5-2024

# Trend Analysis Of Selected Special Education Transition Factors On The Post-School Outcomes Of Former High School Students With Individual Education Plans For School Years 2017 - 2020

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# TREND ANALYSIS OF SELECTED SPECIAL EDUCATION TRANSITION FACTORS ON THE POST-SCHOOL OUTCOMES OF FORMER HIGH SCHOOL STUDENTS WITH INDIVIDUAL EDUCATION PLANS FOR SCHOOL YEARS 2017 - 2020

DISSERTATION

Presented in Partial Fulfillment of the Requirements for

the Degree Doctor of Education in the Graduate School

of Texas Southern University

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Transitioning away from high school to postsecondary life can be a complicated process for any young person. This process can be made more difficult for students with disabilities if options are not put in place before they leave high school. This is where the transition process becomes an important development to help guide students with Individual Education Programs (IEPs) into postsecondary opportunities once they exit high school.

The purpose(s) of this study was to examine selected post-school transition factors of former students with disabilities who had an IEP in high school. Additionally, this study aimed to provide descriptive data on the select variables which include post-school job training, postsecondary education, and post-school employment. Lastly, this study provided insight into outcomes of students with IEPs as well as provide implications for practices for students, educators, employers, agencies, and other stakeholders in the transition process.

The data for this study utilized archival records of the Texas Education Agency State Performance Plan Indicator 14: Student-Centered Transitions Network Survey (2018-2020). This study showed the trends of the three years under investigation have not produced measurable

gains allowing more students to successfully engage in post-school outcomes once they've exited high school. The researcher positively learned that essential resources are needed for effective school-based transition planning and post-school outcomes for students with disabilities. The examination of the trends in this study supported the researcher's conclusion that more work is needed to ensure students with IEPs have the proper transition planning that takes account of their strengths and weaknesses, their wishes for post-school life in the areas of postsecondary education, employment, job training, and to become productive members of society and the community.

## TABLE OF CONTENTS


| | | Page |
|---|---|---|
| LIST OF TABLES | | vi |
| VITA | | viii |
| ACKNOWLEDGEMENTS | | ix |
| DEDICATION | | x |
| CHAPTER | | |
| 1. | INTRODUCTION | 1 |
| | Statement of the Problem | 7 |
| | Purpose of Study | 8 |
| | Significance of the Study | 9 |
| | Hypothesis | 10 |
| | Theoretical Framework | 11 |
| | Assumptions | 13 |
| | Limitations and Delimitations | 13 |
| | Operational Definition of Variables/Terms | 14 |
| 2. | LITERATURE REVIEW | 16 |
| | Literature Search Strategy | 16 |
| | Transition and Legislation | 17 |
| | Features of Transition Plans | 20 |
| | Summary | 32 |
| 3. | METHODOLOGY | 33 |
| | Types of Research Design | 33 |

Population and Research Settings ..... 33

Sampling Procedures ..... 34

Sources of Data ..... 34

Data Collection Procedures ..... 35

Identification of the Independent and Dependent Variables ..... 35

Null Hypothesis ..... 35

Statistical Analysis ..... 36

Testing of Statistical Assumptions ..... 36

4. ANAYLSIS OF THE DATA ..... 38

Statistical procedures used to identify measures of central tendency and trends from one year to the next. ..... 38

Research Questions ..... 38

5. SUMMARY, DISCUSSION, FINDINGS, RECOMMENDATIONS, IMPLICATIONS, AND CONCLUSION ..... 56

SUMMARY ..... 56

Discussion ..... 57

FINDINGS ..... 59

Limitations ..... 69

Recommendations for Practice ..... 70

Implications for Further Research ..... 71

Conclusion ..... 73

APPENDIX ..... 74

TEXAS POST SCHOOL OUTCOMES SURVEY ..... 74

REFERENCES ..... 78

## LIST OF TABLES


Table Page

1. Enrollment Status One Year Post High School in 2018 ..... 40
2. Type of School or Job Training Program Enrolled in 2018 ..... 41
3. Students Completing an Entire Term of School, Job Training or Education Program in 2018..... 42
4. Work Status Since Leaving High School in 2018 ..... 42
5. Students Working at Least 3 Months Since Leaving High School in 2018 ..... 43
6. Enrollment Status One Year Post High School in 2019 ..... 44
7. Type of School or Job Training Program Enrolled in 2019 ..... 44
8. Students Completing an Entire Term of School, Job Training, or Education Program in 2019 ..... 45
9. Work Status Since Leaving High School in 2019 ..... 46
10. Students Working at Least 3 Months Since Leaving High School in 2019..... 46
11. Enrollment Status One Year Post High School in 2020 ..... 47
12. Type of School or Job Training Program Enrolled in 2020 ..... 48
13. Students Completing an Entire Term of School, Job Training, or Education Program in 2020 ..... 48
14. Work Status Since Leaving High School in 2020 ..... 49
15. Students Working at Least 3 Months Since Leaving High School in 2020 ..... 49
16. Enrollment Status One Year Post High School in 2018, 2019, & 2020 ..... 51
17. Type of School or Job Training Program Enrolled in 2018, 2019, & 2020 ..... 52
18. Students Completing an Entire Term of School, Job Training, or Education Program in 2018, 2019, & 2020 ..... 53

19. Work Status Since Leaving High School in 2018, 2019, & 2020 ..... 54

20. Students Working at Least 3 Months Since Leaving High School in 2018, 2019, & 2020 ..... 54

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## ACKNOWLEDGEMENTS

Thank you, God, for ordering my steps and allowing me the opportunity to reach this milestone in my life. What a journey it has been getting here. I want to thank my family and friends, especially my mom, Dorothy Jones, who believed in me until God called you home. A special thank you to my son, Joshua M. Jones, who spent part of this educational journey with me. To my siblings, Benita, Phillis, Roger, and Brenda, who teased me for being in school longer than the entire family combined, thank you for your support. Sydney Welch and Nikia Mattazzi, thank you for your assistance with this project.

I would like to thank my committee wholeheartedly for supporting me with guidance, encouragement, and never-ending support throughout this project. The chats, the spats, and your patience will never be taken for granted by me. A special thanks Dr. Toya Conston without whom I would not have been able to complete this project and for the constant inspiration to look to the finish line. Dr. Emmanuel Nwangwu you are a gem that shines brighter than a thousand stars. Your knowledge, constant encouragement, and dedication to me completing this project is precious within my soul. I only hope to be able to pay it forward as you paid it to me. Thank you, Dr. Melanie Lawson, you are an inspiration for me being a future change-maker in the field of education. I appreciate you being a part of this committee. Lastly, I would like to thank my committee chair, Dr. James Cunningham, for providing me with tough love, guidance, advice, and deadlines to complete this project. Your support and efforts on my behalf allowed me to finish this project beyond my expectations. I love you all and I'm pleased to make all of you proud of me in this effort.

## DEDICATION

This work is dedicated to my son, Joshua Matthew Jones. Joshua I really appreciate that you have continuously supported me along this journey. I want you to be proud of me and know that you are the reason I kept going even when I wanted to quit. Josh you are my heartbeat, my cheerleader, my rock, and you are also my friend. This degree is just as much yours as it is mine and you are my honorary Dr. Josh. This degree is not a sacrifice on my part but a result of the sacrifices you made to spend quality time and participate in other activities with me. The Marvel movies, the Godzilla movies, and all the big releases we didn't see because I was too busy with school, oh we have plenty of time to watch them now. Rootie Poot, I love you so much!

To my mother, the late Dorothy Jones, I miss you so much and I often think that if only you could've have been here with us a few more years, God called you home. As I type this dedication, I realize that this is the first time I've cried since you passed almost two years ago. I wanted you here to witness me completing the tedious journey. I love you mama and I miss you with everything in me. I was named after you and Big Mama Elizabeth, and I appreciate that you did this more now than ever. Mama thank you for always believing in me and for encouraging me to chase whatever dreams I wanted to accomplish.

# CHAPTER 1

## INTRODUCTION

Since the enactment of the 1990 amendment to the Individuals with Disabilities Education Act (IDEA; PL 101-476), students with disabilities now receive mandated transition planning services that may begin as early as twelve years old and no later than sixteen years of age (Putlak, C., 2018). With that, the impending question of "What do you want to do after graduating high school?" indicates expectations that students with disabilities will become full contributing members of their communities (Cawthorne, J., 2016). Transitioning from high school to postsecondary education, employment, or job training into independent living can be a frightening experience for any young person, especially for students with intellectual or specific learning disabilities. The concept surrounding transition is to move from under the protection of IDEA that doesn't follow the student into adulthood (Kanaya, T., Wai, J., & Miranda, B., 2019). Transitioning into higher education is often a difficult task for any student, but with students having learning or physical disabilities, the task of navigating college, employment, or vocational training may seem impossible (Paul, S.M., 2010). Thus, studies that examine the outcomes of students with disabilities after leaving high school are imperative for educators to determine how to best serve this specific student population. For almost 30 years, educators have been held accountable for transition planning for students. However, in postsecondary education, competitive employment, and vocational training they are still underrepresented nationwide (Putlak, 2018) Often, such students continue to face obstacles in obtaining practical post-school outcomes.

IDEA also called for the alignment of the student's courses of study to include transition planning that enables the student to meet measurable postsecondary goals (IDEA, 2004). Under

IDEA (2004), transition planning is required for all students beginning at age 16. The components of transition planning includes administering assessments to identify students' strengths, interests, needs, and preferences; (2) developing post-secondary goals based on the results of the assessments; (3) developing a high school plan that includes relevant courses of study, related services, and community experiences that prepares students for post high school success; and (4) enacting a coordinated set of activities to help the student achieve his or her postsecondary goals (Lillis, J.L., 2021). IDEA requires students and their parents to be a part of decision-making in the individual education program transition process (20 U.S.C. 1416(a)(3)(B)). Research has shown that schools complying with the regulations for IEP transition planning under IDEA have been linked with improved post-school outcomes (Gaumer, Erickson et al., 2014). Therefore, analyzing the post-school outcomes of students who receive IEPs will provide insight into whether these individualized plans are preparing students for life after high school.

Prior to 1975, the Education for All Handicapped Children Act (EHA, P.L. 94-142), students with disabilities were denied a free and appropriate education (FAPE) because programs did not exist to ensure they received equal access to an education (USDOE, 2007). Since the passage of the EHA, much progress has been made in meeting goals for developing and implementing effective programs and services for early intervention, special education, and related services for students with disabilities. The EHA made the Individualized Education Program (IEP) the foundation of special education needs identification, goal setting, service and setting definition, and student assessment (Fish, 2008; Goldstein & Turnbull, 1982); and school districts became responsible for scheduling and facilitating IEP meetings in ways that maximize the opportunity for parents to help determine these critical aspects of their children's education

(Drasgow, Yell, & Robinson, 2001; Simpson, 1996). The IEP is the roadmap that guides the student's program of special education instruction, its supports and services that are needed for making progress and thriving throughout the K-12 journey (Yell, M.L., Conroy, T., Katsiyannis, A., & Conroy, T., 2016). A contract with guiding instruction, the IEP informs all essential parties of a student's present levels of performance and functioning, his or her specific disability, goals for academics or behavior, any accommodations that will assist the student in achieving said goals, feedback from current teachers, parent input about home life and goals for after high school, and what goals the student wishes to achieve for himself or herself.

The IEP also includes standardized testing scores for the previous year and Lexile (reading) level (TEA, 2023). These scores are included because they assist the IEP team in understanding the student's abilities and challenges in many different areas. Consistency in the IEP is essential to guarantee that the student is properly served (TEA, 2023). Assessment data provides information about the student's strengths, weaknesses, expected progress, and supports required to progress academically (CDE, 2023). Moreover, an IEP is a written legal document completed by an Admission, Review, and Dismissal (ARD) committee that every school age child 3 and up to 21 must receive it if he or she has been determined to have one or more of 13 conditions covered under IDEA, including learning disabilities or emotional disturbances (USDOE, 2007). The IEP guarantees that every child with a disability receives a free and appropriate education and must be a specifically tailored document designed precisely for each student (USDOE, 2007). IEPs make certain an appropriate education for students with disabilities is realistic and within reach. Teachers, parents, in some instances the student, along with other school personnel with knowledge and experience come together to produce an effective IEP that will support the student with a disability in progressing through the general

education curriculum (Blackwell, W.H., & Rossetti, Z. S., 2014). IDEA requires specific information to be included in each child's IEP. Transition information is one part that must be included in the student's IEP starting from as early as 12 years old and continuing no later than sixteen years of age (IDEA, 2004).

Students with learning disabilities who encounter difficulties in their academics may not realize traditional college is realistic after graduation (Rodgers, E., 2022). With that, conversations must take place with the IEP teams in middle and high school and include student and family expectations in post-high school planning (Rodgers, 2022). As students career interests change, skill levels increase and improve, and more resources become available, the transition plan should be individualized to support students attempts at leading productive lives after leaving high school.

