduates felt the school program was either "Satisfactory" or "Excellent" in preparing them to: use everyday math, read and understand written materials, fill out forms and write letters, listen to and understand others, verbally express themselves, ask meaningful questions, cope with everyday frustration, understand consequences, find solutions to their problems, share and work in groups, be a productive worker, and know what can they can do well, with almost all of the graduates endorsing an "Excellent" preparation in their ability to use computers for everyday use and have working relationships with authority figures. An equal amount of graduates reported that the school program did not prepare with the information or abilities to access community services.

The graduates did not feel that the NPS school program fostered their engagement with the community as well as it did with other areas like their social skills and interactions, advocacy skills, managing their emotions and needs, and developing their self-expression. Including

additional survey items assessing the graduates' community engagement on future data collection measures could lead to a better understanding of the graduates' community involvement and the facilitation and development of those skills in the NPS program.

The graduates reported mostly favorable experiences with the program. They felt the school program was individualized to meet their needs, challenged them to do their best work, taught them how to apply what they were learning to real life situations, and that their teachers demonstrated real care for them. Where the graduates were not as agreeable was in the area of career preparation, which is a well-documented predictor for both post-school education and employment (Test et al., 2009b). About half of the graduates' endorsed having access to information related to career options and to other information helpful with pursuing their career or educational goal.

The NPS program might focus more on implementing those transition practices and services that support the development of academic skills rather than an equal focus on the students' career exploration, post-school employment options, and other post-school areas as a result of the school mission. Although career awareness is a component of pursuing a collegiate degree, since the ultimate goal is to secure an employment position in a desirable field, the primary focus is on achieving the high school grades and completing the criteria needed for post-school collegiate program enrollment.

About two thirds of the graduates felt that their disability classification was helpful and the other third felt it was not helpful with pursuing their career or education goals.

Although their community engagement as a graduate was not strong, the graduates' reported that their participation in high school-related extra-curricular activities strongly influenced their future goals. A majority of the graduates reported involvement with a range of

activities such as the honor society, an athletic team, or a school club. While a high school student, feeling connected to the school and accepted by the community, can lead to higher school engagement and involvement. Establishing a positive school connection is a pro-social experience for secondary students that can promote their overall quality of life, school achievement, and feelings of safety and has been shown to potentially deter the risk of substance use and engagement with other future risk-taking behaviors (Bond et al, 2007). The graduates' extra-curricular involvement while a high school student is a positive attribute of their motivation and of the ability of the NPS program and high school setting to establish that connection; this findings suggests that bridging the pro-social high school community experiences to their post-school community experiences as part of the transition process would add support to their overall post-school success.

Thirteen of the 16 in-school secondary transition practices identified as a predictor of positive and specific PSO in the literature were included in the study survey. Of those 13 predictive practices, the graduates with disabilities endorsed 9 practices as present in the NPS program. The 9 practices endorsed in the NPS program were: (1) the development of self-determination and advocacy and social skills, (2) career awareness, (3) social skill development (4) community experiences (through their internship experience), (5) academic, social, family, and other general support, (6) parent involvement, (7) exit exam requirements for their state-standard high school diploma, (8) choice in program of study, and (9) transition programming. Additionally, several other evidence-based transition practices and experiences were endorsed by the graduates that are included in the Taxonomy for Transition Programming framework (see Appendix F for the full list of endorsed transition EBP's). It is important to note, the level of implementation and development are not known regarding these practices. Their presence as

indicated by the graduates is just that, a presence. Some of these practices were endorsed by less than half of the graduate respondents, therefore, interpreting their level of presence should be considered within that frame.

# **Research Question 4**

What are the graduates' perceptions of their life satisfaction in the various Quality of Life (QoL) areas?

The QoL indicators include three broad areas of: (a) physical and material well-being, (b) performance of adult roles, and (c) personal fulfillment and satisfaction, and the sub-areas within those general areas make up the 14 areas (Curtis, et al., 2009). Generally, the graduates were satisfied in each of the QoL areas assessed by the survey measure. Table 8 displays the information related to the 14 QoL areas in terms of the inclusion of each area in the PSO survey and the subsequent number of graduates who indicated that area to be one that they felt "Very" satisfied.

**Table 8**The Quality Of Life (QoL) areas assessed & graduates' satisfaction, Survey Items 57-64

QoL Area	Survey	Very Satisfied N= 18
Physical and material well-being		
a. Physical and Mental Health	-	
b. Food, Clothing, Lodging	X *Lodging only	15
c. Safety from Harm	-	
d. Financial Security	-	
2. Performance of adult roles		
a. Mobility, Community Access	X	11
b. Career & Employment	X	12
c. Leisure & Recreation	X	15
d. Relationships, Social Networks		
(& Family)	X	13 (16)
e. Educational Attainment	X	15

#### Table 8 Continued

f. Spiritual Fulfillment	-		
g. Citizenship	X	17	
h. Social Responsibility	<u>.</u>		
3. Personal fulfillment and satisfaction			
a. Satisfaction	-		
b. General Well-Being			

*Note.* An \* indicates only one area assessed in a sub-category. () Indicates the inclusion of an area in this survey not included in the QoL framework.

Physical and material well-being. Due to a lack of representation of survey items, the graduates were not able to specifically indicate their level of satisfaction with their physical and mental health, their access to food and clothing, financial security, or safety from harm. Almost all of the graduates are satisfied with their current living arrangements.

Performance of adult roles. Although many graduates were "Very" or "Somewhat" satisfied with their mobility/ community access (titled "transportation" in the survey item), their career and employment or work, and their relationships and social networks (their "friends"), were areas not as satisfactory as all of the other areas. However, their family relationships were the most satisfying area overall, which was not a specific question included as part of the QoL survey items, but was an area assessed, and already discussed, as part of the present study. Most of the graduates were satisfied with their leisure and recreation activities, or their "free time", and with their educational attainment. There were no survey items specifically assessing their satisfaction with their spiritual fulfillment, citizenship, and experience of social responsibility.

**Personal fulfillment.** Specific survey items were also not included that assessed the graduates' overall satisfaction and general feelings of personal fulfillment regarding their decision making and other components of their general well-being.

# Research Question 5

Which evidence-based secondary transition-related practices are being implemented in this state approved, NPS special education program?

To fully address this research question, two discussions are required. The relevant findings from the PSO Survey data are discussed as they relate to the graduates' experiences with secondary transition-related practices. Then, Chapter VI continues the discussion with a narrative of the information gleaned from a transition "Self-Assessment" rating scale completed by three school professionals who were responsible for implementing secondary transition practices in the NPS program. The Taxonomy self-assessment required the professionals to consider each of the evidence-based practices and activities included in the Taxonomy for Transition Programming model (see Appendix A) and then rate the current level of implementation for that practice as they experience it in the school setting.

Evidence-based practices. Typically, educating students with disabilities in their least restrictive environment provides them with access to a curriculum that will allow them to pursue a state-standard diploma (Zhang & IDEIA, 2004). Eighty-five percent of the graduates with disabilities received the state-standard diploma when they were graduated from the NPS program and the remaining graduates exited with the alternative diploma. The preliminary findings support the academic focus and college preparatory mission of the NPS program to support students as they pursue their post-secondary education-focused plans. Additionally, these findings indicate that the NPS program philosophy embodies a clearly articulated academic mission, program values, principles, and transition-related policies and then implements focused practices that are aligned with that mission. Although the NPS program structure might not comprehensively focus on implementing transition practices to support students post-school

success in all of the areas, the inherent program philosophy, and the subsequent implementation of academic-focused transition practices, are aligned with evidence-based practices that are shown to both predict and support students' post-secondary education experiences. Without having the intention, the structure and philosophy of the NPS program, and the subsequent transition services and activities implemented in the setting, include several practices that predict not just success with post-school education, but also with employment and independent living experiences (Test et al., 2009b; Appendix A).

The graduates' most endorsed the senior internship experience to be the most used transition support and service. These types of work, volunteer, internship, or apprentice-like experiences support students' transition and pursuit of employment (Kohler, 1996; Test et al., 2009b).

Although not specifically an evidence-based, transition-related practice within the Taxonomy, the graduates' participation with school-related extra-curricular activities while still a student was highly present. We know from other areas of applied education research, that school connectedness is a pro-social experience that supports the students overall positive outlook on school and their ultimate motivation to be successful (Elias et al., 1997; Bond et al., 2007).

# **National Comparison**

The specificity of the study design and the survey measure used for the present study prevent any direct comparisons or correlations of the findings with other, albeit similar, PSO data findings. However, a general comparison with their peers with disabilities PSO experiences can be made through a review of the available national PSO data.

### **NLTS and NLTS2**

Several important considerations need to be made when comparing the graduates' postschool outcomes with their peers at the national level. Both of the NLTS and NLTS2 data
collection efforts include extensive, longitudinal studies and ongoing analyses. Although not all
of the data and analyses are available, an extensive amount of the findings and comparisons are
accessible which make an exhaustive, all-encompassing comparison of all of the PSO domains
and each disability classification category an onerous and resource demanding effort, which was
not possible for the current study efforts.

However, a brief review of the available literature proved useful with identifying several comparable experiences of the graduates with disabilities and their peers who participated in the national studies.

Post-Secondary Education. Achieving any amount of post-secondary education has repeatedly been shown to positively correlate with a higher earned income and to lead to positive experiences with other post-school areas of employment, independent living, and community engagement (Test et al., 2009b). The academic focus of the NPS program assumes that the graduates with disabilities would, generally, outperform their national peers with post-school education attendance since this small, concentrated group of graduates each year is intensively supported to pursue their post-school education goals. Thus, almost three quarters of the graduates attended a 2- or 4- year college program at some point since graduating from high school, which are a much higher percentage than the 19 to 20 percent of their peers with disabilities who attended post-secondary education programs (Sanford et al., 2011).

In terms of differences by disability category from their peers, the graduates with a SLI in the present study were the most likely to have enrolled in any post-secondary education, while their peers with a SLD in the national sample were more likely to attend (although, nationally the highest rate of attendance were those youth with disabilities with a hearing impairment, a disability classification category not included in the current study) (Newman et al., 2010).

Post-Secondary Employment. Since post-school employment naturally supports the graduate with a disability with achieving a financial independence and becoming self-reliant, exploring, and potentially securing, employment positions is a critical part of the transition process. Seventy percent of the graduates had worked at some point since graduating from high school, compared to 55 to 62 percent of the national youth with disabilities who had a paid job a year or more after high school (Test et al., 2009b; Newman et al., 2010). By disability classification category, the graduates performed similar to their peers in the national sample as well, with 71 percent of graduates with a SLI working at some point compared to 68 percent of their peers with a SLI, 100 percent of graduates with a SLD had worked compared to 79 percent of their peers with a SLD in the national sample who were employed at the time of the NLTS2 study, and 45 percent of both the graduates with Autism and their peers in the national study had worked at some point since exiting high school (Sanford et al., 2011).

These comparisons suggest that the graduates with disabilities from the NPS program are experiencing at least the same and possibly even more positive rates of post-secondary employment than their peers with disabilities who participated in the national study.

Independent Living. The ability to live independently and to successfully engage with the community has also been identified as a crucial experience for individuals, both with and without disabilities, to experience a positive quality of life (Halpern 1985 as cited in Newman et al., 2010). Again, the graduates with disabilities post-school living status was similar to their peers with 85 percent still living at home with their parents up to 5 years after high school (with

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the remaining graduates living in college dormitories) as compared to the national experience of 72 percent of youth continuing to live at home (Test et al., 2009b). These populations post-school living status is also similar to the 75 percent of their peers without disabilities who continue to live with their parents up to two years post high school (Wagner et al., 2006).