IEPs provide legal protections that ensure each child will receive a free and appropriate education, the right to supplementary aids and services, prior written notice before any change in education and the right give or deny consent to evaluations, and the right to an outside evaluation among other guarantees (Blackwell & Rossetti, 2014). The process is based on the belief that students with disabilities can make progress on challenging goals aligned to the general education curriculum at the enrolled grade level with specially designed services and supports. An IEP must be reviewed annually to determine if progress towards measurable goals is being met. The IEP can be tracked and altered more frequently if it is established that the student is not making measurable progress toward annual goals. In a student's IEP, the goals outlined should relate to how the student will be "expected to function after leaving school" (Dore, 2003, p. 127). These IEPs focus on preparing the student to transition to a productive life after school.

As mandated by IDEA, planning for the transition to adulthood must start no later than the first IEP to be in effect with the student at 16 years of age (IDEA, 2004). Annual IEP goals should include measurable postsecondary goals based on each student's strengths, interests, preferences, beliefs, and values (Morningstar & Vlavenna-Deane, 2018). Moreover, in recent years transition planning for special education students has received a great deal more intensive focus (Kraemer, B. R., Tomaszewski, B., Rentschler, L. F., Steinbrenner, J. R., Hume, K. A., McDaniel, S., Dawalt, L., Brum, C., & Szidon, K., 2022). The US Department of Education's Office of Special Education Programs (OSEP) identified transition as a key component of a school's effectiveness in relation to students with disabilities (ISBE, 2007). Both the Individuals with Disabilities Act and the Texas Education Code (TEC) include provisions for transition planning. IDEA requires an IEP any time a student is identified as having a disability and needs special education services. This need is partially based on the child's special education evaluation. If the student identified as having a disability and needing services moves within a state or to another state, he or she is entitled to the same services or services similar to what was on the previous or current IEP. The current IEP is in effect until the IEP committee has a new meeting to transfer or rewrite the plan. Thus, the IEP plays a critical role in the process of planning transition for students who have disabilities to prepare them for post-school success.

Presently, all state education agency performance plans are required to report on Post-School Transition Indicator 14: the employment and post-secondary education outcomes of students with disabilities one year following school departure (OSEP, 2007). Transition happens when a child moves from one stage of life to the next. However, transition in the IEP assists the student's move from school to post graduation and into adult life. To plan for transition is to plan for the future. Parents and educators should ask: 1. Will the student attend college, vocational

training, or some other postsecondary training? 2. Will the student work? 3. Who will provide the needed support? Students with learning disabilities need more assistance because the transition from high school to adulthood can be a difficult process. Transition planning tries to ensure that students are able to function as adults in pursuits such as obtaining employment, securing housing, or budgeting. Transition planning also increases the likelihood that students will pursue postsecondary education or vocational training to achieve success.

Through IDEA, the U.S. Department of Education mandates that each state submit an annual performance report (SPP/APR) that evaluates the state's efforts to implement the requirements and purposes of IDEA and describes how the state will improve its implementation (U.S. Department of Education). State Performance Plan Indicator 14 (SPPI) measures the percentage of youth who are no longer in high school, had individualized education plans (IEPs) in effect at the time of leaving school, and were:

a. Enrolled in higher education within one year of leaving high school,

b. Enrolled in higher education or competitively employed within one year of leaving high school, and

c. Enrolled in higher education or in some other postsecondary education or training program, or competitively employed or in some other employment within one year of leaving high school (TEA).

Transition planning should include goals after high school, residential circumstances, and work or career goals depending on what interests the student has been capable of completing (Flannery, J.E., Kohler, P. D., 2015).

## Statement of the Problem

The ability to participate in one's own community, whether through college, vocational school, or employment is a major objective for young people post-high school. However, troubling research shows that those with disabilities are exiting high school without the skills necessary to achieve those personal and life goals that would allow them to become full, contributing members of society. Furthermore, research finds that students who engage in postsecondary education, even if for one year, increase their potential for earnings which can impact overall health outcomes (Snell-Rood, C., Ruble, L., Kleinert, H., McGrew, J. H., Adams, M., Rodgers, A., Odom, J., Wong, W. H., & Yu, Y., 2020) For students with disabilities, transitioning to college or to employment is not always an easy task because the prior protections of IEPs do not follow them into their postsecondary education, jobs, or job training. IDEA protections end when the student turns 21 or exits high school, either through graduation or dropping out (IDEA, 2004). While research does highlight transition and postsecondary outcomes of education, employment, vocational training, and independent living, presently, there is little research on postsecondary outcomes related to transition planning for students with individualized education plans (IEP) under special education who are planning to attend college, going into the workforce or job training, and independent living. Current research on transition planning among this population of students is limited because most studies focus on the transition process and not the long-term results of the process. A review of the literature suggests that students with disabilities are often unprepared for post-school outcomes (Lindh, 2023). There is no research on the relationship between quality of transition planning and post-school outcomes. However, there is limited research that analyzes the impact of transition planning and

post-school outcomes. This indicates that there is a need for further analysis of post-school outcomes related to transition planning for students with disabilities.

## Purpose of Study

The purposes of this study are to analyze selected post-school transition factors of former students with disabilities who had an IEP in high school to determine if the student population under study is engaging in post-school outcomes (i.e., job training, postsecondary education, and employment). Specifically, this study is concerned with analyzing trends in selected special education transition factors in post-school outcomes from one year to the next for years 2018-2020 for students who received an IEP. Kohler's Taxonomy for Transition Planning provides the framework for analyzing these factors because the theory holds that successful transition results from five effective practices; 1) Student Focused Planning, 2) Student Development, 3) Family Engagement, 4) Interagency and Interdisciplinary Collaboration, and 5) Program Structure and Attributes (Kohler et al., 2016). The importance of individualized transition planning for students with disabilities on postsecondary education, employment and vocational training, and independent living goals is more effective when the five elements of transition are implemented into the student's IEP for post-school transition success. Moreover, research leads us to believe that if transition planning is done specifically and individually, the number of students with disabilities who engage with post-school outcomes should gradually increase from one year to the next. Additionally, this study aims to provide descriptive data on the select variables which include post-school job training, postsecondary education, and post-school employment of former high school students with IEPs. The goal is to provide a more holistic picture of the number of students engaging with the select variables as an indicator of post-school success. Finally, this study hopes to provide insight into outcomes of students with IEPs as well as

provide implications for practices for students, educators, employers, agencies, and other stakeholders in the transition process. Comprehensive program evaluation is required to correct deficiencies in current practice.

Answers to the following questions were sought:

1. Are there increases in the measures of central tendency in enrollment for students who received an IEP in any school, job training or education program since high school years 2018, 2019, and 2020 from one year to the next?
2. Are there increases in measures of central tendency in enrollment for students who received an IEP in the type of school or post-school job training for years 2018, 2019, and 2020 from one year to the next?
3. Are there increases in the measures of central tendency for students who receive an IEP in completion of an entire term of school, job training, or education program for years 2018, 2019, and 2020 from one year to the next?
4. Are there increases in the measures of central tendency for students who received an IEP in work status since leaving high school for years 2018, 2019, and 2020 from one year to the next?
5. Are there increases in the measures of central tendency for students who received an IEP and worked at least three months since leaving high school for years 2018, 2019, and 2020 from one year to the next?

## Significance of the Study

Despite the availability of post-school follow-up studies in the last twenty years, available research has concentrated on former students' post-school outcomes one year or more after leaving high school involving transition planning, preparation, and programming for

postsecondary settings, whether these outcomes involved college, vocational school, employment, or other activities (Carmeto, R., Marder, C., Wagner, M., & Cardoso, 2003). An analysis of students with IEPs in relation to transition would determine areas of need for students' post-school job training, postsecondary education planning, and post-school employment. Reflecting on this would also explain the need for future program planning and implementation that would support special teachers in secondary transition programs in decision-making for transitioning students in special education. While the federal government mandates local education agencies collect data for transition indicators, it is vital for teachers to understand the results of the Post-School Outcomes Survey for reviewing the delivery system of special education and related services. By analyzing post-school data, leaders can consider whether exiting high school students with disabilities are continuing with college or vocational school, employment, or other options, and assist students in gaining more complex levels of academic and/or practical skills that would prepare them to continue with their individualized goals towards successful post-school outcomes. Finally, this analysis will have effects for planning and programming for colleges, employers, and other transition professionals or agencies who work with graduating special education students.

## Hypothesis

The following research hypotheses were formulated from the above research questions:

$Ho_1$: There will be no increases in the measures of central tendency in enrollment for students who received an IEP in any school, job training or education program since leaving high school for years 2018, 2019, and 2020 from one year to the next.

$Ho_2$: There will be no increases in the measures of central tendency in enrollment for students who received an IEP in the type of school or post-school job training for years 2018, 2019, and 2020 from one year to the next.

$Ho_3$: There will be no increases in measures of central tendency for students who received an IEP in completion of an entire term of school, job training or education program for years 2018, 2019, and 2020 from one year to the next.

$Ho_4$: There will be no increases in measures of central tendency for students who received an IEP in work status since leaving high school for years 2018, 2019, and 2020 from one year to the next.

$Ho_5$: There will be no increases in measures of central tendency for students who received an IEP and worked at least three months since leaving high school for years 2018, 2019, and 2020 from one year to the next.

## Theoretical Framework

This study will utilize Kohler's Taxonomy (Kohler, P. D., Gothberg, J. E., Fowler, C., and Coyle, J., 2016). Kohler's Taxonomy Theory suggests that transition planning is the central basis of education that guides development of student educational programs, including strategies that keep students in school rather than "add-on" activities for students with disabilities (Kohler, 2016). Kohler's Taxonomy proposes five categories of effective practices in transition planning: 1) Student-Focused Planning, 2) Student Development, 3) Interagency Collaboration, 4) Program Structures, and 5) Family Engagement. The tenets of this theory guide the current study by providing the framework needed to examine IEPs (which includes the student-focused planning, student development, interagency collaboration, and family engagement) in collaboration with

transition planning (which includes program structures) to analyze post-school outcomes of students with disabilities.

Kohler, along with her collaborators, advanced a process in which the five categories are correlated and eventually result in successful post-school outcomes for students. Based on their research, the Taxonomy model contains universal and evidence-based practices. Student-focused planning includes the students' participation in developing the IEP, including their postsecondary education, or training goals, occupational goals, and residential goals. Student development includes formative assessments, career interest and aptitude assessments. Age-appropriate assessments identify students' interests, strengths, and likings. Student development also includes academic skills such as acceptable academic behaviors, academic strategies, and knowing by ninth grade what starts college-ready curriculum. Last, student development includes life, social, and emotional skills that include decision-making, problem solving, and developmental skills such as independent living, transportation, and people skills. Interagency collaboration meets the needs of students, families, educators, service providers, postsecondary institutions, employers, and other community stakeholders. Any additional support needed beyond high school that will make a seamless transition is really essential during this process. Family engagement promotes the role of the family in the entire transition process. Families provide essential knowledge and experiences about their child that assists in preparing them for life beyond school. The last category is program structures, where the framework is identified as program characteristics, program evaluation, and strategic planning. For program characteristics, graduation requirements are clearly defined and provided to student and parents, multiple pathways are provided for satisfying graduation requirements, and every opportunity is provided

to earn a standard diploma until age 21. Program evaluation reviews discipline patterns, drop out risks, and post-school data.

## Assumptions

The following assumptions were made relative to this investigation:

1. It was assumed that the data collected from the State would provide reliable and valid outcomes as it pertains to transition planning.
2. It was assumed that students receiving transition planning related to their goals would have positive outcomes as it pertains to post-school secondary education.
3. It was assumed that students receiving transition planning related to their strengths would have positive post-school outcomes as it pertains to job training.

## Limitations and Delimitations

The following limitations were observed in the present investigation:

1. The study will be limited to five of the twelve questions asked in the Post-School Outcome Survey.
2. The study was limited to high school students who had exited high school.
3. The study was limited to pre-existing data collected from years 2018-2020.
4. The study was limited to the transition planning process of the IEP.
5. A delimitation of the study was that not enough students participated in the post-school outcomes survey.
6. Finally, a delimitation of the study was that the survey did not extend beyond the first year of post high school tracking 2, -4 or -5 year post high school success.

## Operational Definition of Variables/Terms

1. Individuals with Disabilities Education Act – (IDEA): The federal law that aids states for the education of children with disabilities. This law gives every child with a disability and, as a result, a need for special education, the right to a free appropriate public education. Part C of the IDEA requires services to begin at birth and extend until the child turns three. Early Childhood Intervention programs deliver Part C services. Part B of the IDEA requires services for children from ages 3 through 21. Most children receiving Part B services are in public schools (TEA, 2021).
2. Individualized Education Program – (IEP): A written statement of the education program for each child with a disability that is developed, reviewed, and revised by the admission, review, and dismissal (ARD) committee, of which parents are active members. The IEP includes specific information about the student's present levels of academic achievement and functional performance (PLAAFP), participation in state and district-wide assessments, transition services, annual goals, special factors, special education, related services, supplementary aids and services, extended school year services, and least restrictive environment, among other things (TEA, 2021).
3. Present Levels of Academic Achievement and Functional Performance – (PLAAFP): For the school-aged student, the PLAAFP summarizes the current strengths and needs of the student in both academic and functional performance areas. It must include how the student's disability affects the student's involvement and progress in the general education curriculum, regardless of the setting in which the student currently receives services. Additionally, it may describe the current instructional level of the student compared to the grade level Texas Essential Knowledge and Skills (TEKS), and, if the

student is below grade level, the PLAAFP also may describe the prerequisite skills the student needs in order to achieve grade-level proficiency (TEA, 2021).

4. Local Education Agency – (LEA): A public board of education or other public authority legally constituted within a State for the administrative control, or direction, of or performance of a service function for public elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties that is recognized in a State as an administrative agency for its public elementary schools or secondary schools. LEAs include public school districts and open enrollment charter schools (TEA, 2021).
5. Disability - An individual with a disability is defined by the American with Disabilities Act as a person who has a physical or mental impairment that limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment.
6. Transition – a coordinated set of activities designed to improve the academic and functional achievement of students with disabilities so they may successfully move from school to post-school activities.
7. Special Education Leaver – A student who left high school by graduating with a regular or modified diploma, aged out, or left school early (dropped out), or who was expected to return to school, but did not.
8. Outcomes – what happens to students as a result of objectives and outputs.

# CHAPTER 2

# LITERATURE REVIEW

The purpose of this chapter is to review the existing literature related to post-school outcomes for students who had IEPs in high school. Specifically, the literature is concerned with examining trends of post-school outcomes for former students who had IEPs in effect at the time they exited high school. This chapter presents a theoretical context and supporting scholarship in which to examine the problem and elements of post-school outcomes. Chapter 2 provides a foundation for this study with a literature review of the relevant research on post-school outcomes and related legislation in special education. This is followed by a discussion of transition and postsecondary outcomes for students with learning disabilities. This chapter concludes with a discussion of transition Indicator 14 and the data that is collected for this indicator of post-school outcomes for students with disabilities.

## Literature Search Strategy

For this literature review, various databases were searched from Texas Southern University's library and online publisher sites, including ProQuest, ERIC, JSTOR, Google Scholar, and Sage Premier. Employment and transition-related data from the US. Bureau of Labor Statistics, Human Services Research Institute, and Texas Education Agency (TEA) were also used. Searches focused on post-school transition, specifically for people with an individual education plan. Also searched was literature published between 2008 and 2023 employing Boolean searches to connect words or phrases used and several related keywords were used in conducting the search including transition, learning disabilities, post-school transition, post-school outcomes, employment, and special education.

## Transition and Legislation

Considerable attention has arisen on how students with individual education plans perform post-school in terms of work and adult roles upon leaving high school and entering community settings (Johnson, C., 2008). Individuals with documented learning disabilities continue to experience poor post-school transition outcomes (Blick et al., 2016). Researchers in higher education have been collecting data for over 30 years to determine the percentage of youth in special education who are employed in postsecondary or training programs after leaving high school. The post high school data collected at the national level has provided the impetus for creating national transition policy for students with disabilities. Transition services for students in special education was mandated with IDEA in 1990 and has been strengthened with each subsequent reauthorization of IDEA. IDEA legislation requires transition planning to be integrated into the student's IEP planning process and developed no later than the student's 16th birthday. The transition component of the IEP is designed to provide instruction, community experiences and, development of employment and other post-school living objectives focusing on preparing youth with disabilities for life after high school (Johnson, C., 2008).

Transition is defined as the process or a period of changing from one state or condition to another (Dunn, 2012). In education, transition describes the progression from elementary to middle school to graduating high school and entering adulthood. Theorizing about transition goes back to the last 30 years of the 20th century with continuing questions about post high school life for students. What do you want to do after high school? Are you going to college? Where do you want to live? Assisting students with disabilities in high school and beyond developed with growing activism resulting in a shift in legislation towards increasing services for students in transition planning and preparation and accessing postsecondary options and

opportunities. Activism called for students with disabilities to access postsecondary options and to seek accommodations and support services in postsecondary settings (Baer et al., 2007).

Prioritizing the need for transition from high school to postsecondary education or employment was brought to national attention by the Office of Special Education and Rehabilitation Services (OSERS) in the 1980s (Halpern et al., 1995). As a result of this increased attention, laws have been proposed, written, implemented, and changed requiring transition services to be written into IEPs for students with disabilities. These laws have also prompted questions about the participation rates and access for students with disabilities.

Transition services for student with disabilities have been supported by laws such as Section 504 of the Rehabilitation Act of 1974, Public Law 94-142 (the Education of All Handicapped Children Act or EAHCA, 1975), IDEA (1990, 1997, 2004), the Americans with Disabilities Act (ADA, 1990, 2008), and Every Student Succeeds Act of 2015. These laws continue to lead the way for transition services for special education students. The most significant of these education laws for transition programs is IDEA. The rights of special education students are supported by terms such as "free, appropriate public education" and mandating that students receive an education in the "least restrictive environment" (U.S. Department of Education, 2007). IDEA defined transition services as:

> "A coordinated set of activities for a student with a disability that is designed within a results-oriented process, that is focused on improving the academic and functional achievement of the student with a disability to facilitate the student's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation, and is based on the

> individual student's needs, taking into account the student's strengths, preferences and interests. In addition to the above, transition services shall include: (1) instruction, (2) related services, (3) community experiences, (4) the development of employment and other post-school adult living objectives, and (5) if appropriate, acquisition of daily living skills and functional vocational evaluation. (IDEA, 1997, 2004; N.J.A.C. 6A:14- 3.7(e)11; APPENDIX D, 20 U.S.C. § 1401 (34), 20 U.S.C. § 1401(34) (34))."

IDEA's definition of transition signifies the need for inclusion of individualized transition statements and a transition plan that is included in the child's IEP (Schmitz, 2008). Every student receiving special services and related services must have an individualized statement describing the student's interest after graduating or exiting high school. Each student must have a transition plan that includes measurable postsecondary goals based upon age-related appropriate transition assessments related to training, education, employment, and independent living skills (Prince et al., 2014).

IDEA expanded its definition to suggest what would consist of an instructional element that would prepare students for postsecondary education, vocational training, employment, and independent living. These instructional elements are discussed in the next section on transition. These post-school options later become what is now known as indicators of post-high school outcomes for students with disabilities or Indicator 14.

Once a student graduates or exits high school, IDEA and its transition requirements end and are no longer covered by this law. Although they are no longer covered by IDEA, students with disabilities continue to be covered by the Americans with Disabilities Act (ADA, 2008) which protects the equal opportunities of students through postsecondary life. The ADA still focuses on providing equal access to education, employment, public services and

accommodation, and transportation through reasonable modifications and accommodations. With IDEA and the ADA improving opportunities for students with disabilities, research shows these students still have disappointing outcomes after graduating or leaving high school (Wagner et al., 2007).

In strengthening the transition services with the reauthorization of IDEA in 2004, appropriate post-secondary goals based upon age-appropriate transition assessments related to training, education, employment, and independent living skills (20 U.S.C. § 1414(d)(1)(A)(i)(VIII), the U.S. Department of Education now mandates that each state develop a State Performance Plan (SPP) across 20 identified indicators. Indicator 14 mandates that states collect, analyze, and report post-school outcomes for youth in special education to determine the percentage of young people who have been employed or have enrolled in some type of postsecondary education or training program or both within one year of graduating or leaving high school (20 U.S.C. 1416(a)(3)(B) (IDEA). States are mandated to conduct follow-up investigations starting with the 2006 special education leavers to ascertain post-school outcomes and report those outcomes to the US Office of Special Education (OSEP) on an annual basis.

## Features of Transition Plans

For students with disabilities, transition is mandated for students with disabilities to successfully set goals and identify services needed to move from high school to a postsecondary setting that may include higher education, vocational training, employment, and independent living (IDEA, 2004). IDEA's requirements state that the local education agency (LEA), or student's public school, coordinates the transition planning process as part of every student's annual IEP beginning at age 14. The various agencies, providers of services, representatives, and others along with staff must, by the time the child enters high school, collaborate, and establish

coordinated activities to assist with instruction, employment, services, living skills, and independent living as expressed by the student's interest beyond high school. The elements that are to be explicitly included in the transition planning services as mandated by IDEA (2004) are postsecondary goals for education, postsecondary goals for employment, independent living skills, course of study, related services, careers, post-school activities, community experiences, daily living skills, and functional vocational evaluation.

***Postsecondary Goals***. Essential to determining postsecondary goals is assisting students in determining what their vision entails for their own postsecondary life entails. What does the student envision for himself or herself after leaving high school? School staff charged with developing the transition process must be creative with asking questions to expose what the student would like to pursue post high school. The information must be drawn from the students own needs, preferences, interests, and strengths for post-high school Indicator 14 elements. These elements, post-high school education, employment, vocational training, and independent living, will steer all other elements in the transition planning process.

The student's choice of post-high school goals should evolve from a range of activities and strategies featuring the elements of the transition objectives. Enhancing mandated graduation requirements with course experiences and opportunities may reveal a student's area of interest. Implementing curriculum in courses for career exploration can further expand preparation for learning about careers and life post high school.

The transition team should support the student with the elements of the transition plan relative to services. The student's IEP may state the student has related services such as speech therapy, occupational therapy, and physical therapy which may need continuing consideration post high school as the services end. For the transition team, this may involve contacting outside

agencies that might offer services to assist with mobility. At this stage revisiting post-high school goals is important for addressing the multiple environments and locations the student may experience outside the high school setting.

Employment practices may include participation in an employment activity within the actual work setting in a community. Work experience may include the student taking courses on career awareness, training, and preparation for work-related activities (Storm et al., 2000). It is important that the student has an opportunity to revisit his or her postsecondary career goals and revise them if necessary.

The transition goals for independent or post-school living involve reviewing assessments and student goals as part of the IEP. The goals may include budgeting for housing, transportation, and utilities. These goals may also include learning how to make banking transactions, register a vehicle, and maintain vehicle insurance and inspections, file taxes, address medical needs and other activities required for semi- or independent living. Daily living skills transition goals may include self-care such as maintaining personal hygiene, shopping, cooking, and preparing for unexpected emergencies in or outside the home.

The last element in the student's transition plan is the Functional Vocational Evaluation (FVA). The FVA relates to any assessments of a student's needs, strengths, interests, and preferences taken after the initial assessments. The FVA is more targeted to gauge a student's aptitude and skills that aid in establishing additional training and education placement opportunities. Gathering this data for the IEP includes targeting a student's exact area of vocational curiosity, developing a vocational outline, providing samples of employment profiles from volunteer service agencies or meeting with vocational rehabilitation services to provide a functional vocational assessment.

These elements must be included in the student transition section of the IEP and establish the transition plan. The transition team, according to Test et al. (2006), must consider and analyze the individual student's needs in planning for these sections in the IEP. It is critical to include these elements in each child's education plan maximizing the value of the student's education, employment, and post-high school life even if their disability presents as mild to non-existent and the student may appear not to need all parts of the plan.

Young people with learning disabilities continue to experience poor post-school transition outcomes (Blick et al., 2016). Despite policies and programs designed around special education students, many individuals with learning disabilities still tend to be unprepared for post-school transition to adulthood. Students lack relevant career development opportunities and employment experiences, thwarting job ability. Spending cuts and limited resources have also contributed to poor transition outcomes (Bouck & Chamberlain, 2017). Bouck and Joshi (2016) conducted an analysis of the National Longitudinal Transition Study-2 (NLTS-2) data focusing on students with mild intellectual disabilities and finding inconsistencies between transition goals and goal outcomes for this specific population. Their results indicate alignment was established between goals and outcomes for employment but not for independent living.

The absence of vocational skills, job experience, and career development opportunities subsequently forces individuals with learning disabilities to find jobs based on availability rather than benefit or interest (Nota et al., 2014). Without effective transition planning programs, students with learning disabilities will continuously be subjected to the cycle of forced dependence in terms of being financially or functionally reliant on government assistance or other support systems. The number of young people with disabilities pursuing postsecondary education or employment post-high school is significantly lower than it is for the general

population (Shandra & Hogan, 2008). A considerable number of general population students leaving high school either continue their education or are employed (Shandra & Hogan, 2008).

Research in the area of transition has identified evidence-based predictors for improving post-school outcomes for students with learning disabilities (Test et al., 2009). A meta-analysis of 22 studies was conducted by Test and colleagues determining which predictors show evidence of improving post-school outcomes in the areas of postsecondary education, employment, and/or independent living. The results found that out of 16 predictors, 11 were significantly linked with post-school education, five were significantly correlated with post-school independent living, and all 16 predictors linked with post-school employment (Test et al., 2009). Transition services are intended to result in improved post-school outcomes. IDEA emphasized the importance of including students with learning disabilities in the general education curriculum to the fullest extent possible in order for a positive and effective educational experience to be achieved. Students included in general education learn relevant academic skills, people skills, and how they apply to real life experiences. Among these people skills are social development, self-care, and autonomy, which are needed for independent living experiences (Carter & Lunsford, 2005). Alquraini and Gut (2012) conducted a meta-analysis that revealed students with learning disabilities educated in the general education inclusive setting increased their academic performance in reading and math and their social and communication skills. They were also more likely to engage in post-high school employment. High school students with high-incidence disabilities educated in an inclusive setting had positive postsecondary education outcomes two years after leaving (Rojewski et al., 2015).