Community Engagement. The individual's ability to live and successfully integrate into their community is also considered a significant contributor to their overall quality of life (Halpern 1985 as cited in Newman et al., 2010). One important aspect of this community involvement is the establishment of an adequate social and interpersonal network. Engaging in community activities can also provide the individual with opportunities to meet people with similar interests, develop new skills, and experience the satisfaction of contributing to their community (Sanford et al., 2011). Regarding their post-school community engagement, 80 percent of youth with disabilities in the national sample reported spending time with friends or family at least once a week. While this rate of scheduled time with friends and family was not assessed in the present study, the graduates with disabilities did report largely being satisfied with their friends and most satisfied with their family networks.

It is difficult to speculate why any differences or similarities might occur when comparing the graduates with disabilities to their peers with disabilities assessed in the national data collection efforts. Differences can always be assumed to be a function of a variety of factors including the differences in the inherent nature of the diagnosed disability, the protective factors and resources available to each student outside of the school setting, such as family support, and many other factors. What is important to recognize, is that in the few areas of comparison, the graduates with disabilities from the NPS program have similar, if not more positive, post-school experiences as compared to their peers with disabilities in the United States.

## Chapter Summary

This chapter presented the themes from the study findings. The findings were reviewed within the framework of the study research questions and within the theoretical frameworks of the evidence-based secondary transition-related practices and post-secondary outcomes.

Additionally, the graduates with disabilities post-school experiences were compared to their peers with disabilities who participated in the NLTS2 PSO study.

Twenty graduates' with disabilities participated in the study by completing the online PSO Survey. Eighty-Five percent of the graduates received the state-standard diploma and the remaining fifteen percent received an alternative diploma when they were graduated from the NPS program. The majority of graduates, 89 percent, attended post-secondary education programs at some point since leaving high school and those who had not attended an education program were employed. Seventy percent of the graduates have worked at some point since graduating from the NPS program and those not working were enrolled in a full-time education program. About half of the graduates earned at least the minimum wage or higher, worked over 20 hours per week, and in a competitive employment position. Eight-five percent of the graduates continued to live at home with their parents while three graduates lived away in a college dormitory. Despite living in their parents' home, 30 percent of graduates were supporting themselves and 20 percent were attempting to do so through partial reliance on themselves and partial reliance on their parents. About half of the graduates used community resources for support at some point since graduating from high school. Despite a high level of participation in school-related extracurricular activities by many of the graduates while still a high school student, their community engagement and involvement as an adult remains unknown. The PSO Survey met the full criterion of the I-14 mandate.

Generally, the graduates were satisfied with their overall quality of life and endorsed the areas of family life, leisure and activity, and their community life as very satisfying. When compared with their peers who participated in the NLTS2 national study, the graduates with disabilities were outperforming their peers with their enrollment in post-secondary education, which can be interpreted as a function of the academic mission and philosophy of the NPS program, the graduates rate of employment (70%) was slightly higher than their peers in the national study (55 to 62 percent), their living status remained slightly higher but roughly the same (85 percent) as both their peers with disabilities (72 percent) and their peers without disabilities (75 percent), and their community engagement was not comparable due to the lack of representation on the current study survey measure. However, the graduates indicated a high level of involvement with high school extra-curricular activities which indicates their potential involvement to do the same as an adult in their community.

Thirteen of the 16 in-school secondary transition practices identified as a predictor of positive and specific PSO in the literature were included in the study survey. Of those 13 predictive practices, the graduates with disabilities endorsed 9 practices as present in the NPS program.

The graduates identified several practices they felt should be present or stronger in the NPS program including additional high school course work to prepare for the rigor of college-level coursework, more opportunities for inclusion in the general education setting, greater provision of career awareness and exploration, support for college entrance exam preparation, and improved post-secondary education program enrollment application support and guidance.

Although the NPS program primarily focuses on providing transition practices to support the students as they pursue post-school enrollment in collegiate education programs, without

intending to, the = structure and philosophy of the NPS program provides the implementation of practices that also support the students to achieve positive post-school employment and independent living experiences. The program practices of supporting students to achieve the state-standard diploma and the focus on various transition activities in general, help to expose students to a variety of information and develop a variety of skill sets that support their post-school outcomes in those three areas, not just education (Test et al., 2009b; Appendix A).

Fully understanding the implementation of the evidence-based practices in this setting are important for the school administrators to improve upon their transition efforts. To supplement the discussion of the survey findings, Chapter VI summarizes the results of a Taxonomy self-assessment rating scale three school professionals who work in the NPS program completed identifying the evidence-based secondary transition practices being implemented in the school setting.

## Chapter VI

#### Self-Assessment

#### Introduction

This chapter summarizes the results of a self-assessment rating scale developed on the basis of the Taxonomy for Transition Programming theoretical model. The Taxonomy is a model for schools to plan, organize, and evaluate the secondary transition education curriculum, services, evidence-based practices (EBP's), and programs (Kohler, 1996). Three school professionals completed the self-assessment.

Any similarities with the school professionals rating of the EBP's and with the graduates' reported transition experiences are discussed. The presence of EBP's which align with the NPS program philosophy and mission are also noted.

#### **Results and Discussion**

The comprehensive list of EBP's included in the Taxonomy, which include approximately 150 transition practices and activities, provide support for each of the 5 transition areas of Student-Focused Planning, Student Development, Interagency Collaboration, Family Involvement, and Program Structure (Kohler, 1996). This list of EBP's was adapted into an online rating scale which requested several school professionals who are responsible for implementing the secondary transition practices in the NPS program to consider each transition EBP and, from their perspective, rate the level of development and implementation of that transition practice/ activity in the school setting.

The Director of Special Education and four School Psychologists were asked to anonymously complete the Taxonomy self-assessment rating scale. Three school professionals participated in the self-assessment.

There are several factors to consider when interpreting and discussing the self-assessment information. Identifying the level of implementation of the EBP's adds to the discussion of the present study findings by providing an insight into the current state of affairs of the secondary transition EBP's in the NPS program. It is important to recognize that the sample of three school professionals who completed the self-assessment do not fully represent the NPS program faculty and staff who are charged with implementing secondary transition services. The self-assessment information provides a glimpse of the EBP's, with the purpose of highlighting the transition areas largely represented and supported by practices and those areas with minimal or no practices. This brief assessment cannot be considered a complete needs assessment of the current state of affairs regarding the secondary transition practices implemented in the NPS program.

The information gained form the school professionals rating s represent a preliminary, and partial, assessment of the secondary transition EBP's that are, in their perspective, "Fully Developed and Implemented", "Partially Developed and Partially Implemented", "In Development, but not yet Implemented", and "Not Developed or Implemented" in the NPS program.

To analyze the self-assessment data, the response choices were weighted and those EBP's rated as (a) "Fully Developed and Implemented" or "Partially Developed and Implemented" and (b) were similarly rated by the school professionals were identified as present in the NPS program. Those EBP's that the school professionals similarly rated as "In-Development" or "Not Developed or Implemented" were identified as practices not present in the NPS program.

# **Self-Assessment Findings**

The school professionals' were varied with their perspective of the presence of transition practices clustered into different transition areas. There were some practices the school professionals agreed were both fully developed and implemented, or not present at all. While there were other practices the school professionals disagreed in their rating of the practices implementation in the NPS program.

The Principal Investigators' (PI) of the present study is employed as a School Psychologist in the NPS program setting; thus the PI is one of the three school professionals who had completed the self-assessment. The summary of the self-assessment findings include, when appropriate, additional information based upon the PIs' knowledge of the NPS program to support the self-assessment information.

Taxonomy Area 1: Student-Focused Planning. The school professionals felt that many student-focused planning practices were being developed while being partially implemented.

IEP Development. No transition practices were identified as fully present, however, the school professionals indicated that specifying post-secondary education or training goals and objectives on the students' IEP and implementing an education program that corresponds to those specific goals were fairly present practices. However, the graduates recalled not being highly involved with their IEP process or goal-setting, and that their parents and related service providers such as School Psychologists and Speech and Language Pathologists, often created their goals. Identifying specific options for each outcome area as they related to the students' choices were not a highly present practice when creating the post-secondary goals.

The academic focus of the school program indicates the presence of an education curriculum that supported the students' PSO education goals.

Student Participation. The school professionals rated a strong teaming practice with the student, family, and the school being present for transition meetings, the appropriate time allotted to conduct meetings, and the necessary time available to prepare for meetings. The school professionals were varied regarding the rate of referrals being made to any adult service providers prior to the students exit, with one indicating it was partially present, another rating it to be in development, and another rating it as not present. Additionally, the use of transition assessment information as a basis for planning was a developing and partially implemented area.

Planning Strategies. Both of the practices of implementing IEP training for students and providing them with the opportunity to evaluate the process as part of a student-centered planning experience, were only partially present. The school professionals indicated that, when they were present, the students' self-determination, or decision-making skills, and advocacy skills were facilitated as part of this process. All of the professionals agreed that providing career counseling services were a developing practice. Interestingly, the area of career counseling was one identified to be missing for some graduates and it seems as though the high school program has taken steps towards supporting this area. Documenting students' transition needs, and preferences prompted a variety of responses from the professionals, with one school professional each rating this practice as not present, in development, and partially implemented. Without assessing and documenting the students' strengths, needs, and interests, it is challenging to involve them in the transition planning process

Taxonomy Area 2: Student Development. This area includes skills instruction to develop life and employment skills, career and vocational curricula, the provision of related services support, use of assessment, and the students' exposure to structured work experiences.

Life Skills Instruction. Self-determination skills training, such as goal setting and decision making, self-advocacy skills, and learning strategies skills training were indicated as close to full implementation in the school setting. The graduates also agreed with this and indicated the presence of support with understanding their strengths and weaknesses and learning profile, despite their lack of involvement with their transition process. Students' social skill development were partially developed and implemented in the NPS program. The areas of leisure and independent living skills were not present or had a low level of implementation.

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Employment Skills Instruction. Generally, the employment skills cluster were indicated as one with no practices being implemented. Although the professionals reported the areas of work-related skills training, job seeking skills, and occupation-specific vocational skills as in development. The academic focus of the high school curriculum dictates a lack of transition practices in this area.

Career and Vocational Curricula. All of the professionals agreed that the technology preparation curriculum was partially implemented and a career education curriculum was close to the same. The broader school setting had integrated a one-to-one computing teaching model into the academic curriculum. As a result, the graduates similarly endorsed the NPS programs helpfulness with developing their technology skills and abilities.

Support Services. The use of related services to identify and develop skills and promote their disability awareness and understanding of using accommodations were endorsed as 100 percent implemented, with the identification and development of natural supports almost equally implemented. The focus on test accommodations was also reflected with the graduates who had indicated an understanding of their needs and a pursuit of accommodations at the collegiate level.

Assessment. The use of career interest assessments was the most frequently used transition assessment and planning practice (although, all of the professionals reported this area as partially implemented). The most implemented assessments were academic, cognitive, and adaptive behavior assessments, and second were vocational assessments, however, all of those practices were considered partially developed and implemented. Since this is the foundation of the students' participation, involvement, and goal setting, developing this area could be a critical component to support facilitating implementation and development in other areas.

Structured Work Experience. Although no paid work experiences or job placement services were rated as present, the completion of a service-oriented internship as part of the graduation requirement seemed to provide the basis for professionals to partially endorse the presence of apprenticeships and work study programs. The potential variety in the respondents' answers might be due to the unsureness of which category to endorse for the internship experience. The graduates indicated this experience to be one of the most used practices as part of their transition planning.

Taxonomy Area 3: Interagency Collaboration. Interagency collaboration regarding service delivery and as a framework for communication in the setting, were both areas reported to be largely underrepresented by developed transition practices.