Post-school outcome studies continue to report low graduation rates, dismal employment rates, and difficulties with independent living for students with disabilities (Bureau of Labor

Statistics, U.S. Depart of Labor [BLS], 2012; National Council on Disability [NCD], 2011). Disability employment has increased in recent years but still lags behind overall employment. Furthermore, the employment-population ratio for persons with a disability declined from 18.6 % in 2010 to 17.8% in 2011 (BLS, 2012, p.1). Research suggests that transition improvement must align with educational initiatives in order to develop the specialized services needed to support students with learning disabilities (Morningstar et al., 2012). After twenty years of mandates and policies, students with learning disabilities continue to have poor post-school outcomes (Morningstar & Kleinhammer-Tramill, 2005). Post-school outcomes improve when evidence-based practices are implemented for students with learning disabilities (Test et al., 2009).

***Reporting Post-school Outcomes.*** Indicator 14 is a federal accountability initiative designed to generate data on students with disabilities one year after graduating or exiting high school. It is one way to assist us in understanding whether students' education has prepared them for adult life. Currently the Department of Education's Office of Special Education Programs mandates only two areas for examination: postsecondary education/training and employment (Gerber et al., 2014) that are used to develop goals for 6-year State Performance Plans (SPP). Indicator 14: Post-school Outcomes requires all school districts to provide follow-up data on students who had IEPs and who graduated dropped out, and those who have aged out. Indicator 14 data specifically seeks data on the percentage of youth who had IEPs in effect when they exited high school and were:

A. Enrolled in higher education within one year after graduating high school.
B. Enrolled in higher education or employed competitively within one year after graduating.

C. Enrolled in higher education or a vocational education program; competitively employed or in some other employment within one year of leaving high school (20 U.S.C. 1416(a)(3)(B)).

Few studies have examined the process of gathering post-school outcome data. Indicator 14 requires that school districts collect their own data of post-school outcomes and devise their own SPP after analyzing and identifying strengths and weaknesses in preparing students with disabilities for post-school life (Garber, 2014). This effort at accountability is to set rigorous goals to measure improvement over time. Although some states such as Washington have been collecting this data for a number of years, it was not until February 2009 that Indicator 14 data had to be incorporated into SPPs.

Annual Performance Report Indicator 14, which measures post-school outcomes, showed a decline in median data for post-secondary education and employment for youth with disabilities who exit school. The Department of Labor's Annual Youth Labor Force Participation Rate and Unemployment Rate shows that only 46.7% of adults with disabilities age 20–24 are part of America's labor force (compared to 72% of comparably aged nondisabled Americans). This results in an unemployment rate of 16.5% for young adults with disabilities, twice the rate of nondisabled Americans (8.7%) (U.S. D.O.L. 2023).

Students with learning and intellectual disabilities continue to face multiple barriers to inclusion and are forced to rely on family members or others for daily functioning skills, financial support, and encouragement. Transition services are used to assist students with disabilities as they "transition" from high school to post high school adult life. Transition should prepare students to exit high school and successfully integrate into their communities, hold jobs, have a good relationship with others, and maintain a residence (Curtis et al., 2009). Although

students with disabilities are still facing multiple barriers, these students are increasingly participating in postsecondary education in the United States that may be attributed to the introduction of anti-discrimination laws over the past thirty years (Vess, 2007).

Concern for post-school outcomes for students with disabilities created numerous research studies focusing mostly on the outcome of employment. Studies using NLTS-2 data examined more specific outcome areas such as postsecondary education and postsecondary living and community participation. Evidence suggests that transition to postsecondary opportunities can present difficulties for students with disabilities that can inhibit pursuing employment opportunities. One of the fundamental issues with work is that students with learning disabilities often claim they do not receive enough support from the community (Ellenkamp et al., 2016).

***Post-High School Outcomes*** Post-high school studies of students with disabilities are an important educational area of research that is time, finance, and resource intensive. Earlier research studies focused on the prospects and post-school adjustments of students with disabilities (Windle, 1962). The beginning of the first national studies of post-school outcomes was the National Longitudinal Transition Study (NLTS), which was mandated by the U. S. Department of Education as a five-year study from 1985 to 1990. This study collected data on students with disabilities and reported student outcomes in the areas of post-secondary education, employment, wages, and residential independence in the first five years after leaving high school (Wagner et. al., 1991). The NLTS is a US Department of Education sponsored longitudinal study intended to provide researchers with a picture of the experiences and achievements of special education students as they transition from high school to adult life. The study seeks to answer the

four-year post-school outcomes of students with disabilities with non-disabled peers in postsecondary education, employment, household status, and community integration.

Following the NLTS study, postsecondary education enrollment, employment, independent living, and employment wages, increased for students with disabilities (Blackorby & Wagner, 1996). The U.S. Department of Education mandated a second study that collected data on the transition experiences of 13-16-year-old students until the age of 23 (Wagner, et al., 2005). The second NLTS study identified key characteristics and predictors that have become identifiable domains for the educational transition of students with disabilities after high school. The domains identified are postsecondary education, employment, and independent living, among others.

Wagner et al. (2005), in reviewing the findings, reported data comparisons based on the post-high school experiences of students with disabilities who graduated or dropped out of school for at least two years. The findings show differences in high school graduation rates, living accommodations post high school, various social and community engagements, and various levels and rates of employment (Wagner, et al., 2005). The two studies conducted by the NLTS demonstrate that students with disabilities simply graduating from high school does not result in students being prepared to successfully transition into adult life (Test et al., 2006).

IDEA's last federal mandate established accountability practices by requiring state departments of education and local school districts to consider what students are doing beyond high school by collecting post-high school outcome data (Wehman, 2013). Each year, as part of the Annual Performance Report (APRP), school districts are mandated to submit State Performance Plans (SPP) to the US Department of Education's Office of Special Education Programs (OSEP) indicating the progress of students with disabilities (IDEA, 2004). The SPP

Indicator 14 deals specifically with post-school outcomes. Indicator 14 of the SPP requires districts and states to collect and report post-school outcome data one year after students have exited high school (NTACT, 2018, pp 1-2).

After a student with a disability graduates from high school, both the student and his or her family enter into a time of transformation and doubt about the future. If the student's transition plan developed in high school focused on postsecondary education, attaining a job, and independent or assisted living with community participation, he or she is extremely fortunate. But, with the lack of federal and state resources, services, and other supports, shared with long waiting lists, many individuals with disabilities are not so fortunate. Also, they are often dependent upon their families to function as a guide to help access services and assistance. Emotional unrest among family members is common when discovering a place for their child is uncertain after high school. Many times, the family must endure certain financial modifications as free services may end after a student reaches the age of majority.

Starting in 1987 and continuing to the present, the U.S. Department of Education sponsored a series of National Longitudinal Transition Studies (NLTS; i.e., NLTS, NLTS2, NLTS 2012), which followed several cohorts of youth with various disabilities during and after high school. Descriptive data that was collected presented information to assist the field of secondary transition and understand how school experiences of students with disabilities influence their school and post-school outcomes. Students with disabilities, historically, do not experience post-school success at the same rates as their nondisabled peers, with gaps in the areas of postsecondary education, employment, and independent living (Newman et al., 2011; Sanford et al., 2011). These trends continue to the present day. National data show gaps between students with and those without disabilities enrolling in postsecondary education (National

Center for Education Statistics, 2019) and attaining a bachelor's degree (U.S. Census Bureau, 2016). Additionally, data from the U.S. Bureau of Labor Statistics (2018) revealed people with disabilities who earned a bachelor's degree were three times less likely to be employed than people without disabilities. These outcomes indicate many students with disabilities are not accessing in school the transition-related instruction and support necessary to be successful after exiting school (Trainor et al., 2020).

Studies have produced a reliable set of predictors of school activities that positively correlate with post-school success in education, employment, and independent living (e.g., vocational education, inclusion in general education, life skills instruction, compensated employment/work experience). Test, Mazzotti, et al. (2009) identified 16 predictors of post-school employment, education, and independent living success. Of the 16 predictors four positively correlated to all three outcome areas (i.e., inclusion in general education, compensated employment/work experience, self-care/independent living skills, student support); seven predictors positively correlated to post-school education and employment (i.e., career awareness, interagency collaboration, occupational courses, self-advocacy/self-determination, social skills, transition program, vocational education); and five predictors positively correlated to post-school employment (i.e., community experiences, exit exam requirements/high-school diploma status, parental involvement, program of study, work study).

Haber et al. (2016) conducted a meta-analysis to measure the strength of the Test, Mazzotti, et al. (2009) predictors, updating the search through May 2010. Their study found statistically significant effects for career technical education, interagency collaboration, inclusion in general education, self-determination, and paid employment/work experience on both employment and education outcomes. These results are of real importance because the predictors

can provide schools, districts, and state education agencies with information on factors that can guide secondary transition program development (Rowe et al., 2015).

The purpose of Individuals with Disabilities Education Act (IDEA; 2004) undoubtedly indicates special education teachers need to prepare students for post–high school education, employment, and independent living, and IDEA 2004 requires that IEPs for students of transition age contain postsecondary employment, postsecondary education, and as needed, independent living goals (Kochhar-Bryant, Shaw, & Izzo, 2007). Annual transition goals operationalize skills students need to acquire to enable them to accomplish their postsecondary goals (Test et al., 2006). Benz, Lindstrom, and Yovanoff (2000) found that basic academic skills, such as reading, writing, and arithmetic, alone are inadequate to support students with disabilities to attain their post-school goals.

Post-school transition research suggests young adults with disabilities continue to struggle in making substantial gains in life after exiting high school. For example, Blackorby & Wagner (1996) reported that the post-school employment rate of young adults with disabilities was significantly lower than that of their nondisabled counterparts (57% vs. 69%). The National Longitudinal Transition Study–2 (Newman) more recently compared the employment rates of young adults with and without disabilities and found similar gaps: 57% of young adults with disabilities were employed at the time of the Wave 3 interview compared to 66% of young adults without disabilities. Young adults with disabilities have historically occupied low-skill and low-wage jobs (Mithaug, Horiuchi, & Fanning, 1985; Newman et al., 2009; Sitlington & Frank, 1990). Though low-skill and low-earning jobs may serve as an entry to higher paying future employment, the lack of further education may make these jobs become a final destination for most young adults of this population. Current studies have found that young adults with

disabilities are attending postsecondary education at significantly lower rates, 45% to 53%, than are their peers without disabilities (Newman et al., 2009).

## Summary

It is agreed that some young adults with disabilities struggle to adjust effectively in life beyond high school, but to further assess whether school services prepare young adults for employment and postsecondary education as mandated in IDEA, researchers must continue to study the outcomes of youth with disabilities once they graduate or leave school. In addition to observing the Office of Special Education Program's reporting requirements, a crucial reason for states to conduct follow-up studies on students with disabilities is to gain the data needed to improve school programs. Follow-up research can form the foundation of evidence that pushes school transition programs to become best practices.

# CHAPTER 3

# METHODOLOGY

The primary purpose of this research was to examine selected post-school outcomes (post-school job training and post-school employment) for students who have graduated or exited high school with individualized education plans (IEPs). Discussion in this chapter was divided into nine (9) major areas: (1) Type of Research Design; (2) Population and Research Setting; (3) Sampling Procedure; (4) Data Source; (5) Data Collection Procedure; (6) Identification of Independent and Dependent Variables; (7) Null Hypothesis; (8) Statistical Analysis; and (9) Testing of Statistical Assumptions.

## Type of Research Design

The data collected was quantified by employing a trend-analysis of the variables through descriptive statistics. The data collected from TEA covered the school calendar years 2017-2020. In this type of design, we will be examining participant responses to Indicator 14 measurements were examined.

## Population and Research Settings

The population for this analysis consisted of high school students with IEPs who graduated or otherwise exited public high school in the State of Texas for the academic years 2017-2020. The educational data generated from these schools was derived from the records of the Texas Education Agency's (TEA) Indicator 14 Program.

TEA governs public education on the primary and secondary levels. TEA is responsible for providing leadership, guidance, and support to all public-school districts in Texas. Following the mandate of the Office of Special Education Programs to gather State Performance Plan (SPP)

data, the TEA is tasked with gathering this information from all public-school districts in the state that have special education programs and students with IEPs.

## Sampling Procedures

The sampling procedure utilized in the present study was the results from simple random sampling for former students. Archival data for the current analysis was obtained and broken down by participant responses over the three school years. To determine whether there were any differences in responses, former high school students selected for this study were stratified according to the independent variables (higher education, competitively employed, some other postsecondary education or training program, some other employment, and not engaged in 1-4 above). Are there any differences in responses?

## Sources of Data

The archival (secondary) data for the current descriptive investigation was obtained from the Texas Education Agency (TEA). The primary goal of the TEA is to support public schools within the 20 educational service regions of Texas.

The TEA is required to collect and report data from local education agencies (LEAs) for the State Performance Plan/Annual Performance Report (SPP/APR), and the LEAs are required to report data on sixteen State Performance Plan Indicators (SPPIs) identified by the United States Department of Education's Office of Special Education Programs (TEA, 2023). State Performance Indicator (SPPI) 14 provides a measurable percentage of former students having had individual education programs (IEPs) in effect at the time they left school and were either enrolled in higher education, postsecondary training or competitively employed within one year post high school. This information is collected not only for federal reporting to the Department of Education, but also for program improvement.

LEAs collect the information through the Public Education Information Management System (PEIMS) during the spring/summer Postsecondary Outcomes Survey.

## Data Collection Procedures

The researcher contacted by phone and follow-up email, the Texas Education Agency during the spring semester 2023 requesting 2018-2020 reports of the State Performance Plan Indicator 14 data. The email was sent through the Public Information Request website. The email summarized the purpose and theoretical bases of the study and outlined the methodological procedures to be followed in conducting the study.

After receiving permission to use the data from the TEA website, this document was shared with the university's Human Subjects Committee for final approval to conduct the study. The researcher agreed to all demands in safeguarding the data.

## Identification of the Independent and Dependent Variables

For the present analysis, three variables were used. The variables included: post-school job training, postsecondary education, and post-school employment. The dependent variables quantitatively measured characteristics of post-school outcomes, which include enrollment in any school, job training, or education program one year since high school; type of school or job training; completion of school, job training, or education program; and work status since departure from high school. Results from year to year were compared in order to determine if there were increases or decreases in selected outcomes.

## Null Hypotheses

The following research hypothesis were formulated from the above research questions:

$Ho_1$: There will be no increases in the measures of central tendency in enrollment for students who received an IEP in any school, job training or education program since high school for years 2018, 2019, and 2020 from one year to the next.

$Ho_2$: There will be no increases in the measures of central tendency in enrollment for students who received an IEP in the type of school or post-school job training for years 2018, 2019, and 2020 from one year to the next.

$Ho_3$: There will be no increases in measures of central tendency for students who received an IEP in completion of an entire term of school, job training or education program for years 2018, 2019, and 2020 from one year to the next.

$Ho_4$: There will be no increases in the measures of central tendency for students who received an IEP in work status since leaving high school for years 2018, 2019, and 2020 from one year to the next.

$Ho_5$: There will be no increases in measures of central tendency for students who received an IEP and worked for at least three months since leaving high school for years 2018, 2019, and 2020 from one year to the next.

## Statistical Analysis

Inasmuch as the dependent variable was measured on a quantitative scale, trends from one year to the next were highlighted. This statistical approach employed descriptive statistics (Measures of Central Tendency, Frequencies, and Trends in data collected for years 2018-2020).

## Testing of Statistical Assumptions

Measures of central tendency allow the researcher to compare different groups to determine the relative relationship of intermediate values (Sirkin, R. M., 2005). The statistical

assumptions when using measures of central tendency are that the data is normally distributed, the data is independent, and groups being compared have comparable variance. Each measure of central tendency assumes a different level of measurement. The mean requires interval or ratio level data where no extreme outliers are included. The median requires ordinal level data. The mode is the only measure of central tendency which may apply nominal data. All three measures of central tendency may be used with interval-ration data but only the median and mode may be applied to ordinal level data. Only the mode may be used at the nominal level.

# CHAPTER 4

## ANALYSIS OF THE DATA

The purpose of this study was to analyze selected post-school transition factors of former students with disabilities who had an IEP in high school to determine if the student population under study was engaging in post-school outcomes (i.e., job training, postsecondary education, and employment). Specifically, this study was concerned with analyzing trends in selected special education transition factors in post-school outcomes from one year to the next for years 2017-2020 for students who received an IEP. The objective was to determine if transition planning in high school promotes the desired outcomes of postsecondary education, employment, or vocational training. This secondary data analysis was conducted using descriptive statistics and trend analysis.

### Statistical procedures used to identify measures of central tendency and trends from one year to the next.

Primarily, descriptive statistics were utilized to review the sample represented by the data and to identify and describe the variables in the study. After measures of central tendency were identified, the researcher created a plot map to determine if differences existed in frequencies for years under study.

### Research Questions:

1. Are there increases in the measures of central tendency in enrollment for students who received an IEP in any school, job training or education program since high school for years 2018, 2019, and 2020 from one year to the next?

2. Are there increases in the measures of central tendency in enrollment for students who received an IEP in the type of school or post-school job training for years 2018, 2019, and 2020 from one year to the next?
3. Are there increases in the measures of central tendency for students who received an IEP in completion of an entire term of school, job training or education program for years 2018, 2019, and 2002 from one year to the next?
4. Are there increases in the measures of central tendency for students who received an IEP in work status since leaving high school for years 2018, 2019, and 2020 from one year to the next?
5. Are there increases in the measures of central tendency for students who received an IEP and worked at least three months since leaving high school for years 2018, 2019, and 2020 from one year to the next?

To perform this analysis, data were collected from and analyzed from the Texas Education Agency for years 2017 to 2020 using a questionnaire study. The purpose of using a questionnaire study design was to follow up with persons previously enrolled in high school and had an IEP in effect at the time of leaving high school. The data collected were to determine former students' post high school activities. An overview of data collection methods and results from analysis are provided below. Specifically, an analysis was performed on State Performance Plan Indicator 14: Post-School Outcome Survey data for years 2018-2020.

Each year, the TEA collects data from local education agencies (LEAs) for the State Performance/Annual Performance Report (SPP/APR). The United States Department of Education’s Office of Special Education Programs requires data on sixteen State Performance Plan Indicators (SPPIs). LEAs are mandated by the state to provide well-timed, valid, and

reliable data that reflect the measurement for each indicator. For the purposes of this study, data trends of Indicator 14: Post-school Outcomes are being analyzed. The analysis was conducted on the final state report of post-school outcomes for statewide public schools and charter school districts in the state of Texas. The survey included eleven questions; but for the purpose of this study, five questions were analyzed.

The target population for use in this study was all previously enrolled students who had an IEP in effect at the time of exiting high school and graduated or dropped out during the year under study. The target population for all three years under study was 56,557 in number. The accessible population under study was 13,871.

Current federal and statewide initiatives are focused on improving post-school outcomes for students in special education. Three important variables for analyzing post-school outcomes include: school, job training, or education program. Using the Summary of Responses, the post-school outcomes for participants are displayed in the tables below. For the three years 2018, 2019, and 2020, a total of 13,871 former students completed the survey at a completion rate of eighty-two percent.

**Table 1**

**Enrollment Status One Year Post High School in 2018**

| Q1: 2018 | Number | Percent |
|---|---|---|
| Enrolled in any School, Job Training, or Education Program Since Leaving High School | | |
| No | 2334 | 59% |
| Yes | 1554 | 40% |
| Don’t know/Refused | 33 | 1% |
| Total | 3921 | 100% |

In survey year 2018, the population of respondents indicating they were not enrolled in any school, job training, or education program since leaving high school was fifty-nine percent (Table 1). Just under forty percent answered they were enrolled in a program and less than 1 percent did not answer or refused to answer. Of the respondents answering yes to being enrolled in a program, approximately four percent were enrolled in a high school completion program (Table 2), sixteen percent were enrolled in a short-term education or employment training program.

**Table 2**

**Type of School or Job Training Program Enrolled In 2018**

| Q2: 2018 | Number | Percent |
|---|---|---|
| Type of School or Job Training Program | | |
| High School Completion Program | 73 | 5% |
| Short-term Education or Employment Program | 277 | 16% |
| Vocation, Technical, or Trade School | 222 | 13% |
| 2- or 4-Year College or University | 959 | 60% |
| Religious or Church-sponsored Mission | 9 | 1% |
| Other | 14 | 1% |
| Don't Know/Refused | 58 | 4% |
| Total | 1612 | 100% |

Approximately thirteen percent of respondents were enrolled in a vocational, technical, or trade school, just under sixty percent were enrolled in a 2- or 4-year college or university, less than one percent were enrolled in a religious or church sponsored mission or some other program, and approximately four percent did not know or refused to answer their status. For participants who

were enrolled in school, job training, or an education program, just under forty percent responded yes, while under one percent did not know or refused to answer (Tables 1 and 2).

**Table 3**

**Students Completing an Entire Term of School, Job Training, or Education Program in 2018**

| Q3: 2018 | Number | Percent |
|---|---|---|
| Did you complete an entire term? | | |
| No | 423 | 27% |
| Yes | 1116 | 70% |
| Don't Know/Refused | 54 | 3% |
| Total | 1593 | 100% |

**Table 4**

**Work Status Since Leaving High School in 2018**

| Q4: 2018 | Number | Percent |
|---|---|---|
| Have you worked since leaving high school? | | |
| No | 1482 | 38% |
| Yes | 2421 | 32% |
| Don't Know/Refused | 18 | 15% |
| Total | 3921 | 100% |

**Table 5**

**Students Working at Least 3 Months Since Leaving High School in 2018**

| Q5: 2018 | Number | Percent |
|---|---|---|
| Worked at Least 3 Months Since Leaving High School | | |
| No | 369 | 15% |
| Yes | 2030 | 83% |
| Don't Know/Refused | 52 | 2% |
| Total | 2451 | 100% |

In answering if they have completed an entire term of any school, job training, or education program, twenty-seven percent answered no, seventy percent answered yes, and just under four percent did not know or refused to answer (Table 3). Of respondents who answered if they have worked any time since leaving high school, thirty-eight percent responded no, sixty-two responded yes, and less than one percent did not know or refused to answer (Table 4). Last, the respondents were asked if they had worked at least 3 months or at least ninety days since leaving high school. The responses were fifteen percent answering no, eighty-two percent answering yes, and two percent did not know or refused to answer (Table 5).

The summary of responses for the year 2019 is displayed in the following tables. Respondents answering if at any time since leaving high school, have you ever been enrolled in any school, job training, or education program, sixty-two percent responded no, thirty-seven percent responded yes, and no respondents answered that they did not know or refused to answer (Table 6). For respondents answering question 3: Did you complete an entire term, 386 or 27.9% answered no, 948 or 68.6% answered yes, and 48 or 3.5% did not know or refused to answer.

**Table 6**

**Enrollment Status One Year Post High School in 2019**

| Q1: 2019 | Number | Percent |
|---|---|---|
| Enrolled in any School, Job Training, or Education Program Since Leaving High School | | |
| No | 2311 | 63% |
| Yes | 1382 | 37% |
| Don't Know/Refused | 0 | 0% |
| Total | 3693 | 100% |

**Table 7**

**Type of School or Job Training Program Enrolled In 2019**

| Q2: 2019 | Number | Percent |
|---|---|---|
| Type of School or Job Training Program | | |
| High School Completion Program | 55 | 4% |
| Short-term Education or Employment Program | 156 | 11% |
| Vocation, Technical, or Trade school | 187 | 14% |
| 2- or 4-year College or University | 838 | 61% |
| Religious or Church-sponsored Mission | 2 | 10% |
| Other | 93 | 7% |
| Don't Know/Refused | 51 | 4% |
| Total | 1381 | 100% |

Of those respondents describing the kind of school or job training program in which they were enrolled, four percent answered high school completion program, eleven percent answered short-term education or employment training program, thirteen percent answered vocational, technical,

or trade school, sixty percent answered 2- or 4-year college or university, less than one percent answered a religious or church sponsored mission, seven percent answered other, and just under four percent did not know or refused to answer (Table 7).

**Table 8**

**Students Completing an Entire Term of School, Job Training, or Education Program in 2019**

| Q3: 2019 | Number | Percent |
|---|---|---|
| Did you complete an entire term? | | |
| No | 386 | 28% |
| Yes | 948 | 69% |
| Don't Know/Refused | 48 | 4% |
| Total | 1382 | 100% |

Of those respondents answering whether they completed an entire term of any school, job training, or education program for year 2019 (Table 8), twenty-eight answered no, almost sixty-nine percent answered yes, and just under four percent did not know or refused to answer. The responses for the year 2019 were remarkably similar in percentage points than 2018. It is encouraging that the former students are able to enroll in a post high school program and complete an entire term. The results do not indicate that the former students completed an entire year.