Collaborative Service Delivery. Overall, the professionals did not endorse many practices in this cluster as present in the NPS program. Several partially implemented practices included: coordinated requests for information from parents, collaborative development and use of assessment data, shared delivery of transition-related services, consultation between special, regular, and vocational educators, and collaboration between post-secondary education institutions and the school district. The least endorsed practices were collaborative funding and

staffing of transition services, since no specific individuals were reported as in a transition role and it is shared by all of the related service providers. Structured meeting time for related service providers to collaborate and discuss their practices to unify their services was only partially developed and implemented. The ability to collaborate program planning and development and reduce system barriers to collaboration, were also practices either partially present or not present. Promoting this area could help to establish and consistently incorporate a shared system for transition services delivery.

Collaborative Framework. The roles of service providers seemed to be fairly articulated in the transition process and there were partially established methods to communicate among service providers. So despite the absence of structured time and processes to collaborate on practices and service delivery, the professionals reported understanding their role in the process and having established a way to discuss their practices amongst each other. Although the use of a single case management system and designated transition contact person for all service providers was in-development. Establishing a communication system and a point person for supporting the providers in their transition services delivery could help the professionals to provide collaborate more consistently to support skill development and student involvement.

Taxonomy Area 4: Family Involvement. This transition area encompasses practices that support the family involvement, empowerment, and training. The families were reported to participate in the evaluation of the student's program often and were included in the decision making process at the IEP meetings, with a lesser participation in service delivery and student assessment. Participating in the program policy development was the least occurring practice.

*Family Empowerment.* Minimal-to-no practices were indicated as present to support the development of family empowerment. The family was often presented with a range of choices

and sometimes included in pre-IEP planning activities. A structured process to identify the needs of the family was not present, although it was in-development. There were no established parent-teacher organizations for the families for a student with disabilities; however, there were regional organizations and networks supporting the families and parent-teacher organizations for the students, overall, in the high school setting.

Family Training. Parent training addressing their legal rights and self-advocacy and training on the transition-related processes were indicated as both partially developed and partially implemented. The least implemented practices included training on how to use the students' natural supports and facilitating the families own empowerment. Providing training to instruct parents on how to develop self-determination, advocacy, and disability awareness skills could support the students' skill development further.

Taxonomy Area 5: Program Structure. This area includes practices and activities related to the program philosophy, program evaluation, strategic planning, policy, human resource development, and resource allocation as it relates to secondary transition-related practices and programs in the school setting.

Program Philosophy. The presence of a strong, consistent, and well-articulated philosophy was indicated with students having access to all educational options, a program planning focused on an outcome-based model, and incorporation of cultural and ethnic sensitivity in the program. The outcome-based planning was aligned with the academic focus and college preparatory nature of the NPS program. Incorporating a longitudinal approach to transition was indicated as a developing practice.

**Program Evaluation.** For the most part, this area was in development or, generally, lacking a presence. Partially implemented practices included a data based management system

and specific evaluation of student outcomes. Using data for program improvement, incorporating ongoing program evaluation, establishing a student-family role in program evaluation, conducting a secondary level education services needs assessments, and post school services or programs needs assessment were all practices reported to be in-development.

This indicated that the NPS program is not implementing any type of needs assessments or program evaluations, but the professionals are thinking about it. Incoroporating the present study findings into the current transition practices could present the professionals in the NPS program with a challenge since they are not used to working with this type of information.

Developing a transition model and program, that includes a method for implementation and ongoing program evaluation process that could be followed by different professionals in the NPS program could help the program to continue to engage in an ongoing assessment of their services and provisions and increase their overall accountability. Conducting a thorough needs assessment with the faculty, staff, and active students could identify those areas that need additional support and practices with the provision of transition services. The needs assessment and program evaluation processes could add to the school professionals' ability to make databased decisions, determine their effectiveness with service delivery, and identify additional areas for improvement.

Strategic Planning. A majority of the professionals reported not having knowledge of practices implemented in this area which include community-, regional-, and state-level strategic planning.

**Program Policy.** The schools program values, principles, and mission were clearly articulated and integrating the transition-related planning and services as components of the curricula were reported as in-development. The transition planning program structure and

process was somewhat articulated and implemented, and the existence of specific and consistent transition-related policies and procedures between agencies was indicated as developing and partially implemented. Clearly articulating the structure, process, roles, responsibilities and procedures for transition-related programming could support collaboration among school professionals and improve the consistency of the practices that are implemented.

Human Resource Development. All of the professionals indicated that the availability of transition resource materials to personnel, families, and employers were partially present, staff were qualified but not specifically assigned, and there was mostly sufficient allocation of personnel. Pre-service training on transition practices, transition-related technical assistance, an established set of transition competencies for personnel, and ongoing transition-related staff training were mostly developing practices and not implemented. The absence of professional development creates a challenge with implementing secondary transition practices in a consistent and cohesive manner and could interfere with establishing a clearly articulated transition program. Since program-wide professional development and training can be expensive and time consuming, identifying a school professional to become a qualified transition specialist through the regional training center as outlined by professional organizations such as the CEC DCDT transition-related competencies, will provide the opportunity for the presence and support of a transition point person, the necessary technical assistance to implement services, and feedback on the implementation.

**Resource Allocation.** This area was largely indicated as an unknown area.

Generally, the self-assessment provided a preliminary identification of those practices implemented most often and not at all, however, the school professionals ratings do not provide any information regarding when and where those practices were being implemented, such as

during academic classes, related services, or other scheduled time. Overall, the details of the present students' and faculty participation in and experience with the actual transition process remain unknown. Additionally, insight was not gained regarding whether those practices indicated as not present or having a minimal presence were even considered to be a need for the NPS program, professionals, and the students.

The information gained from the self-assessment and from the graduates revealed that the NPS program was satisfying almost all of the seven criteria as outlined in the IDEIA (2004) Plan B Indicator-13 mandate. Both of the graduates and school professionals reported that they created measurable goals related to education, although not necessarily related to employment or independent skills, were annually updated, and the courses of study were available to reasonably meet those education goals. The school professionals indicated that the students were invited each year to their IEP meeting starting at the age of 16. The graduates and school professionals reported a general lack of using transition needs assessment to support developing the students' post-secondary goals and transition needs for the IEP planning aside from the use of career inventories.

Largely the information from the self-assessment supports the academic focus and college preparatory mission of the NPS program, since both the graduates and school professionals indicated the presence of transition-related supports focused on promoting academic related skills, needs, and post-school planning, which has also led to high rates of the graduates post-school education program enrollment.

### Chapter Summary

This chapter provided a general summary of the Taxonomy self-assessment rating scale which was completed by 3 school professionals who were responsible for implementing

secondary transition-related practices in the state-approved, NPS special education school setting. The school professionals rated the level of implementation of various evidence-based secondary transition practices in the school setting. Those practices that were frequently or not frequently incorporated in the secondary transition planning process were noted, as well as, those practices that were reported as developing or partially implemented practices. The graduates and school professionals collectively indicated that the NPS program was generally meeting a majority of the seven I-13 criteria aside from developed and consistent use of transition needs assessments during transition planning.

Chapter VII presents a summary of the PSO Survey findings and self-assessment information. The limitations of the PSO Survey and self-assessment are also discussed. Implications of these findings for the school professionals to guide the planning and implementation of the secondary transition-related practices and programming in the NPS program and the PSO data collection procedures are discussed. The implications that this study has on the fields of secondary transition, post-secondary outcomes, and for the practice of and training in the field of School Psychology are also considered.

## Chapter VII

# Summary, Limitations, and Implications for Practice

### Introduction

First, the results are summarized as they relate to the professional literature. Then the limitations of the present study, regarding the design, statistical analyses, and the findings as they relate to the fields of secondary transition and post-school outcomes, are discussed.

Acknowledging the limitations of the findings and the present study methodology supports the identification of specific and applicable recommendations for the administrators and personnel who work with the students with disabilities in the NPS program to consider when making decisions.

There are a number of implications to consider regarding the students with disabilities who attend the high school program, the faculty working in the NPS program, and for adapting and improving the secondary transition planning and programming efforts so that the students continue to transition to more positive adult roles and experiences.

Several implications are also provided for the fields of secondary transition and postschool outcomes, and for the field and practice of School Psychology.

## **Literature Support Summary**

The preliminary findings of the present exploratory study align with what is known in the fields of secondary transition programming for students with disabilities and their post-school experiences. Individuals with disabilities have unique needs and interests and as they transition into adulthood and pursue those interests, there are innumerous factors that impact their experiences and paths. It is important to consider which secondary transition-related EBP's and identified predictors are being implemented in the NPS program, how they relate to the

graduates' post-school experiences, and how these align with the established literature in each prospective field.

## **Evidence-Based Secondary Transition Practices**

The comprehensive Taxonomy for Transition Programming model includes many EBP's and activities that, when integrated into the academic curriculum, have been shown to support the high school student with a disability as they create their individualized transition plans, identify their interests, skills, and needs, develop post-secondary goals and the necessary skills to achieve those goals, and successfully transition to their post-school adult life (Kohler, 1996).

**PSO Survey findings.** Within the Taxonomy, research support has been demonstrated for 16 practices as "in-school predictors" for successful and specific post-school outcomes (Test et al., 2009b; Appendix A). Although the survey did not explicitly assess all of the 16 predictor practices, the graduates were asked about their experience with 13 of those practices (please see Appendix F for the full inclusion details regarding the Taxonomy areas and the 16 predictor practices for both the PSO Survey and the Taxonomy self-assessment rating scale). Graduates were not asked for their experiences with the predictor practices of: (1) implementing occupational courses and (2) their inclusion in general education due to the academic focus and separate, small class setting of the NPS program, and (3) information regarding the framework and service delivery within the NPS program, since those services are better assessed by the school professionals in the program. Knowing and understanding the graduates' experiences with their related services and the transition service delivery as a high school student could be useful and beneficial, however, those experiences are difficult to assess in both a multiple choice or rating scale survey format. The school professionals rated the level of implementation of practices in the areas when completing the Taxonomy self-assessment rating scale and indicated

highly developed and implemented related services, but a developing and partially implemented practice of collaborative transition planning and coordination of the transition program delivery.

Of the 13 predictor practices assessed on the PSO Survey, the graduates endorsed 9 practices as "present", albeit at varying levels of presence, in the NPS program. The 9 practices were: (1) the development of self-determination and advocacy skills, (2) exposure to career awareness, (3) development of social skills, (4) opportunities for community experiences (through their internship experience), (5) presence of academic, social, family, and other general support, (6) parent involvement, (7) access to the LRE exit exam requirements for their statestandard high school diploma, (8) a margin of choice in the program of study, and (9) transition programming. The graduates did not endorse having experiences with developing their self-care skills for independent living, having access to vocational education, or engaging in work study or paid employment.

Taxonomy self-assessment. The school professionals were not explicitly asked to rate the EBP's that were considered predictors; however, through their ratings on the Taxonomy self-assessment, they indicated the presence of several predictor practices that were similar to the graduates reports. The school professionals indicated the consistent presence of coursework and other transition practices that develop the students' self-determination, decision making, and advocacy skills, some support for developing social skills, access to community experiences through the senior year internship, parent involvement, an integrated curriculum supporting the students to graduate with the state-standard diploma, and the presence of a program of study aligned with the students' interests.

The school professionals rated the presence of career awareness as a developing area, indicated there were no opportunities for paid employment experiences, and rated the NPS

program policy for transition programming to be one that is developing and partially implemented. Appendix F displays the school professionals' ratings of the Taxonomy transition areas.

A variety of factors impact the similarity and difference in the graduates' high school experiences as students in the program and the school professionals experiences as employees in the NPS program. Therefore, this information needs to be considered as descriptive information and not the accurate, and full, current state of affairs for the presence of transition EBP's in the NPS program.