**Table 9**

**Work Status Since Leaving High School in 2019**

| Q4: 2019 | Number | Percent |
|---|---|---|
| Have you worked since leaving high school? | | |
| No | 1426 | 39% |
| Yes | 2267 | 61% |
| Don't Know/Refused | 0 | 0% |
| Total | 3693 | 100% |

**Table 10**

**Students Working at Least 3 Months Since Leaving High School in 2019**

| Q5: 2019 | Number | Percent |
|---|---|---|
| Worked at Least 3 Months | | |
| No | 348 | 15% |
| Yes | 1891 | 83% |
| Don't Know/Refused | 28 | 1% |
| Total | 2267 | 100% |

Table 3 displays respondents answering question 4: Have you worked at any time since leaving high school, 1,426 or 38.6% answered no while 2,267 or 61.4% respondents answered yes. For question 5, since leaving high school have you worked for at least 3 months or about 90 days since leaving high school, 348 or 15.4% answered no, 1,891 or 83.4% answered yes, and 28 or 1.2% did not answer or refused.

The summary of responses for the year 2020 is displayed in Table 5. Question 1: At any time since leaving high school, have you enrolled in any school, job training, or education program? Of the total respondents 3,750 or 59.9% answered no, 2,451 or 39.2% answered yes,

while fifty-six or .9% did not know or refused to answer. Question 2: Describe the kind of school or job training program in which you were enrolled, 123 or 4.9% were enrolled in a high school completion program, 274 or 10.9% were enrolled in a short-term education or employment training program, 306 or 12.2% were enrolled in a vocational, technical, or trade school, 1,553 or 61.9% were enrolled in a 2- or 4-year college or university, 4 or .2% were enrolled in a religious or church sponsored mission, 177 or 7.1% answered other, and 70 or 2.8% did not know or refused to answer. Question 3: Did you complete an entire term? Of the respondents answering no, 22.9% answered no, 73.3% answered yes, and 3.9% did not know or refused to answer.

When respondents were asked if they had worked at any time since leaving high school, 40.4% answered no, 59.4% answered yes, while .3% did not know or refused to answer. Question 4 asked if the respondents had worked for at least 3 months since leaving high school. Of the total respondents 580 or 15.5% answered no, 3,097 or 83.0% answered yes, and 55 or 1.5% did not answer or refused to answer.

**Table 11**

**Enrollment Status One Year Post High School in 2020**

| Q1: 2020 | Number | Percent |
|---|---|---|
| Enrolled in any School, Job Training, or Education Program Since Leaving High School | | |
| No | 3750 | 60% |
| Yes | 2451 | 39% |
| Don’t know/Refused | 56 | 1% |
| Total | 6257 | 100% |

**Table 12**

**Type of School or Job Training Program Enrolled In 2020**

| Q2: 2020 | Number | Percent |
|---|---|---|
| Type of School or Job Training Program | | |
| High school completion program | 123 | 5% |
| Short-term education or employment program | 274 | 11% |
| Vocation, technical, or trade school | 306 | 12% |
| 2- or 4-year college or university | 1553 | 62% |
| Religious or church-sponsored mission | 4 | 0% |
| Other | 177 | 7% |
| Don't know/Refused | 70 | 3% |
| Total | 2507 | 100% |

**Table 13**

**Students Completing an Entire Term of School, Job Training, or Education Program in 2020**

| Q3: 2020 | Number | Percent |
|---|---|---|
| Did you complete an entire term? | | |
| No | 573 | 23% |
| Yes | 1837 | 73% |
| Don't Know/Refused | 97 | 4% |
| Total | 2507 | 100% |

**Table 14**

**Work Status Since Leaving High School in 2020**

| Q4: 2020 | Number | Percent |
|---|---|---|
| Have you worked since leaving high school? | | |
| No | 2525 | 40% |
| Yes | 3716 | 59% |
| Don't Know/Refused | 16 | 1% |
| Total | 6257 | 100% |

**Table 15**

**Students Working at Least 3 Months Since Leaving High School in 2020**

| Q5: 2020 | Number | Percent |
|---|---|---|
| Worked at Least 3 Months | | |
| No | 580 | 16% |
| Yes | 3097 | 83% |
| Don't Know/Refused | 55 | 2% |
| Total | 3732 | 100% |

In comparing the summary of responses for years 2018, 2019, and 2020, it is noted that for years 2018 and 2019 the total number of available records to contact was about the same for each year at 11,492 and 12,721, respectively. But for the year 2020, the number of available records to contact nearly tripled to 32,344 records. From 2018 to 2019, the number of surveys completed decreased by 228. For the year 2020, the number of completed surveys was 6,257, an increase of 2,564.

Comparing the respondent's answers to question 1, there was a decrease from year 2018 to 2019 in the number of students answering no to being enrolled in any school, job training, or education program. For the year 2020, the total number answering no is 3,750, but a smaller percentage answered no than in the year 2019. There was a decrease of 172 students answering yes to question 1 from 2018 to 2019 and an increase of 1,069 students answering yes from 2019 to 2020.

Of the students who answered yes to question 1, for all three years the average was 61% who reported being enrolled in a 2- or 4-year college or university; 13% reported being enrolled in a vocational, technical, or trade school; and 13% reported being enrolled in a short-term education or employment training program. Even after accounting for the year 2020 size of respondents, the average percentages were identical. Of the students answering yes to Question 1, the average number completing an entire term was about 71% for all three years.

The average of respondents answering yes if they worked since leaving high school, a slight decrease of .3% could be observed from 2018 to 2019 and a slight decrease of two percentage points is noted from year 2019 to 2020. Of the respondents answering if they worked at least 3 months since leaving high school, the results were about the same at an average of 83%. Eighty percent reported working an average of 20 hours or more per week while 16% reported they did not work an average of 20 hours or more per week. In a comparison of the 2018 and 2019 results, 3.3% more respondents reported having worked an average of 20 or more hours per week in 2019. There was a slight decrease of about two percentage points of respondents working 20 hours or more per week in 2020 as compared to 2019.

On average for the years 2018-2020, 848 or 18% of respondents report being enrolled in higher education; 4,418 or 33% report being competitively employed; and 4,979 or 36% report

not being engaged in any school or work. For reporting year 2019, there was a slight decrease in the total number of respondents compared to the previous year of 2018 resulting in lower averages across all questions considered. As noted earlier, the total number of respondents almost tripled from 2019 to 2020 but the total averages were still the same.

The average number of respondents reporting being enrolled in higher education within one year of leaving high school was 18% for the 3 years. The average number of respondents reporting being enrolled in higher education or competitively employed within one year of leaving high school was identical at 51% for the 3 years. The average number of respondents reporting being enrolled in higher education or some other postsecondary training program, or competitively employed or in some other employment within one year of leaving high school was 64%.

**Table 16**

**Enrollment Status One Year Post High School 2018, 2019, & 2020**

| Q1: 2018,2019, & 2020 | Number | Percent |
|---|---|---|
| Enrolled in any School, Job Training, or Education Program Since Leaving High School | | |
| No | 2798 | 61% |
| Yes | 1796 | 39% |
| Don’t know/Refused | 30 | 1% |
| Total | 4624 | 100% |

Table 16 shows the total averages for question 1 for the three years under analysis. What the table reveals is that on average, 61% of former students have not enrolled in any post high

school program or employment whereas 39% of respondents have enrolled in some program since leaving high school. Less than 1% of former students did not know or refused to answer whether they were enrolled in any school, job training or education programs since leaving school.

**Table 17**

**Type of School or Job Training Program Enrolled in 2018, 2019, & 2020**

| Q2: 2018, 2019, & 2020 | Number | Percent |
|---|---|---|
| Type of School or Job Training Program | | |
| High School Completion Program | 84 | 5% |
| Short-term Education or Employment Program | 236 | 13% |
| Vocation, Technical, or Trade School | 238 | 13% |
| 2- or 4-year College or University | 1117 | 60% |
| Religious or Church-sponsored Mission | 5 | 1% |
| Other | 95 | 5% |
| Don't know/Refused | 60 | 3% |
| Total | 1835 | 100% |

The findings for Table 17 show that on average for the years 2018-2020, 4.46% of former students enrolled in a high school completion program; 13.13% of former students were in a short-term education or employment program; 13.17% were enrolled in a vocational, technical, or trade school program; and 60% were enrolled in a 2- or 4-year college or university. Less than 1% were enrolled in a religious or church sponsored mission and less than 5% were enrolled in

some other program not specified. Those refusing to answer or answered don't know averaged less than 4%.

**Table 18**

**Students Completing an Entire Term of School, Job Training, or Education Program in 2018, 2019, & 2020**

| Q3: 2018, 2019, & 2020 | Number | Percent |
|---|---|---|
| Did you complete an entire term? | | |
| No | 460 | 25% |
| Yes | 1300 | 71% |
| Don't Know/Refused | 66 | 4% |
| Total | 1826 | 100% |

The results indicated in Table 18 further break down question 1 and show that on average for the three years analyzed, 71% of students completed an entire term of education at a 2- or 4-year college or university, job training, or education program. About a quarter of former students did not complete an entire term of education in any school, job training, or education program. Less than 5% did not know or refused to answer if they completed an entire term of education, job training, or education program since leaving high school.

**Table 19**

**Work Status Since Leaving High School in 2018, 2019, & 2020**

| Q4: 2018, 2019, & 2020 | Number | Percent |
|---|---|---|
| Have you worked since leaving high school? | | |
| No | 1811 | 39% |
| Yes | 2801 | 61% |
| Don't Know/Refused | 11 | 0% |
| Total | 4613 | 100% |

Table 19 reveals that a majority of students, 61%, have worked for some time since leaving high school. One-third of former students reported never having worked since leaving high school. Eighty-three percent of former students reported having worked at least three months since leaving high school (Table 20). Less than 1 percent did not know or refused to answer whether they ever worked or worked at least three months since leaving high school (Tables, 19 and 20).

**Table 20**

**Students Working at Least 3 Months Since Leaving High School in 2018, 2019, & 2020**

| Q5: 2018, 2019, & 2020 | Number | Percent |
|---|---|---|
| Worked at Least 3 Months | | |
| No | 433 | 15% |
| Yes | 2339 | 83% |
| Don't Know/Refused | 45 | 2% |
| Total | 2817 | 100% |

Findings from this analysis indicate that on average for the past 3 reported years, Indicator 14 data indicates that enrollment in programs for students who had IEPs at the time of graduating or leaving high school is stagnant, meaning there is not an improvement in the average numbers of former students enrolling in higher education, vocational, or short-term and employment training programs. When controlling for the significantly higher number of respondents from year 2019 to year 2020, the total averages of responses remain identical. Noted is the high number of former students who reported having never worked since leaving high school is a total average of 39%. These averages indicate there is some gap in or between transition planning and students involved in some postsecondary activities.

# CHAPTER 5

# SUMMARY, DISCUSSION, FINDINGS, RECOMMENDATIONS, IMPLICATIONS, AND CONCLUSION

## SUMMARY

The purpose of this study was designed to analyze the post-school trends of former high school students who had an individual education program in effect at the time of exiting high school. Transition planning is designed to guide students into post high school education, employment, or job training. Transitioning from the protective surroundings of the public school system into young adulthood is not an easy task for any student. This is especially true for the student with an individual education program and a disability. Students with IEPs need additional support in meeting their postsecondary goals to transition into adulthood. This study's considerations suggests that the major limitations for advancing a continuous postsecondary transition involve inadequate family support, self-support skills, and a realistic outlook expressed from the student's school. Navigating postsecondary education can be difficult and as such, students should know how to access the various agencies available to them such as the disability office at their university or college of choice. It is an essential obligation that schools provide realistic transition support to students and their families during the high school years to fully prepare them for the next steps they will embark on post school. Students should use the transition process to determine what their interests are in finding suitable employment that can benefit their post high school living status. The transition process can also help determine what interests the student has that may lead to an employment or job training program that will then lead to viable employment after high school.

## Discussion

This chapter provides an understanding of the results and implications for curriculum and practice in public schools. This study was organized according to the five post-school outcome survey questions analyzed in this investigation. The researcher's study proposed five research questions to develop a deepened understanding of the individual education program transition processes for postsecondary life after exiting high school.

The purposes of this study were to analyze selected post-school transition factors of former students with disabilities who had an IEP in high school to determine if the student population under study was engaging in post-school outcomes (i.e., job training, postsecondary education, and employment). Specifically, this study was concerned with analyzing trends in selected special education transition factors in post-school outcomes from one year to the next for years 2018-2020 for students who received an IEP. Kohler's Taxonomy for Transition Planning provided the framework for analyzing these factors because the theory holds the importance of individualized transition planning for postsecondary education, employment and vocational training, and independent living emphasizing that effective support for these students with disabilities requires a personalized, student-centered, and collaborative approach. Moreover, research leads us to believe that if transition planning is done specifically and individually, the number of students with disabilities who engage with post-school outcomes should gradually increase from one year to the next. Additionally, this study aimed to provide descriptive data on the select variables which include post-school job training, postsecondary education, and post-school employment of former high school students with IEPs as to provide a more holistic picture of the number of students engaging with the select variables as an indicator of post-school success. Last, this study hopes to provide insight into outcomes of students with IEPs as well as provide

implications for practices for students, educators, employers, agencies, and other stakeholders in the transition process. Comprehensive program evaluation is required to correct deficiencies in current practice.