## **Post-Secondary Outcomes**

This initial exploration of graduates' post-secondary experiences assessed several of the QoL indicators identified in the professional literature that impact an individual's overall life satisfaction. The NLTS2 data collection procedures include parts of the QoL model, but limit the inclusion of areas only as they relate to the youth with disabilities independent living and community engagement experiences, rather than including all of the 14 QoL areas. To make the statement that the present study went further than the NLTS2 by assessing additional QoL areas might be an over-statement. However, the present study is, at least, on par with other PSO studies by including several of those QoL areas in the PSO data collection process and the effort was made to include those areas typically included in state PSO measures, with some overlap and some differences in the areas assessed (Curtis, et al., 2009).

The present study included the traditional PSO domains outlined by the IDEIA (2004) I14, those of (1) Education and (2) Employment, and the areas of (3) Independent Living and (4)
Community Engagement which are established domain areas for inclusion in data collection

efforts to fulfill I-14 criteria by the National Center for Educational Outcomes (NCEO) and the Post School Outcomes Center (PSOC).

The PSO Survey items were also aligned with the typical items included in the statelevel data collection measures. One additional area that does not appear to be included in state or national PSO measures was the graduates' use of test accommodations and classroom supports at the collegiate level.

#### Limitations

The present PSO follow-up and transition EBP's research was preliminary in nature and has several limitations.

# **PSO Survey, Procedures, and Findings**

External validity and generalizability. Of the many graduating classes from the particular NPS program of interest, only a particular 5- year cohort of graduates were selected and recruited for the present study. This cohort was selected on the basis of recruiting a participant sample that would be representative of the overall graduated population, but also in consideration of the inherent challenges to connect and community with the graduates. The primary communication with the graduates occurred through mailings to their most recent home address on school records via U.S. post mail. This medium posed a barrier to recruit a larger sample size for a number of potential reasons. The graduates could have moved without notifying the NPS program of their most current address, or their parents mailing address might have continued to be their correct permanent address, however, the graduates could have had a different current address. In this latter circumstance, the graduates would have only received the present study information if their parents had forwarded the documentation to their residence.

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Only a fraction, 20 graduates, of the recruited 104 graduates participated. Although several steps were taken to maximize the response rate, important information and experiences were missed as a result of such a small sample of graduates. The findings from this study can be considered, in a descriptive manner, as representative of those graduates from this NPS program who participated, had graduated in those represented years, and with those represented disability classifications. While each specific graduate's experience may not be generalizable to every graduate from the NPS program, these individuals' perceptions of their experiences do highlight several common factors that have impacted them based on their similar high school experiences and on their post-secondary life as an individual with disabilities who had attended this specific school program.

The low response rate should be a primary consideration with conducting future PSO data collection efforts. Developing a more efficient system for maintaining the most current addresses of graduates could potentially increase the number of graduates' participating in the follow-up studies. Increasing the sample size will provide findings that could be more representative of a broader range of individuals with different strengths, interests, needs, cohort years, transition experiences, and disability diagnoses/ experiences.

Demographic considerations. Several demographic characteristics should be considered when interpreting both the findings and the limitations of the study. The inherent characteristics of the twenty participating graduates might naturally have created a participation bias which could impact the findings of the survey. The findings indicated a high rate of enrollment in post-school Education programs and an overall productive experience with either Education or Employment. This could indicate that those graduates who are inherently motivated and

interested in learning, might have found a particular value or interest in choosing to participate in the study.

The overall positive high school experiences and the helpfulness of the NPS program might be representative of this particular group characteristic as well. Alternatively, considering how the 80 percent of graduates who did not participate might have impacted the findings can be useful. Several challenging questions are necessary to ask when interpreting the findings. Perhaps the post-school and high school experiences of those graduates who chose not to participate were not as productive or positive, which could lead to their decision to not participate in the study. The potential impact of participation bias should to be considered when interpreting each of the preliminary findings in each post-school area.

Additionally, the low response rate for the overall study resulted in a lack of representation for certain disability experiences, those graduates with an ED, Visual, and Hearing Impairment, and for the cohort in the 2013 graduation year.

Disability factors. It is difficult to assume that each student has a comprehensive understanding of their learning profile of strengths and weaknesses and, subsequently, their disability profile while still a student in high school. The potential variety in the various graduates' learning and ability profiles and the variety of levels of understanding those profiles, adds an additional complexity, and potential barrier, to comparing any of the graduates' experiences. Since two graduates with the same disability experience from the NPS program might have varying levels of understanding and awareness of their profiles, supporting the development of that awareness is a challenge for school professionals and could further impacts their overall participation in the transition planning process.

Despite the graduates attendance in the same high school program, the NPS program strives to support a variety of students with different learning and ability profiles, and not every student experience of the program and the implementation of transition services from year to year, can be assumed to be similar.

Parent roles. Understanding the level of parent involvement while the graduates were still a high school student, and how that could impact the graduates' actual participation in their secondary transition processes, is an important factor. The assumption was that the graduates have a complete understanding of their strengths, weaknesses, and disability profiles, yet if their parent was highly involved, they potentially could have not only advocated for their child, but interfered with the students ability to participate in their transition planning if they were not allowing the students to make their own decisions. If that were the circumstance, the parents' role could interfere with the students' involvement in their transition process and with the development of their disability awareness, self-determination, and advocacy skills. The parent roles for this group of graduates are unknown.

Program factors. Other factors could impact the similarity of the graduates' high school experience in the NPS program as well. Certain program factors such as teacher turnover, the availability of services and resources, the implementation of transition practices, adjustments to curriculum, state-mandates for the IEP process, administrative personnel changes, and etc., inevitably change from year to year, which then impacts the availability and implementation of transition planning and programming with different graduated cohorts.

Although several secondary transition EBP's are implemented in the NPS program, the consistency and cohesiveness of their implementation is unknown, which could contribute to

different high school experiences, and thus different post-school experiences, for different cohorts of graduates.

Design and internal validity. When considering internal validity, both the measure used and the design of the study are critical parts of studying the specific research questions. Some limitations of the findings of the present study relate to the lack of specificity with defining the actual transition activities, practices, services, and programming, and defining the process of the planning, such as the IEP process, in the PSO Survey measure. Although several definitions were provided for the graduates to refer to when completing the transition-related survey items, those were not all encompassing of the transition and post-school related language used in the measure.

Areas not included. During the statistical analyses, several areas that were relevant to the graduates' high school and post-secondary experiences were identified as absent from the survey measure. The transition-related areas that were not explored in the survey included: assessing for the relevant high school coursework that potentially supported the graduates' path to particular PSO experiences, both their actual high school experiences and the coursework they had an interest in if those experiences weren't available, and exploring the graduates' work experiences while still a high school student. Understanding their ability to manage both high school and a part-time employment position could support understanding how the graduates could manage both in their adult lives.

In terms of exploring the PSO experiences, the following areas and information were not included or collected in the present study: specifically assessing the graduates' mixed experience with managing both post-school enrollment in a collegiate program and maintaining employment, exploring their feelings, interests, and plans for independent living, and assessing

the graduates' community engagement in addition to financial and rehabilitation support, specifically with their recreational and social engagement, involvement with community centers, religious communities, and volunteer work. The NLTS2 assess the following three areas of community participation: taking lessons or classes outside of formal school enrollment, participating in a volunteer or community service activity, and belonging to an organized community or group (Sanford et al., 2011).

To more comprehensively explore the graduates' life satisfaction and overall experiences with the areas that support their positive QoL, additional survey items assessing the full indicator areas should be added. The QoL areas excluded from the present study were: physical and mental health, food and clothing, safety from harm, financial security, spiritual fulfillment, social responsibility, and overall satisfaction and well-being (see Table 8 for the full inclusion information of the QoL indicators on the PSO Survey measure). Gaining additional information in these areas could provide a more comprehensive understanding of the graduates' post-school experiences.

Measurement. The psychometric properties of the PSO Survey instrument present and additional limitation of the present study and the findings. Since the survey measure was specifically designed for this study, the psychometric properties of the survey were not determined. Completing a factor analysis would identify the presence of specific transition and post-secondary outcome domains, which would support the overall validity of the measure.

Despite this limitation, several steps were taken to design a survey instrument with sound psychometric properties to improve the reliability and validity. State and national surveys, model PSO surveys provided through the technical assistance centers and organizations, and those domains supported in the professional literature were reviewed to carefully determine

which items were appropriate for conducting the present study. The best practices and recommendations for improving reliability and validity of PSO data collection procedures identified in the professional literature were also incorporated. The measure was piloted with school professionals familiar with the NPS program setting and the student population, and then appropriately modified based on their feedback.

Despite these steps, several items had particularly low response rates. There are several factors that could potentially contribute to specific items receiving such a low response rate. The low response rate on survey items 23, 26, and 27 could be due to the graduates' difficulty with recalling their transition-related experiences, could provide the appropriate and accurate support for the graduates' lack of involvement in their transition planning experiences as reflected in their responses to other survey items, or other unknown factors could potentially have contributed.

In addition to difficulties with recall or a lack of experience, the items with low response rates could indicate an item with low relevancy to the graduates' experiences, the experience of fatigue, or an overall disinterest with participating in the study.

The use of a contingent model where respondents could skip to relevant survey items based on their response to specific items could also minimize low response rates for non-relevant items and increase the participants' motivation to stay engaged with the survey until its completion. Generally, the survey items with non-relevant responses or low response rates should be analyzed to determine if the wording was clear, if there were adequate answer options, or if any important information was missing from the item that would support the respondent to answer.

Some survey items require modifications for future data collection procedures. Survey item 5 should be adjusted to include additional semester options with the purpose of clarifying if students are completing extra semesters outside of the traditional semester schedule to complete their 2- or 4- year program. Similarly, an item assessing the degree or certification the graduates had already completed and the number of semesters required for that completion, should be added to better understand their degree pursuit and the timeline required for an individual with a disability. Survey item 8 needs to include the additional response options: (1) credits, but no degree and (2) high school, to encompass the full range of the graduates' highest level of education they plan to complete. Survey items 16 and 17 are very similar and could be condensed into one item asking the graduates for their reasons for not working since graduating from high school.

Occasionally the graduates' misunderstood a survey item, as observed by non-relevant, comments in the "Other, please specify" answer choice, which could further indicate the presence of irrelevant or poorly-worded questions and the need for an item analysis and modifications.

Design, procedures, and statistical issues. One of the general limitations is the subjective nature of self-report with survey research, which makes it difficult to confirm the information gathered from individuals' perspectives with other sources of information (Evans & Mathur, 2005).

The graduates' responses might have also been influenced by a variety of additional factors such as poor recall of events and facts, a concern with providing their opinion and feedback on their high school program and the school professionals (despite anonymity), or a lack of a deeper understanding of their transition planning experience.

Additional limitations arise with the inclusion of only one open-ended, general question eliciting feedback at the end of the survey. There are additional survey items throughout the measure that ask the respondent to explain their response further, which provide rich anecdotal information. However, including additional open-ended questions could provide additional, crucial information in lieu of conducting a more resource-intensive focus group or one-on-one interviews. An important consideration when adding open-ended items is the added complexity these items present for conducting a thematic analyses.

To maximize the overall response rate for the study, several strategies were incorporated in the design of the study and the data collection procedures as indicated in the fields of survey use and PSO data collection. An initial pre-announcement flyer for the study was mailed to graduates to capture their interest in the study, efforts were made to personalize all correspondences, two follow-up reminder letters were mailed, and an incentive was offered for the graduates' participation. An early decision in the planning process to adjust the target population from a 3-year cohort to a 5-year cohort of graduates was also made in an attempt to increase the numbers of participants.

In terms of the limitations of the statistical analyses, using a narrative and tables with item-by-item analyses can become repetitive for the reader. However, providing briefer descriptions as an alternative takes the risk of leaving out pertinent information (Approaches to the Analysis of Survey Data, 2001).

The statistical analyses included filtering the data by the graduates' identified disability category to determine the differences of their experiences based upon their disability classification and diagnoses. Conducting an additional analysis and filtering the survey data by graduation year could highlight the graduates' experiences as a function of the time that has

elapsed since the graduate exited from high school. This information could provide support for different education, employment, or independent living experiences.

### **Taxonomy Self-Assessment Rating Scale**

An initial attempt was made to understand the secondary transition practices being implemented in the NPS program from the perspective of the graduates with disabilities and three school professionals. To comprehensively explore the secondary transition practices being implemented and to fully understand the transition planning processes in the NPS program, it would first require a comprehensive and structured needs assessment study with the current NPS school faculty, staff, and students to determine what the true "current state of affairs" might be regarding secondary transition practices. Dependent on the needs assessment findings, the next steps might include a formal assessment of the implementation of those practices or a program evaluation if the transition programming was deemed to be in an evaluable form (Maher, 2012). This process would be a tremendous undertaking for one research study; therefore, the decision was made to include a quick assessment with those professionals responsible for implementing the secondary transition practices that were present in the NPS program.

External validity and generalizability. The three school professionals who completed the self-assessment represent those primary individuals who are responsible for facilitating and implementing transition planning and practices, however, they only represent a fraction of the school professionals who support the transition planning and programming implementation.

Teachers, teacher assistants, para-professionals, and other related service providers are all responsible for implementing transition services. The self-assessment gained descriptive and subjective information which provides an initial exploration of the presence of transition EBP's.

Professional roles. Additionally, the Director of Special Education and the School Psychologists who completed the self-assessment maintain different roles with the implementation of the transition practices. Despite their similar training and professional role, the School Psychologists in the NPS setting have their own specific responsibilities in the high school program, such as case management, teaching, or acting as a liaison for communicating transition information, in addition to their traditional responsibilities. These different experiences might contribute to differing perspectives of the level of implementation of different practices, since the Director might have more contact and knowledge with the program structure and funding, and the School Psychologist with case management responsibilities might have more knowledge or the IEP process or interactions with parents. Additionally, the school-based counseling related services might provide an opportunity to address and support many components of the secondary transition processes in the NPS setting, to which the Director is not present.

**Program factors.** Several program factors limit the generalizability of the self-assessment information as well. Since annual budgeting predicts the available resources, the practices and personnel to implement those practices could vary from year to year.

Design and internal validity. The initial plan to explore the presence of transition practices involved the PI analyzing and comparing those practices with the Taxonomy and then summarizing the presence of EBP's based on their subjective experience as a School Psychologist in the NPS program. However, increasing the validity and the potential objectiveness of the information was important, therefore, the decision was made to adapt the Taxonomy transition areas and practices into a rating scale to gain additional perspectives from the other school personnel responsible for facilitating the transition planning and programming.

Measurement and design. The careful steps taken to increase the reliability and validity of the PSO Survey were not similarly incorporated with the development of the Taxonomy self-assessment rating scale. Instead, the innumerous transition EBP's included in the Taxonomy areas (Kohler, 1996) were directly transcribed into an online survey design site. With consideration of the research questions, the decision was made to ask the professionals to rate the level of development and implementation of each practice and activity based on their experience. Rating the level of implementation is not an inclusive component of the Taxonomy model, and could have potentially interfered with the validity of the information the self-assessment was intended to glean. Due to the late timing of the decision to include this type of rating scale, there was a limited ability to carefully consider and decide alternative rating scale responses. The purpose of this self-assessment was to capture a brief summary of which practices were implemented and their level of presence in the NPS program. Approximately 10 minutes were necessary to complete the self-assessment rating scale.

*Procedures and statistical issues.* Similar to the PSO Survey, the nature of the school professionals' self-report of their experiences is a limitation to this type of data collection.

The survey website provides the option to weight the respondents' rating and based on specific thresholds, the school professionals' ratings of the transition practices were analyzed and compared. The large number of EBP's made this analysis difficult and the ability to provide a narrative that accurately and effectively summarized the practices that were in each implementation category cumbersome.

### **Implications for Practice**

Despite the limitations, several implications can be gleaned from the exploratory study to enhance both of the secondary transition planning practices being implemented in the program

and the future PSO data collection efforts with graduates of the NPS program, and to inform the practice of School Psychologists and other Education professionals.

### **Secondary Transition Practices**

The findings suggest that information obtained through PSO data collection efforts can identify general practices and strategies that support particular post-school experiences for graduates with disabilities and their life satisfaction, at least for this specific population.

Overall, the graduates felt that the NPS program met their needs and prepared them for both their post-school education experiences and for other life experiences. They reported several concerns due to the limited access to a wider a range of college readiness classes, preparation for exploring career options, and support for the college application and preparation process. Yet, many graduates reported leaving high school with a variety of skills that have helped them to be academically successful. Both the graduates with disabilities and the school professionals noted a lack of transition practices supporting their connection to their community regarding their involvement, use of resources, and connection to agencies. However, many graduates were involved with high school extra-curricular activities, and many indicated that their community-related lives were very satisfactory to their QoL, which indicates that the connectedness they experienced while in high school most likely continues into their adult lives, at least their social experiences. Providing specific transition support to bridge those community experiences and opportunities to develop a deeper understanding of their community needs and what they have access to, will further promote a positive QoL related to these experiences.

The study indicated that a majority of graduates were not involved with their transition planning process as a high school student. However, those graduates that were involved with the process through goal-setting and attending their IEP meetings, felt that it supported their pursuit,

and subsequent achievement with, reaching their post-secondary goals. Unfortunately, many graduates did recognize the importance of attending their IEP meetings upon reflection while participating in the PSO Survey. It is critical that schools develop and conduct transition assessments to identify the students' transition needs, strengths, and interests. This information will also support their involvement with planning and their overall development of self-determination and advocacy abilities.

Additionally, the graduates' participation in the planning process was not exactly clear. For example, students might have participated in planning and goal development in other meetings outside of attending their IEP meeting..

The student-focused areas and practices with the greatest empirical support are repeatedly demonstrated to be in the areas of planning and student development (Test et al. 2009a; Landmark et al., 2010). Developing students with disabilities self-determination and their feelings of personal responsibility as a leader in their transition planning process is continuously substantiated to be the connection to their post-school success. Although these transition areas were not reported or endorsed by either the school professionals or the graduates to be fully represented with well-developed and consistent implementation of EBP's, the areas of (1) student planning, (2) student development, and also of (3) program structure were areas that both the graduates and the school professionals indicated had the most practices present in the NPS program, albeit they were at varying levels of development and implementation. The presence of transition practices in those two areas indicated that the NPS program had several substantial, positive practices in existence. The challenge will be identifying the process in which those practices are implemented and establishing a consistent method to provide those effective services.

Additionally, identifying the classes and related services that support the students' skill development and facilitates their involvement is crucial to continue to strengthen those practices. Including the students' families was shown to be a strength for the NPS program, and one that was helpful to the graduates' transition planning. Therefore, incorporating the family support and guidance through this experience, by training the parents how to develop those skills as well, will also support the students' skill development and participation.

According to the school professionals, the NPS program primarily focused on developing the students' self-determination and self-advocacy skills, their learning strategies and understanding of their accommodations, supports, and various related services, and continually included the family in the IEP process. The focus on developing the students' understanding and efficient use of the school supports and test accommodations that supported their academic success was found to translate to the graduates' post-school education experiences as well. Those practices supported the students as they pursued their post-school education, which supported the schools mission; however, many of the practices also supported their pursuit of the other post-school experiences.

Most graduates had exited the NPS program with a state-standard diploma and the skills necessary to pursue a college level education program. Despite the primary academic focus, the graduates' developed many life skills, pursued and maintained employment, and sought out interpersonal experiences with their friends and family that promoted a positive quality of life, in addition to pursuing post-school collegiate programs. This indicated the quality and utility of providing transition practices to support post-school Employment, Independent Living, and Community Engagement experiences, in addition to Education. Facilitating the development of all skill areas, such as learning, employment, life, social, and etc., and providing information

about a range of post-school options could be beneficial, regardless of the students' interest or needs, since many of the practices promote positive experiences in more than one post-school outcome area (Test et al., 2009b).

The Taxonomy for Transition Programming postulates that comprehensively supporting the 5 broad areas of student-focused planning, student development, family involvement, interagency collaboration and program structure, with evidence-based practices leads to more appropriate, meaningful, and successful outcomes (Kohler, 1996). The graduates with disabilities reported successes, and satisfaction, in the areas of education, employment, and independent living, although their education trajectory was the focus while still a high school student. Despite the successes with this area, and the alignment with the school program achieving it mission, providing well rounded support for all of the outcome areas could meet more of the students/ graduates needs.

The mixed endorsement of many transition practices by the graduates' and their low endorsement of a number of practices, indicate that the practices that are present in the program are not clearly articulated or consistently implemented in a manner that conveys a coordinated approach to the students in the NPS program.

Generally, the self-assessment information gleaned an initial exploration of the practices implemented most often and not at all, with many of those practices indicated as partially implemented or only in-development. The school professionals similarly agreed with the level of implementation for several practices, yet their ratings were varied with many practices.

Additionally, the school professionals' ratings did not provide information regarding when and where the practices were being implemented, such as during academic classes, related service

meeting, or other moments throughout the school day. Therefore, the actual transition process remains unclear for this NPS program.

It remains unclear if the practices identified as not present or minimally occurring are even a need for the NPS program, professionals, and the students with disabilities it services. Since the Taxonomy self-assessment was designed as an ad-hoc process, developing a more clear and creative way to collect data that will add to the understanding of the presence and level of implementation of transition practices would be appropriate. Thoughtfully including the school professionals, staff, and the current students in the data collection processes to assess the presence of transition practices will provide the appropriate amount of time and technical assistance necessary to collect the most meaningful and valid information from the school stakeholders.

Introducing a program planning and evaluation model could clarify the overall needs of the stakeholders, such as the current students, staff, faculty, and parents, in terms of the secondary transition planning available to support the students' strengths, needs, in-school interests, and post-school interests. Using a structured model, such as the Planning and Evaluating Human Services Programs model (Maher, 2012), could address not only the current needs of those individuals but provide a process to systematically plan a more cohesive and collaborative secondary transition program and approach, provide the support and training to implement the program, and establish a process for engaging in ongoing evaluation of the transition efforts by the professionals in the NPS program, so they are able to increase accountability and make data-based decisions to adapt the provisions of service delivery.

According to Curtis, Rabren, & Reilly (2009), to determine program effectiveness and efficiency, and also to maintain professional accountability, evaluating both the transition

practices and the collaborating personnel who implement those practices, are "an essential component needed for thorough, insightful program development and systems change in the area of services for youth with disabilities" (p. 47).

Establishing a coordinated and collaborative process where all school professionals are involved in the planning and design and are consistently focused on a well-articulated mission for the secondary transition services is the spirit of the Taxonomy for Transition Programming model. An established system of communication among related service providers could also help to coordinate practices so that school professionals are implementing transition practices consistently, are gaining feedback from their colleagues to adapt their practices, and are providing the most accurate and relevant services in a coordinated manner for their students with disabilities. Creating a process could improve the presence of those practices not fully developed or implemented and possibly address any barriers identified as part of the needs assessment and program planning process.

The present study summarized several barriers to implementing evidence-based practices that have been substantiated in the research literature. These include a lack of transition-specific training, low acceptability of program and practices, absence of a process for communication and planning, a clash of theoretical paradigms, and resource intensive practices (Kratochwill & Shernoff, 2004). The researchers suggest focusing on understanding the components of the programming that lead to change, understanding the inherent limits to EBP's and their implementation in the applied setting, considering the guidelines for which the EBP was identified to be effective, understanding the variability in implementation, understanding the basic principles of reviewing, matching, and selecting available interventions or practices to the

target population, and focusing on including an evaluation component in the implementation to evaluate its effectiveness in the school setting.