The literature review understands the significance of the transition planning process for students who had IEPs in effect at the time of exiting high school. Many students who received special education services while in school struggled with the various obstacles that interfere with achieving the outcomes of postsecondary life. Transition planning serves to mitigate or eliminate those obstacles to help level the field against students that did not have disabilities. The transition plans outline the various responsibilities of the student, parent, school, and any outside agencies. These responsibilities are designed to support postsecondary education, employment, training, and independent living goals. Transition planning should guide the student's course selection and ensure it corresponds with the student's interests. The student's present levels of academic achievement and functional performance (PLAAFP) should be considered when developing the secondary transition program.

This study examined the post-school outcome for three years from 2018 through 2020 and specifically, their post-high school activities. Five research questions were developed and examined using information from the Texas Education Agency State Performance Plan Indicator 14: Post-School Outcome Survey (SPP). The SPP was developed to collect and follow-up with persons who were previously enrolled in high school and had an individualized education program in effect at the time of exiting high school. The survey is conducted annually and administered statewide by NuStats, sponsored by the Texas Education Agency, and facilitated by Education Service Center 11 (ESC11). Data used for this study sample was derived from a total

of 13,871 surveys completed from a larger sample of 56,557 available records to collect in the state of Texas for the school years 2018, 2019 and 2020.

## FINDINGS

Research Question 1

*Are there increases in the measures of central tendency in enrollment for students who received an IEP in any school, job training or education program since leaving high school for years 2018, 2019, and 2020 from one year to the next?*

Findings for this research question indicate that the trend for enrollment in any school, employment or job training program decreased from year 2018 to year 2019. As a result, we reject the research hypothesis and reject the null hypothesis due to there being no significant increases over the two-year period in the measures of central tendency in enrollment for students who received an IEP in any school, job training or education program for years 2018, 2019, and 2002, from one year to the next. However, the trend from 2019 to 2020 increased slightly due to a larger number of persons surveyed than the previous year (See tables 1-3). As a result of this increase, we confirm the research hypothesis but reject the null hypothesis. Also, the total number of students surveyed in 2019 dropped from the previous year causing a slight dip in the total number of students enrolled in any school, employment, or training program. The average amount over the three years indicates 39% of respondents answered yes to being enrolled since leaving high school (Table 16) while 61% of this population were not enrolled in any postsecondary education, postsecondary employment, or job training since leaving high school. Less than 1% did not or refused to answer the question of their post-school outcome status.

The Office of Special Education Programs (OSEP) has emphasized the importance of Indicator 14. Indicator 14 measures post-school outcomes and is a significant tool for assessing transition programs for students with disabilities. The data presented here for former students one year after exiting high school is concerning. There is a slight increase in the respondents surveyed answering no from 2018 to 2019; and from 2019 to 2020, there was a decrease in the response even as the number of respondents increased by 1,439. More post high school students (61%) reported not being enrolled in any type of post-school program than those reporting not being enrolled (39%).

The number of respondents answering yes to being enrolled in any school, job training, or education program was 40% in 2018 but decreased in 2019 to 37% and increased by two percentage points in 2020. The data may have decreased in 2019 due to a smaller number of participants responding to the survey. Also, there was a slightly larger survey completion rate in 2018 than in 2019.

The data indicates that transition planning in its currently implemented state is not producing significant gains in school enrollment, employment, or vocational job training programs for former students who had IEPs when they exited high school. Previous years of data not under investigation in this study but indicating the results of former students not enrolling in some type of postsecondary program are concerning in that the percentage answering no to this question is trending higher year to year instead of decreasing from year to year. These results, which include the beginning of the Covid-19 pandemic in early 2020, indicate a need for educators, administrators, policymakers, parents, and other parties necessary to the IEP transition process to take notice of the stagnant trends in former students enrolling in postsecondary education, employment, or post-school job training programs.

Research Question 2

*Are there increases in the measures of central tendency in enrollment for students who received an IEP for the type of school or job training for years 2018, 2019, and 2020 from one year to the next?*

The data shows that there was a drop in enrollment in higher education from year 2018 to 2019 of a percentage point from 73 or 5% to 55 or 4% but that this percentage rose again from year 2019 to 2020 to 123 or 5% which is an increase of one percentage point (Tables 5, 7, & 9). Students enrolled in a short-term education or employment program decreased over the three years from 277 or 17% in 2018 down to 156 or 11% and 274 or 11% in both 2019 and 2020. The number of students enrolled in a vocational or technical trade school was 222 or 14% in 2018, 187 or 14% in 2019, and 306 or 12% in 2020, which indicates a slight decrease from the previous two years. In 2018 the number of students enrolled in a 2-or 4-year college of university was 959 or 60%. In 2019 that number decreased to 838 or 61% and from 2019 to 2020 the actual number increased to 1,553 or 62%. Even though the numbers decreased between years 2018 and 2019, the percentage remained the same due to a decline in the number of students surveyed. With a difference of 715 respondents from 2019 to 2020, there was an increase in responses, but the percentage increased by only 1 point. In 2018, 9 students or 1% answered to being enrolled in a religious or church-sponsored mission. In 2019 there was a decrease in this number to 2 students or less than 1%. The number of students enrolled in a religious or church-sponsored mission in 2020 increased to 4 or 1%, indicating an increase in percentage. In 2018, 14 respondents or 1% specified “other” (not specified), the number of respondents selecting “other” in 2019 increased to 93 or 7%, and in 2020 the number of respondents further increased to 177 or 7%. The number of respondents choosing other trended up across the three years under study

although the average for years 2019 and 2020 remained the same. Last, those who didn't know or refused to answer for type of school or job training program in which they were enrolled, 58 or 4% in 2018, while in 2019, 51 or 4% didn't know or refused to answer, and in 2020, 70 or 3% or respondents didn't know or refused to answer.

The trends for all types of programs enrolled in tended to decrease from year 2018 to 2019. For this reason, we rejected the research hypothesis and rejected the null hypothesis that there were no increases in measures of central tendency in enrollment for students who received an IEP for the type of school or job training program for years 2018, 2019, and 2020 from one year to the next. For year 2019 to 2020 there were increases in the number of students enrolled in the type of school or job training program. For this reason, we confirmed the research hypothesis and rejected the null hypothesis that there will be no increases in measures of central tendency in enrollment for students who received an IEP for the type of school or job training for years 2018, 2019, and 2020 from one year to the next.

The data from the survey does not provide reasons for the decline in enrollment received from year 2018 to 2019, but after viewing previous year's surveys not under investigation in this study, one notes that there are declines in the number of respondents completing the surveys. For the year 2020, there was a significant increase in the number of respondents completing the survey even though this was the start of the Covid-19 pandemic.

Many public schools in Texas have a post high school completion program for students with intellectual disabilities who are enrolled in life skills classes. The survey does not indicate if the four percent of students enrolled in this program were life skills students or if there were programs for students with mild cognitive disabilities. The percentage of students enrolled in a

high school completion program varied by less than .1% across the three years indicating no significant increase.

The percentage of respondents enrolled in a short-term education or employment training program decreased from 2018 to 2019 by 5.9 percentage points and then by .4 percentage points from 2019 to 2020. This indicates that there is some reason not specified as to why respondents are not enrolling in a short-term program over the three years. Are the programs not funded adequately? Is the employment training program available at all times during post high school for students? Is the program suitable for job placement after training?

The percentage of respondents enrolled in a vocational, technical, or trade school decreased across the three years but only slightly. Respondents enrolled in a 2- or 4-year college or university increased across the three years under study but again the percentage increase was insignificant. The largest group of respondents enrolled in any kind of program were those attending a college or university. Transition planning's greatest impact for this question is in guiding former students towards community colleges and universities.

Religious or church-sponsored missions accounted for the least number of respondents enrolled post high school. Most religious or church-sponsored missions are private institutions and may not cater to the needs of students with disabilities. Their percentages of enrolled students enrolled remained at less than one percent across the three years under study.

The number of respondents answering “other,” but not specified, increased from .9% in 2018 to 6.7% in 2019 and increased to 7.1% in 2020. There was no follow-up question or indication of what “other” encompasses. Last, those answering they don’t know or refused to answer differed by .1% from 2018 to 2019 and increased to 2.7% in 2020. This question should

have been split into two questions to follow-up with those replying “don’t know.” Again, for 2018 to 2019, we rejected the research hypothesis and confirmed the null hypothesis due to there being decreases in measures of central tendency in enrollment for students who received an IEP in the enrollment type of school or job training for years 2018, 2019, and 2020 from one year to the next and for years 2019 to 2020, we confirmed the research hypothesis and rejected the null hypothesis due to there being increases in the measures of central tendency in enrollment for students who received an IEP in the enrollment type of school or job training for years 2018, 2019, and 2020 from one year to the next.

Research Question 3

*Are there increases in the measures of central tendency for students who received an IEP in completion of an entire term in school, job training, or education program for years 2018, 2019, and 2020 from one year to the next?*

The total number of respondents replying no to completing an entire year in any school, job training, or education program decreased from 423 or 27% in 2018 to 386 or 28% in 2019, but an increase of 37 or 1 percentage point. From 2019 to 2020, the number of respondents answering no rose by 187 to 573 or 23% for a decrease of 5 percentage points. The data indicates an actual increase in the number of respondents even though it indicates a decrease in the percentage of people surveyed (Tables 3, 8, & 13).

For respondents replying yes to completing an entire term of any school, job training, or education program since leaving high school, 1,116 or 70% replied yes in 2018. A decline in 2019 to 948 or 69% was due to the total amount of respondents replying to the survey. The total amount of respondent replying yes to completing an entire term rose in 2019 from 948 or 69% to 2020 by 889 to 1,837 or 73%. The data, although not specified, showed a decline in the number

of respondents from 2018 to 2019 but from 2019 to 2020, the number increased by 4 percentage points. Due to the decline in measures of central tendency from 2018 to 2019, we rejected the research hypothesis and confirmed the null hypothesis tendency for students who received an IEP in completion of an entire term in school, job training, or education program for years 2018, 2019, and 2020 from one year to the next. For years 2019 to 2020 the data indicated an increase in the measures of central tendency. Therefore, we rejected the research hypothesis and rejected the null hypothesis tendency for students who received an IEP in completion of an entire term in school, job training, or education program for years 2018, 2019, and 2020 from one year to the next (Tables 5, 10 & 15).

On average for the three years under study, 460 or 26% of respondents answered no to completing an entire term in any school, job training, or education program. The average number of respondents replying yes for the three years was 71%, and for respondents who didn't know or refused to answer, the average was 4%. The research hypothesis and null hypothesis was rejected due to the there being no significant increase in the measures of central tendency for students who received an IEP in completion of an entire term in school, job training, or education program for years 2018, 2019, and 2020 from one year to the next (Table 18).

Research Question 4

*Are there increases in the measures of central tendency for students who received an IEP in work status since leaving high school for years 2018, 2019, and 2020 from one year to the next?*

For survey year 2018, 1,482 or 38% of respondents reported never having worked since leaving high school. In 2019, that figure slightly decreased by 56 to 1,426 or 39%. In 2020, the number of respondents rose by 1,099 to 2,525 or 40%. For respondents who did not know or

refused to answer their work status, in 2018, 18 or less than 1% responded to the survey. In 2019, there were no replies for those who did not know or refused to answer whether they worked at any time since leaving high school. And in 2020, 16 or less than 1% did not know or refused to answer whether they worked at any time since leaving high school (Tables 4, 9, & 14). In 2018, 2,424 or 62% percent of respondents reported they have worked at some time since leaving high school and in 2019, 2,267 or 61%, there was a decrease of 157 respondents and from 2019 to 2020 that figure rose to 3,716 for an increase of 1,449 or 60%. There was an increase of 1% from 2018 to 2019 for those answering that they have never worked and from 2019 to 2020, the increase in those never working was again only 1%. Due to the decrease in measures of central tendency for students who received an IEP in work status since leaving high school for years 2018 and 2019 we rejected the research hypothesis and confirmed the null hypothesis that there will be no increase in the measures of central tendency for survey years 2018, 2019, and 2020 from one year to the next. For the years 2019 to 2020, the data specified increases in the number of respondents who reported working at any time since leaving high school. For this reason, we confirmed the research hypothesis and rejected the null hypothesis that there will be no increases in measures of central tendency for students who received an IEP in work status since leaving high school for years 2018, 2019, and 2020 from one year to the next. Even though the increase was insignificant, the data showed that there was in fact an increase. The data, once more, did not specify other why there were decreases from 2018 to 2019 and then a large increase from 2019 to 2020 except for the fact that there were fewer people surveyed in 2019 than in 2018 and then for 2020, the number of respondents surveyed increased by over one thousand.

On average over the three years of study, for respondents answering no to having ever worked since leaving high school, 1,482 or 38% of respondents did not or have never worked in

2018, with the number decreasing in 2019 to 1,426 or 39%. Respondents reporting no increase from 2019 to 2020 to 2,525 or 40%, a one-point percentage increase, and less than 1% did not know or refused to answer whether they worked (Tables 4, 9 &14).