To support the secondary transition efforts, ongoing transition-related staff development would be ideal. However, school resources could limit the ability to implement ongoing professional development; therefore, signifying a school professional as the transition coordinator who completes a Transition Specialist credential through the regional resource center could provide the technical assistance and necessary support for the remaining school faculty and staff to implement secondary transition-related practices. The CEC DCDT also provides guidelines and recommendations for more integrated programs, dependent on the school resources, for considering EBP's identified and available through the NSTTAC database and implementing those practices in the school setting in a thoughtful and structured process (CEC; <a href="http://www.nsttac.org">http://www.nsttac.org</a>).

The findings indicated that the NPS program met the IDEIA, I-13 requirements with the provision of an IEP process including an annually updated IEP meeting to which the student was invited, inclusion of appropriate and measureable post-secondary goals, which are based on age-appropriate transition assessments, and discussion of the services that will help the student to reasonably meet those goals (PL 108-446).

#### Post-School Experiences

Developing a practical, efficient, sustainable, and resource-effective data collection process to explore the PSOs of graduates can provide valuable information to school personnel for data-based decision making, to parents, and to other community stakeholders who are responsible for preparing children with disabilities for their post-school experiences in a variety of areas (Smith & Bost, 2007; PSO Center). The PSO process can support the school with

assessing how well secondary transition-related practices, or a complete program, are preparing students for post-school experiences, which then improves those experiences.

Exploring the post-school experiences that promote graduates overall QoL and satisfaction and their connection to evidence-based transition practices continues to be a research priority (Curtis et al., 2009).

The graduates with disabilities provided additional comments and information about their post-school experiences that aligned with the satisfaction and QoL PSO indicators and the other four areas of education, employment, independent living, and community involvement.

Generally, it is difficult to assess, comprehensively, every aspect of those areas and in a user-friendly manner. The community involvement and connectedness tends to be the least supported in transition practices and the least assessed with PSO data collection procedures.

### The Field of School Psychology

One of the primary responsibilities of a School psychologist is to support the student and their access to a school setting that promotes their academic, social, and emotional satisfaction and their overall well being. At the secondary level, the School Psychologists' role and responsibilities include supporting the secondary transition of students with disabilities by facilitating the planning, implementation, and evaluation of secondary transition programming, provision of direct services to support skill development, and through consultation and collaboration with other school professionals and their families.

The current findings support some information already established in the field of School Psychology and Education. To support the learning of students with disabilities, professionals need to communicate and work within a collaborative process which often demands an ability to be flexible, timely, patient, and adaptive. Typically, complexity is added to this dynamic

experience when there is not an established program, process, or structure. The School Psychologist's (those who responded to the self-assessment) and the Director of Special Education did not share the same perspective on the level of development and implementation with many different transition-related practices in the school setting. It is important to try to understand what this might indicate for the program and for the training of School Psychologists' in general.

When it comes to school programs, School Psychologists, among other professionals, are often charged with conducting both formal and informal needs assessment to address school-based concerns and then to facilitate the designing, implementing, monitoring, evaluating, and then adaptation of programs that support any identified need. These types of needs assessments could be at the small group level, classroom level, faculty level, or other systemic levels of the school system. Incorporating the appropriate course work and applied experiences in School Psychology training programs is critical for efficient planning and implementation of transition programs. Creating professional development and training opportunities for secondary transition-related practices while in graduate training programs helps the School Psychologist to facilitate program design, implementation, and evaluation in their work settings. Transition typically becomes a focus at the middle school level and is even recommended in the transition literature to begin in the elementary grades, which indicates a broad group of students, that School Psychologists will need to incorporate this particular set of skills.

Additionally, School Psychologists are often the appointed Transition Coordinator in their school setting, which makes it practical to include this specific specialist training in a graduate training program. The School Psychologists' unique training and background with programm planning and evaluation provide the unique foundation for their effectiveness with

implementing post-school outcome data collection efforts as well. Several benefits have been identified with the appointment of the transition coordinator also administering post-school outcome follow-up procedures. These include a first hand knowledge of the graduates which could create a more personable and comfortable experience, easier tracking, and a personal interest and investment to explore the outcomes and to use the data findings from the post-school follow up in the school transition programming efforts (Baer et al., 2003).

School Psychologists have the ability to explore, research, and then determine practical and appropriate evidence-based practices that will potentially have an impact on their student populations. Test et al. (2009b) suggests using the NSTTAC website which categorizes practices with moderate to strong empirical support by the Taxonomy for Transition model (<a href="http://www.nsttac.org">http://www.nsttac.org</a>). This website also has "Lesson Plan Starters" for education professionals to implement in their secondary transition classrooms. The technical assistance and resource centers related to the fields of secondary transition and to post-secondary outcomes data collection are displayed in Appendix G.

Continually, when researchers compare, analyze, and research Kohler's 5 major areas, the interventions with the greatest empirical support are student-focused planning and student development (Test et al. 2009a; Landmark et al., 2010). As the primary facilitator of the IEP process, the School Psychologist is particularly tasked with also facilitating the students' involvement in their process. Providing IEP training for students and their families, self-determination training, support for other professionals who might be directly teaching those skills and monitoring the process continuously to identify a potential need or concern, is one of the primary responsibilities of a School Psychologist.

Test et al. (2009b) provide additional strategies such as starting to promote these skills while still in elementary school which creates an opportunity for the student to practice guiding their learning process prior to secondary school, rely on transition assessments and students needs and interests when making decisions, identifying community agencies and resources prior to graduation that will provide students with access to, and the opportunity to fully participate in, post-secondary education and employment, provide parent trainings to support and increase their active participation and involvement in the planning and decision making process, clarify roles, policy, and resources, improve teaming efficiency and collaboration of the students' multi-disciplinary team, and link the student to vocational rehabilitation.

#### **Suggestions for Future Research**

Developing the PSO Survey for future data collection efforts and incorporating all of the identified limitations will improve the reliability and validity of findings and broaden the scope of the measure.

Developing a process to maintain the most up-to-date mailing and, potentially, email addresses of graduates will create a data-base for future collection efforts and potentially increase graduate participation.

There are various areas that were under-represented in the present study and PSO Survey measure. Future post-school outcomes data collection efforts should include items to further assess students work and employment experiences, and their management of both work and school experiences. Their community involvement remains largely unclear. Including questions to better understand their recreational activities, volunteer work, community organization memberships, etc. would support this area. Also, multiple questions should be included to comprehensively assess all of the QoL domains and the graduates' overall life satisfaction in those areas that were not well understood.

Considering a longitudinal data collection effort to re-survey the graduates at the 8- or 10- year post-high school point could help to determine the amount of time the graduates require to complete their planned degree, if they accomplish what they set out to do with their post-secondary collegiate plans, or if they are living independently.

Given the high number of skipped questions and the potential irrelevance of certain openended question comments, adding a focus group methodology to future data collection events could help to uncover the reasons behind particular outcomes, allow the ability for graduates to answer how and why questions, and overall, provide an opportunity to elicit more comprehensive information from the graduates about their experiences.

### **Chapter Summary**

The purpose of this exploratory research study was to explore the transition-related experiences and post-school outcomes of graduates with disabilities from a college preparatory, state-approved, NPS special education program. The findings from this initial exploration provide the school personnel with information to adapt and improve the implementation of transition-related services and practices to support the students with disabilities needs and interests and to improve their post-school outcomes. It also established an initial post-school outcomes data collection process for the NPS program to potentially adapt and implement on an annual basis with their graduates.

The ultimate goal of special education is to enable the student with disabilities to make a successful transition from school to their adult lives. One of the responsibilities of special education programming is to collaborate with the student, their family, and any community resources so as to coordinate an individualized transition plan and support that student as they pursue their post-school goals.

These findings might not alter the way professionals in the field think about doing this type of research, but they more so highlight the dynamic nature of conducting research in an applied setting like the school environment.

It is important to recognize the complexity and collaborative engagement necessary to efficiently implement a secondary transition-related program. There are many factors such as student and family characteristics, motivation, and available resources to name several, that impact this dynamic process that all students need to eventually participate.

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# Appendix A

# Taxonomy on Transition Programming Theoretical Framework

# & 16 Identified Predictors of Post-Secondary Outcomes

(Kohler, 1996; Test et al., 2009b)

Transition Areas,		Predicted Post- Outcome	
Sub-Areas, & 16 Practices Identified as Predictors Area(s)			
1	Student-Focused Planning		
	a. IEP Development		
	b. Student Participation		
	c. Planning Strategies		
	1. Self-advocacy/ determination	Education & Employment	
	2. Career awareness	Education & Employment	
2	Student Development	·	
	a. Life Skills Instruction		
	3. Self-care/ independent living	Education, Employment, & Independent Living	
	4. Social skills- education and employment		
	b. Employment Skills		
	5. Vocational education	Education & Employment	
	c. Career & Vocational Curricula		
	6. Occupational courses	Education & Employment	
	d. Support Services		
	7. Student Support	Education, Employment, & Independent Living	
	e. Assessment		
	f. Structured Work Experience		
	8. Community experiences	Employment	
	9. Work study	Employment	
	10. Paid employment/ work experience	Education, Employment, & Independent Living	

### 3 Interagency Collaboration

11. Interagency Collaboration

Education & Employment

- a. Collaborative Framework
- b. Collaborative Service Delivery

### 4 Family Involvement

- a. Family Training
- b. Family Involvement

12. Parent Involvement

c. Family Empowerment

### **Employment**

## 5 Program Structure

- a. Program Philosophy
  - 13. Exit exam requirements/ HS diploma
  - 14. Inclusion in General Education
  - 15. Program of study
  - 16. Transition program
- c. Strategic Planning
- d. Program Evaluation
- e. Resource Allocation

Employment

Education, Employment, &

Independent Living

Employment

Education & Employment

### Appendix B

#### Informed Consent Letter

-- School Letterhead --

Dear state-approved, NPS Special Education Program\* Alum,

You are being asked to participate in a study designed to examine your post-school experiences since graduating from the state-approved, NPS program\* at the Private High school\*. I am doing this study as part of my doctoral dissertation in the field of School Psychology. My Faculty Advisor is Kenneth Schneider, Ph.D., of the School Psychology Doctorate Program at the Graduate School of Applied and Professional Psychology at Rutgers, The State University of New Jersey in New Brunswick, New Jersey.

Your cooperation and honest responses in completing the survey are truly appreciated. The responses you provide are completely anonymous and no employee of your former school will be given your specific answers. After the study has been completed, I will share a general summary of how all of the graduate participants responded with the Director of the NPS Special Education Program\* and with the Principal of Private High School\* with the intention of helping them to better the high school program.

If you choose to participate, you will be asked to answer questions related to your work and education experiences since graduating and also to provide feedback about your transition-related experiences while you were still a student in the NPS Special Education Program\*.

Your participation in this study is completely voluntary. You may refuse to participate, refuse to respond to specific items, or terminate your participation at any time during the study survey. There are no anticipated risks for participating in this study.

Completing the survey in its entirety should take approximately 15 minutes.

Once you've completed the survey, you can choose to enter into a raffle drawing to win one of two, \$25.00 www.Amazon.com gift cards. Instructions for entering will be provided at the end of the survey and your request will not be attached to your survey responses.

If you any questions about your rights as a research participant, please contact an IRB Administrator at the Rutgers University, Arts and Sciences IRB:

Institutional Review Board Rutgers University, the State University of New Jersey Liberty Plaza/ Suite 3200 335 George Street, 3<sup>rd</sup> Floor New Brunswick, NJ 08901 Telephone: (732) 235-9806

Email: <u>humansubjects@orsp.rutgers.edu</u>

By completing this survey online, you are providing your consent for participation in this study.

To begin the survey, please open an Internet web browser and type in the following link exactly as shown:

## https://www.surveymonkey.com/s/PostSchoolExperiences

Please contact me if you have any questions at: <a href="mailto:sara.teta@rutgers.edu">sara.teta@rutgers.edu</a>

Thank you for your participation!

Sara A. Teta, M.S.Ed., Psy.M.

School Psychologist

(Flesch-Kincaid Grade Level 12.0)

This informed consent form was approved by the Rutgers University Institutional Review Board for the Protection of Human Subjects on December 17, 2014; Currently, there is no expiration on the approval of this form.

## Appendix C

### Online Survey Screen 1: Consent

Dear Alum,

Thank you for choosing to participate in this study! You will be asked to answer questions related to your work and education experiences since graduating and also to provide feedback about your transition-related experiences while you were a student in the NPS Special Education Program\*.

Your cooperation and honest responses in completing the survey are truly appreciated. The responses you provide will be held in the strictest confidence.

Just a reminder, your participation in this study is completely voluntary and will remain anonymous. You may refuse to participate, refuse to respond to specific items, or terminate your participation at any time during the survey. There are no anticipated risks for participating in this study.

Completing the survey should take about 10-15 minutes.

Once you've completed the survey, you can choose to be entered into a raffle drawing to win one of two \$25.00 www.Amazon.com gift cards. Instructions for entering will be provided at the end of the survey and your request will not be attached to your survey responses.

By clicking "Next," you are providing your consent to participate in this study.

(Flesch-Kincaid Grade Level 12.0)

This informed consent form was approved by the Rutgers University Institutional Review Board for the Protection of Human Subjects on December 17, 2014; Currently, there is no expiration on the approval of this form

# Appendix D

## Post-School Outcomes Survey Protocol

## **Demographics Section**

		Demographes Beetion
1.	What :	year did you graduate from the state-approved, NPS Special Education Program*2?
	a.	June 2010
	b.	June 2011
	c.	June 2012
	d.	June 2013
	e.	June 2014
2.	Think	of your experience as a student in the state-approved, NPS Special Education
	Progra	m*, what disability classification(s) made academic success a challenge for you?
	(Check All that Apply)	
	a.	Speech or Language Impairment- Expressive, Receptive, or Mixed Expressive/
		Receptive language difficulties
	b.	Other Health Impairment (OHI,) which could include Attention Deficit
		Hyperactive Disorder (ADHD): Inattentive, Impulsive, or Combined types, or
		Pervasive Developmental Disorders (PDD) such as Asperger's Syndrome
	c.	Specific Learning Disability (SLD,) which could include a specific reading
		disorder, such as Dyslexia or a specific math disorder such as Dyscalculia
	d.	Emotional Disturbance (ED,) which could include mood and/ or behavioral
		difficulties, Anxiety, etc.
	e.	Hearing Impairment (including deafness)
	f.	Visual Impairment (including blindness)
	g.	Autism
	h.	Traumatic Brain Injury (TBI,) as the result of surgery or accident
	i.	Other, please specify:
3.	What	type of high school diploma did you graduate with?

<sup>&</sup>lt;sup>2</sup> \* Indicates the use of a general description rather than an actual title or name to maintain the confidentiality agreement with the study setting and participants.

- a. State-standard diploma\*
- b. Local diploma

### Post-School Experiences: Education

- 4. At any time since leaving high school, have you ever been enrolled in any type of training program or collegiate courses?
  - a. Yes, I have been enrolled full-time (9 or more college credits in a semester) since graduating
  - b. Yes, I have been enrolled part-time (9 or less college credits in a semester) since graduating
  - c. Yes, it has been mixed between full-time and part-time semesters
  - d. No, I have not been enrolled in any type of training or education program
- 5. Since leaving high school, how many semesters have you been continuously enrolled in a training program or college courses? (Check One)
  - e. 6 semesters or more
  - f. 3 to 5 semesters
  - g. 1 to 2 semesters
  - h. Less than one semester
  - I am not/ have not enrolled
  - j. Other (please specify)
- 6. What type of education program you have enrolled in/ attended since graduating. (Check one)
  - k. 4 year college or university
  - 1. 2 year college or university
  - m. Other education or training program that lasts at least one academic year
  - n. Other education or training program that lasts less than one academic year
  - o. I have not been enrolled in any type of training or education program
- 7. Describe the kind of training program you were enrolled if you are not/ have not attended a two- or four- year college or university.

### (Check All That Apply)

- a. Short-term education or employment training program (e.g., WIA, Job Corps)
- b. Vocational, technical, or trade school
- c. Religious or church sponsored mission
- d. I am currently enrolled in a college or university
- e. Other type of training program. Please specify:
- 8. What is the highest level of education you plan to complete?
  - a. Specialized training program (technical or trade school)
  - b. Associates degree (2 years)
  - c. Bachelor's degree (4 years)
  - d. Master's degree
  - e. Doctorate or professional degree
  - f. Other Please specify
- 9. What type of training program or career major have you completed/ are you pursuing?
  - a. Please specify:
  - b. I am not in a training program or attending a college or university program.
- 10. What is your current college or university Grade Point Average (GPA)?
  - a. 3.5 4.0
  - b. 3.0 3.4
  - c. 2.5 2.9
  - d. 2.0 2.4
  - e. Below a 2.0, I am on academic probation
  - f. I am not currently enrolled in a college or university education program.
- 11. What college or university supports for individuals with disabilities have you taken advantage of (if the following supports were available in your school)?

### (Check All That Apply)

- a. Separate location for tests
- b. Extended time for tests
- A note-taker during class
- d. Tutoring services

e. Assistive technology devices (recording pen, read aloud text books, etc.) f. Curriculum Specialist appointments g. I have not used any supports h. I am not currently enrolled in a college or university education program i. Other. Please specify: 12. If you have NOT received any type of training or education at any time since leaving high school, is it mainly because you: (Check One) a. Do not want further training or education b. Can't afford further training or education c. Have transportation challenges d. Don't meet admission requirements e. I have been working/employed full time f. This question does not apply to me. I have received some type of training or education. g. Other. Please specify: 13. What, if any, disabilities/ disorders are currently a challenge to your academic success? (Check All That Apply) a. Hearing Impairment b. Speech or Language Impairment (Expressive, Receptive, or Mixed Expressive/ Receptive language difficulties) c. Visual Impairment ( d. Emotional Disturbance (ED,) which could include Mood and/ or Behavioral difficulties, Anxiety, etc.) e. Autism Traumatic Brain Injury (TBI,) as the result of surgery or accident Other Health Impairment (OHI,) which could include Attention Deficit Hyperactive Disorder (ADHD): inattentive, impulsive, or combined types) h. Specific Learning Disability (SLD<sub>1</sub>) which could include a specific reading

disorder, such as Dyslexia or a specific math disorder such as Dyscalculia

- i. Multiple Disabilities
- j. Intellectually Impaired
- k. Orthopedic Impairment
- 1. Deaf/blindness
- m. None, I have learned efficient strategies to support my disability
- n. I am not in school.

### Post-School Experiences: Employment/ Vocational

- 14. At any time since leaving high school, have you ever worked?
  - a. Yes, I worked an average of 20 or more hours per week
  - b. Yes, I worked less than 20 hours per week
  - c. No, I have never worked since leaving high school
- 15. Since leaving high school, have you worked the longest in: (Check One)
  - a. Competitive work (I had to apply for the job)
  - b. Self-employed work (I have my own business)
  - c. Family business
  - d. Military
  - e. Supported employment (Paid work in the community with helping people always around to support you.
  - f. Sheltered employment (where most workers have disabilities.)
  - g. Another type of job setting. Please specify:
  - h. I have not worked, this questions does not apply to me
- 16. If you have NOT worked at any time since leaving high school, is it mainly because you: (Check one)
  - a. Are in school or training to prepare for future work
  - b. Are looking for a job, but can't find one
  - c. Do not want to work
  - d. Have transportation challenges
  - e. Have some other reason. Please specify: \_\_\_\_\_\_
  - f. This question does not apply to me, I am currently working.

17. Please identify the reasons why you might not be currently working.

(Check All That Apply)

- a. I'm going to school/ in a training program full time
- b. I wanted to look for a better job
- c. Wages were too low
- d. I didn't get along with boss or coworkers
- e. Because of an illness or disability
- f. I didn't like the working conditions
- g. I had difficulty learning and mastering the skills I needed to successfully do my job.
- h. Family reasons, such as pregnancy or caring for family members
- i. Unable to find a job
- i. Fired
- k. Laid off
- l. Other Please specify:
- 18. Since you left high school, about how much of the time have you worked?
  - a. Not at all
  - b. Less than 1 month
  - c. Only during the summers
  - d. About half of the time
  - e. Most of the time
  - f. Consistently since I graduated from high school.
- 19. How much are you/were you usually paid for your job?
  - a. More than minimum wage
  - b. Minimum wage
  - c. Less than minimum wage
  - d. No pay, it is/ was volunteer work
  - e. I have not worked

Post-School Experiences: Independent Living						
20. Where	do you live now?					
a.	Alone on my own					
b.	With a parent(s)					
c.	With other family members					
d.	With a spouse or partner					
e.	In a correctional facility					
f.	In military housing					
g.	In a supervised group home					
h.	In a hospital/ medical facility					
i.	With a roommate					
j.	In a college dormitory					
k.	Other Please specify:					
21. How o	lo you pay for your living expenses?					
a.	With my salary and wages					
b.	Partially with my salary and wages and partially with support of my parents or other caregivers					
c.	Partially with my salary and wages and partially with the support of government subsidies					
d.	My parents, other caregivers, partner or spouse pay for my living expenses					
e.	Other Please specify:					
	Post-School Experiences: Community Integration					

- 22. Have you at any point received services through local agencies? (Check All That Apply)
  - a. VESID/ ACESS
  - b. Rehabilitation services
  - c. Department of Social Services (DSS)

- j. Did not know that any agencies were available

### Transition-Related Experiences

When answering the following questions, try your best to recall your experiences while still a student in the state-approved, NPS special education program\*.

For the purposes of these questions, "Transition-related Experiences" include any transition services or activities related to supporting you as you explored post-school options, transition planning which can include attending your Individualized Education Plan (IEP) meetings and/ or actively creating your IEP and Senior Exit Summary, completing career or vocational assessments or questionnaires, or training/ practice experiences.

As part of the transition process to plan for post-secondary experiences, junior and senior high school students' are expected to identify "Post-Secondary Goals" and "Transition Needs" on their Individualized Education Plan's (IEP) and Senior Exit Summary.

23. What I	Post-secondary Goals did you identify on your IEP?
a.	
b.	I don't recall
24. What '	Transition Needs did you identify on your IEP?
a.	
b.	I don't recall

25. Think about your current employment, training experience, academic setting, or living arrangements which of these were identified as Post-secondary Goals on your IEP?

- a. Current employment/job
- b. Training
- c. Academic setting
- d. Living arrangements
- e. I don't recall
- f. None
- g. Other Please specify:

High school "transition services" include activities related to supporting the student to explore post-secondary options in education, recreation or social experiences, employment opportunities and community living.