Research Question 5

*Are there increases in the measures of central tendency for students who received an IEP and worked at least three months since leaving high school for years 2018, 2019, and 2020 from one year to the next?*

In 2018, the percentage of students who reported not working at least 3 months after leaving high school was 369 or 15%. That figure decreased in the year 2019 by 21 to 348 or 15%, a slight decrease. From 2019 to 2020, the figures rose to 580 or 16% (Tables 5, 10, & 15).

Of the respondents answering whether they did work for at least three months since leaving school, 2,030 or 83% of respondents reported working at least three months in 2018. In 2019, 1,891 or 83% of respondents reported working, a decrease in the actual number of respondents but maintaining the percentage at 83%. From 2019 to 2020, 3,097 reported having worked at least 3 months since leaving high school. This was an increase of 1,026 respondents reporting working at least 3 months. In 2018, 52 or 2% of respondents did not know or refused to answer whether they worked at least 3 months. From 2018 to 2019, the figure declined to 28 or 1%. From 2019 to 2020¸ the number of respondents increased to 55 or 2% of respondents who did not know or refused to answer whether they worked for at least 3 months. There was no reason specified for this increase in actual number of respondents other than that many more people were surveyed in 2020 than in years 2018 and 2019, respectively.

For the years 2018 to 2019, the number of respondents reporting not working for at least 3 months decreased. For this reason, the research hypothesis was rejected, and the null hypothesis was confirmed that will be no increases in measures of central tendency for students who received an IEP and worked at least three months since leaving high school for years 2018, 2019, and 2020 from one year to the next. From the years 2019 to 2020, the data indicated an increase in the number of respondents reporting not working at least 3 months since leaving high school. For this reason, the research hypothesis was confirmed, and the null hypothesis was rejected for students who received an IEP and worked at least three months since leaving high school for years 2018, 2019, and 2020 from one year to the next (Tables 5, 10 &15).

The data does not indicate whether the former students were prepared for adult responsibilities related to employment. This finding confirms existing research regarding inadequate transition outcomes often experienced by individuals with disabilities (Alsaman & Lee, 2017). More respondents were employed for at least three months than not employed but the survey does not expound upon the type of employment or whether the job lasted more than three months.

On average, the trend from 2018 to 2020 indicates that there was a slight decline in the number of respondents not working from 2018 to 2020. The total average of respondents not working for the three years was 15%. The total average of respondents reporting working at least three months was 83% while the total of those respondents that don't know or refused to answer was only 2% across the three years. The comparative results indicate that here in Texas, there was a fundamental need in IEP transition programs to increase the number of former students who had IEPs at the time of exiting high school enrolling in some postsecondary program of higher education, employment, or vocational job training. A longitudinal study is essential to

compare cohorts of former students' post-school status. The data analyzed in this study indicated that for three years there was not a significant increase in the percentage of former students enrolling in higher education over the three years. The percentage of former students enrolling in higher education, employed, or enrolled in a job training program actually declined in the year prior to the Covid-19 pandemic but increased during the year the pandemic began.

## Limitations

In any research study there are limitations and unforeseen events that must be considered when examining results for this study. These limitations include the following organizational factors. The first limitation of the study was for former high school students having IEPs when exiting high school. The study focused on students who had IEPs in effect when exiting high school as IDEA requires the IEP team to ensure that the student's IEP includes the supports and services needed to assist the student in preparing for postsecondary education, employment, or some other postsecondary vocational or training program. Second, the study was limited to students who have exited high school. There was no information or access to employers who may have hired former students and what their work experiences were to determine if transition planning during high school may have had a positive or negative impact on employment retention. The purpose of SPPI 14 is to follow up with students who were receiving special education services while in high school one year following their exit from the public school system. Among that target group of students, SPPI 14 measures the percentage of students who are enrolled in higher education, competitively employed, or in another type of education or employment setting. Third, I used a trend analysis approach to conduct the study which was limited to secondary data collected from school years 2017-2020. These limitations included the type of survey questions asked and missing data (e.g., failure to respond to certain questions).

The data already had preselected questions which still required further clarification or follow-up. The data must be submitted annually by each school district to the TEA and once it is disseminated and published, the researcher will be able to analyze the data under study. Finally, due to my focus on transition planning, I used participant data that did not include clarification questions to answer vague survey choices and there was not any available information from schools regarding how much support was provided or information on transition plans which may or may not have been created while they were in high school.

Because there were limited research studies on post-school outcomes as it relates to transition planning, future research should focus on a greater understanding of how best practices are required and recommended for transition related to this group of students.

## Recommendations for Practice

The researcher designed the analysis to address the trends in post-school outcomes for State Performance Plan Indicator 14. To acquire the information relevant to the outcome results for the years under study, the researcher examined the TEA State Performance Plan Indicator 14: Post-School Outcome Survey report. The survey consisted of twelve questions but for the purpose of this research, only trends for five questions were analyzed. The five questions asked respondents if they were enrolled in any school, job training or education program since leaving high school, asked respondents to describe the kind of school or job training program in which they were enrolled, and asked if the respondent completed an entire term (from question 1), whether he or she worked since leaving high school, and if they had worked at least 3 months since leaving high school. Even though this study was confined to Texas schools, the researcher looked at trends from other states that published their findings for the same years.

The outcome survey results for former students with IEPs provided exceptional insight for educators in both K-12 schools and institutions of higher education. When analyzing the responses to the questions, the data indicated that too many former students with disabilities are not entering programs that may lead to independent lives after high school. The responses indicated a need for follow-up questions to determine the reasons for the choices selected in the survey.

Recommendations based on findings:

1. Examine the impact of transition planning in middle and high school and determine if it is accurately evaluating the students strengths and weaknesses towards postsecondary education, employment, or vocational or job training.
2. Based on the limitations of the study my second recommendation is to increase participation and responses by varying the ways in which students may answer the survey. Another recommendation for survey responses is using social media to reach as many former students as possible. Reach out by phone to the students and to their family members to elicit information. Use a postage-paid postcard that is easily fillable so that respondents can quickly return their responses.
3. Based on empirical literature from chapter 2,

## Implications for Further Research

As mentioned previously, this trend analysis provided only a brief overview of an extremely complicated, yet necessary process that impacts not only the lives of former students, but also the communities in which they live, interact, work, attend school, or engage in recreational activities. The consequences of this study were limited to addressing the questions

asked in the SPP Indicator 14 survey. Further research is needed to examine the seriousness of actually developing and implementing transition plans and correlating them to actual outcomes for students. Institutes of higher education have a duty to implement transition planning into curriculum and instruction and administration programs to ensure future teachers of special education students and administrators over special education programs are well-informed about the process and how to include it in the students' 4-year high school plans.

Many topics materialized through the analysis of data that went beyond the scope of this study. Further research could revisit those areas to further understand the transition process effect on higher education and vocational training. One area that constantly emerged was a lack of follow-up on an annual basis for at least four years to determine if the current transition planning programs are working and what has happened with former students in that time period after exiting high school. This gap in followed-up research is significant if you are determining if planning is working as it is currently implemented. As school districts follow state and federal guidelines pertaining to SPP post-school outcomes, a comprehensive program evaluation should be undertaken to review current practices in transition planning. Other ideas for further exploration may involve shifting transition planning to the upper elementary grades and middle school. The median data for postsecondary education and employment for youth with disabilities has declined (U.S.DoL, 2023). This makes it imperative to focus on transition planning services earlier than in high school. More ideas needing further exploration include determining whether transition planning leading to post-school outcomes differs in results as it relates to degree of disability. Are the survey respondents mild to moderately disabled or is there a severe disability?

## Conclusion

This descriptive analysis has provided an opportunity to understand how special education programs in higher education institutions and in public schools are performing. It also highlights the importance of the programs and curriculum that engage students with disabilities in transitioning from high school to postsecondary education, vocational training, or employment opportunities. It has given me the desire to continue researching post-school outcomes for students and how we as educators can produce a greater number of students with mild to moderate disabilities who can lead independent lives by becoming productive members of the communities in which they reside. It has empowered me to plan and implement a system for continuous improvement that I can determine as a continuing framework to examine post-school outcomes for our students and collaborate with like-minded educators to create constructive changes in our schools.

## APPENDIX

The survey used in gathering the research for this study is Indicator 14: Post School Outcomes Survey. Texas Post School Outcomes Survey. This survey asks seven questions to former high school students who had an IEP in effect at the time of exiting school. For purposes of this study, the questions analyzed here are 1, 1a, 1b, 2, and 2a. The full survey is listed below.

TEXAS POST SCHOOL OUTCOMES SURVEY

Can you believe it's already been a year since you left high school? The Texas Education Agency is asking for your help. They want to learn about what you are doing now, and about how well you think high school prepared you for what you are doing now.

If you are a parent of a student who has received this survey, you may help your child complete it or fill it out on their behalf.

Please click the button below to begin the survey.

PART A: CONTINUING EDUCATION AND TRAINING

Q1. At any time since leaving high school, have you enrolled in any school, job training, or education program?

- Yes
- No

Q1a. Describe the kind of school, job training, or education program you attended? (*Select all that apply*)

- A 2-year community college
- A 4-year college or university
- A high school completion program (such as a GED or Adult Basic Education program)
- A short-term education or employment training program (such Job Corps)
- A vocational technical school (less than a 2-year program)
- A religious or church sponsored mission
- Military training
- Volunteer/community service training (such as The Peace Corps, Vista, AmeriCorps)
- Other (include name or description) _____

Q1b. Did you complete a full term (the term can be any length such as a quarter, a semester, inter-session, summer session, or program)?

- Yes
- No

Q1c. Did you contact an Office of Disability Services at your 2- or 4 -year college or university?

- No - I did not know about an office like this
- No - I knew about an office like this, but did not contact them
- Yes - I did contact an office like this

Q1d. What supports or accommodations did you receive through this office? (*select all that apply)*

- Adaptive equipment (such as a wheelchair, walker, or communication device)
- Additional time for assignments
- Assistive technology (such as speech-to-text or text-to speech applications)
- Large print or braille
- Orientation and mobility services for students with visual impairments
- Sign language interpreter
- Support for registration/scheduling; accessing services; finding a personal assistant
- Recorded lecture
- Audio textbooks
- Test accommodations (such as oral tests, extended time to complete test)
- Tutoring
- Other (please specify) _____

PART B: EMPLOYMENT

Q2. At any time since leaving high school, have you ever worked?

- Yes
- No

Q2a. Did you work for at least a total of 3 months (about 90 days)? (NOTE: This does not need to be 90 days in a row.)

- Yes
- No

Q2b. Did you work an average of 20 or more hours per week (or at least half time of a 40-hour week)? (NOTE: It is okay if the hours varied from week to week)

- Yes
- No

Q2c. Were you paid at least minimum wage? (NOTE: Minimum wage in Texas is currently 7.25 per hour)

- Yes
- No

Q2d. Select the job that describes where you spent the most time:

- In a company, business, or service with people with and without disabilities
- In the military
- In supported employment (paid work with services and wage support to the employer)
- Self-employed
- In a family business (e.g., farm, store, fishing, ranching, catering)
- In sheltered employment (where most workers have disabilities)
- Employed while in jail or prison.
- Other (please describe) _____

Q2e. Which of the following helped you get your current or most recent job, if any? (Select only one.)

- Former school or school district
- Parent, sibling, or other family member
- Friend
- State agency (such as the Texas Workforce Commission, Vocational Rehabilitation, Workforce Solutions, etc.)
- Community organization (such as Goodwill, Catholic Charities)
- None - I got the job myself
- Other (please describe) _____

PART C: OTHER INFORMATION

Q3. What parts of your high school experience were most helpful in preparing you for life after high school? (Select all that apply.)

- Academic classes (core content areas like math, science, English)
- Career and Technical Education (CTE classes)
- Elective classes (independent living skills taught at school in money management, hygiene, and/or cooking)
- Community-based work instruction (such as job shadowing, internships, service learning)

- Community-based instruction (adult living skills provided in community settings using transportation, home living skills, grocery shopping, etc.)
- Unpaid work experience
- Paid work experience
- Other (please describe) _____

Q4. What grade would you give your high school for how well it supported your transition to life after high school?

- A
- B
- C
- D
- F

Q5. Did the COVID pandemic negatively affect you in any of the following ways? (select all that apply)

- Lost a job
- Employer reduced my hours
- Employer reduced my pay
- Unable to work because of personal health or health of a family member
- Had to stop attending school or training program
- Delayed start of school or training program
- Reduced course load of school or training program
- Unable to attend school or training program because of personal health or health of a family member

Q6. Which of the following best describes the person filling out this survey:

- I am the student who was sent the survey
- I am a family member of the student who was sent the survey

Q7. Which of the following motivated you to complete this survey:

- Email
- Text message
- Postcard
- Someone from my former school
- Word of mouth
- Other (describe) _____

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