- 26. Please indicate the type of transition services or supports you used while you were a high school student. (Check All That Apply)
  - a. Recreational experiences
  - b. Employment or vocational training
  - c. Senior Involvement/ Internship experience
  - d. Navigation of adult service providers (VESID/ ACESS services)
  - e. Vocational or Career Assessments
  - f. Entitlement Programs (SSI, SSDI)
  - g. Social opportunities
  - h. Other Please specify:
- 27. Did you receive any of the following transition-related services? (Check All That Apply)
  - a. Work with someone on resume building/interview skills
  - b. Job coaching/ shadowing
  - c. Career Counseling
  - d. Transportation/ travel training
  - e. Information regarding your rights as a person with a disability and the law
  - f. Guidance with understanding your IEP, classification and related disability and psycho-educational evaluation results and report
  - g. College or University enrollment planning

28. Who was the most helpful professional/ person to help you to create a transition plan to					
meet your post-secondary goals after high school?					
a.	Related service provider - Speech and Language Therapist				
b.	Related service provider - School Psychologist/ Counselor				
c.	Teacher				
· d.	Parent or Family member				
e.	Coach				
f.	Other. Please specify:				
29. As par	t of your transition experience, did you attend your IEP meetings?				
a.	Yes, in both Junior and Senior year				
<b>b.</b>	Yes, only one year				
c.	No, I did not attend my IEP meetings but I wish I had				
d.	No, I did not attend my IEP meetings and I am just fine with that				
30. If you	wish you had attended your IEP meetings, please indicate what your high school				
would	have needed to do to help you to do this effectively.				
a.					
	Nothing, I did not want to attend my meetings.				
	I attended my meetings.				
•	attended your meetings, did you actively help the team to create your IEP goals				
	nior Exit plan?				
<del></del>	Yes				
	No, my parents/ caregivers created my goals				
	No, my Teachers created my goals				
	No, my School Psychologist created my goals				
e.	Other. Please specify:				
For the following questions use the responses:					
Excel	lent Satisfactory Unsatisfactory Wasn't Taught				
How h	elpful was the state-approved, NPS Special Education Program* in preparing you				
to	••				

- 32. use everyday math, such as understand how to keep a checkbook, or use money to shop at the grocery store?
- 33. read and understand written material such as the daily paper, instructions in a manual, or job applications?
- 34. be able to fill out forms and applications or write letters?
- 35. listen so that you can understand what others say to you?
- 36. be able to verbally express yourself so that others can understand you?
- 37. ask meaningful questions?
- 38. use computers for work, college or everyday use?
- 39. cope effectively with personal frustration?
- 40. understand the consequences for your actions?
- 41. approach and find solutions to problems
- 42. have satisfying social relationships with peers?
- 43. have a good working relationship with authority figures such as teachers or your boss?
- 44. share and cooperate in group situations?
- 45. be a productive worker such as finishing an assignment, being on time, working carefully?
- 46. know what you can do well?
- 47. access services in your community such as health or counseling services?

For the following questions use the responses:

Strongly Agree Agree Disagree Strongly Disagree

- 48. My high school education was individualized to meet my needs.
- 49. My teachers challenged me to do my best work.
- 50. My teachers seemed to care about me as an individual.
- 51. I was taught how the things I was learning apply to real life.
- 52. My school provided me with information about career options.
- 53. The information was useful in helping me to pursue my career or education goals.
- 54. Being a classified student helped me to pursue my career or education goals.

55. Which	n of the following extra-c	urricular activities did	you participate in high school?
(Chec	k All That Apply)		
a.	Sports		
b.	School clubs		
c.	Honor society		
d.	Volunteer work		
e.	Campus Ministry		
f.	Other, please identify.		<u> </u>
56. What	effect do you think this p	articipation had in infl	uencing your future goals?
a.	Greatly influenced the	direction of my future	goals
b.	Somewhat influenced to	he direction of my futu	ire goals
c.	No influence on my fut	ure goals	
d.	I did not participate in	any extra-curricular ac	tivities in high school
e.	Other, please specify: _		-
For the fo	ollowing questions use the	e responses:	
For the fo	ollowing questions use the Very	e responses: Somewhat	Not at all
		Somewhat	
In your company of the second	Very urrent post-school experience work education or training e you live friends family life community life free time transportation	Somewhat ences, how satisfied ar	
In your comments of the second	Very urrent post-school experie work education or training re you live friends family life community life free time transportation y, if you would like to pre	Somewhat ences, how satisfied ar	e you with
In your course. Your 58. Your 59. When 60. Your 61. Your 62. Your 64. Your 65. Lastly migh	Very urrent post-school experie work education or training re you live friends family life community life free time transportation y, if you would like to pre	Somewhat ences, how satisfied ar	e you with  ation or feedback that you think
In your course. Your 58. Your 59. When 60. Your 61. Your 62. Your 64. Your 65. Lastly migh	Very urrent post-school experie work education or training re you live friends family life community life free time transportation y, if you would like to pre	Somewhat ences, how satisfied ar	e you with  ation or feedback that you think

Thank you for sharing your experiences for the purpose of this research study!

If you would like to be entered into the drawing to win one of two \$25.00 www.Amazon.com gift cards, send an email to <a href="mailto:sara.teta@rutgers.edu">sara.teta@rutgers.edu</a> and include your:

- 1. Name
- 2. Email address
- 3. Mailing address

Your email request for the gift certificate drawing will in no way be connected to your survey responses.

Once the survey closes, you will be notified if you are a gift card winner.

Again, thank you for sharing and for your participation!

Sara Teta		

(Flesch-Kincaid Grade Level 8.8)

#### Appendix E

#### Study Pre-Notification Announcement Flyer

-- School Letterhead --

Dear Alum\*.

In the coming weeks you will receive a request for your participation in a study designed to examine the state-approved, NPS Special Education Program\* Alumna's' post-school experiences since graduating. The study is a part of my doctoral dissertation in the field of School Psychology. Your cooperation in the survey will truly be appreciated.

Your participation will require you to complete an online survey that will take about 15 minutes of your time. This survey will ask you questions related to your work and education experiences since graduating from the state-approved, NPS program\* and also about your transition planning experiences while still a student in the state-approved, NPS program\*.

Your participation in this study will be completely voluntary and anonymous. There are no anticipated risks for participating in this study. Additionally, if you choose to complete the survey, you will have the option to in to a raffle drawing to win one of two \$25.00 www.Amazon.com gift cards.

In about two weeks you will receive a letter with more details so that you might consent to participate in this study. This letter will also include the survey link for you to access the survey if you choose to participate.

If you have any questions or concerns prior to receiving more information about this study and the survey, please feel free to contact Sara A. Teta, at <a href="mailto:sara-teta@rutgers.edu">sara-teta@rutgers.edu</a>.

I'd just like to thank you ahead of time for your consideration to participate!

Most sincerely,

(Flesch-Kincaid Grade Level 11.7)
School Psychologist
Sara A. Teta, M.S.Ed., Psy.M.

### Appendix F

Taxonomy for Transition Programming evidence-based practices (EBP's)

and the 16 In-School Predictor Transition Practices for Post-School Outcomes

Presence in PSO Survey and in the NPS Program

The Taxonomy model includes 5 transition areas with sub-categories. A range of transition practices and activities support each sub-category and include approximately 150 evidence-based practices (EBP's) and activities. The Taxonomy self-assessment completed by the school professionals comprehensively included all of the transition practices and activities. The levels of implementation of 57 of the Taxonomy EBP's are included in the table.

The following table indicates:

- a) If the Taxonomy sub- category and the 16 in-school predictor transition EBP's for post-school outcome success were represented on the Post-School Outcomes (PSO) Survey
   (✓)
- b) If the graduates with disabilities (G) endorsed practices in those transition areas, subcategories, or in-school predictor practices (✓)
- c) The amount of EBP's rated as present at each level of implementation (F, D, N) by the school professionals.

Ar	ea	16 In-School Predictors	PSO Survey	G	F	D	N
1.	Student-Focused Planning						
	<ul><li>1a. IEP Development</li><li>1b. Student Participation</li></ul>	1. Self-Advocacy &	✓		0	2	2
		Determination*	✓,	✓	2	2 5	0
	1c. Planning Strategies	2. Career Awareness	<b>✓</b>	 ✓	0	5 ✓	0
2.	Student Development						
	2a. Life Skills Instruction	3. Self-Care Skills for	 ✓	 	0	3	1
	2b. Employment Skills	<ul><li>4. Social Skills</li><li>5. Vocational Education</li></ul>	<b>√</b>	<b>√</b>	0	0	2
	2c. Career & Vocational Curricula	6. Occupational Courses			0	1	1
	2d. Structured Work	7. Community Experience	✓		0	0	2
		8. Work Study 9. Paid Employment	<b>✓</b>				<b>✓</b>
	2e. Assessment		✓		0	1	0
3.	2f. Support Services  Interagency Collaboration	10. Academic, Social, Family, & Other General Support 11. Framework &	✓	<b>√</b>	2	0	0
٦.	interagency Conadoration	Service Delivery			0	2	4
4.	Family Involvement	12. Parent Involvement General	✓	✓	✓	✓	✓
	4a. Family Training				0	0	2
	4b. Family Involvement 4c. Family Empowerment				1 0	2 0	1 3
5.	Program Structure				Ū	Ū	_
	5a. Program Philosophy	13. Exit Exam	✓	✓	3	1	0
		Requirements	✓	✓	✓		
		14. General Ed Inclusion	_		_	✓	
	5h D	15. Program of Study	<b>√</b>	<b>√</b>	<b>√</b>	1	Λ
	5b. Program Policy 5c. Strategic Planning	16. Transition Program	<b>√</b>	<b>√</b>	0 0	1 0	0
	5d. Program Evaluation		 		0	0	3
	5e. Resource Allocation				ő	ő	Ő
	5f. Human Resource Dev't				0_	3	4

Note. \* indicates a skill that fits in to multiple transition areas.

- indicates an area not assessed. Some Taxonomy areas were excluded on the PSO
 Survey due to a more appropriate inclusion on the Taxonomy self-assessment with school professionals.

The "PSO Survey" column indicates the presence of a survey item assessing the specific area or practice.

The "G" column indicates the presence of EBP's as endorsed by the Graduates.

The "F", "D", and "N" columns indicate the EBP's the school professionals rated in each level of implementation area.

The ratings are categorized as follows:

"F" indicates "Fully developed and implemented" practices

"D" indicates "Developing and partially implemented" practices

"N" indicates "In-development, but not implemented" or not present.

The remaining EBP's included in the self-assessment, but not included in the amounts of each implementation categories, were all rated as "Developing, partially Implemented" practices.

### Appendix G

# Technical Assistance Centers, Organizations, and Web Resources Secondary Transition and Post-School Outcomes

#### Secondary Transition

Council for Exceptional Children (CEC) Division on Career Development and Transition (DCDT)

Advanced Special Education Transition Specialist Training and Competencies
 <a href="http://www.nsttac.org/sites/default/files/assets/pdf/DCDTFactSheeCompentencies.pdf">http://www.nsttac.org/sites/default/files/assets/pdf/DCDTFactSheeCompentencies.pdf</a>

National Center on Secondary Education and Transition (NCSET)

 Provides recommendations for implementing Secondary Transition Programs and addressing barriers to implementation

http://www.ncset.org/publications/

National Secondary Transition Technical Assistance Center (NSTTAC)

Technical Assistance for implementation and Evidence Based Practices
 <a href="http://nsttac.org/">http://nsttac.org/</a>

Transition Coalition Website "Transition tips" database

www.transitioncoalition.org

US Department of Education, Institute of Education Science (IES) What Works Clearinghouse

Transition evidence-based practices that "work" in applied settings
 www.whatworks.ed.gov/

# Appendix G Continued

## Post-Secondary Outcomes

National Center for Educational Outcomes

 Provides assistance for States with PSO data collection and Annual Reporting http://www.cehd.umn.edu/nceo/

National Longitudinal Transition Study 2 (NLTS2)

 Provides data collection measures, procedures, and findings www.nlts2.org

Post-School Outcomes Center (PSOC), University of Oregon

• Provides support with data collection.

http://www.psocenter.org/