

Ten Sigma Transition Survey: A Tool to Create Effective Transition Programming  
For Students with Disabilities

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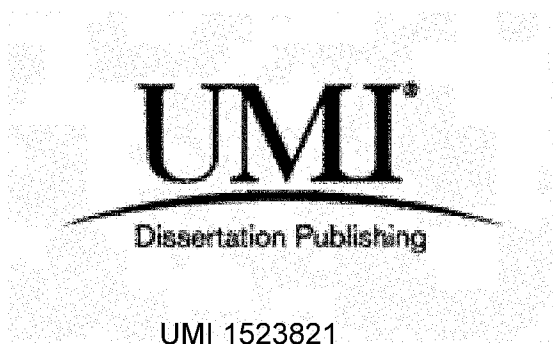
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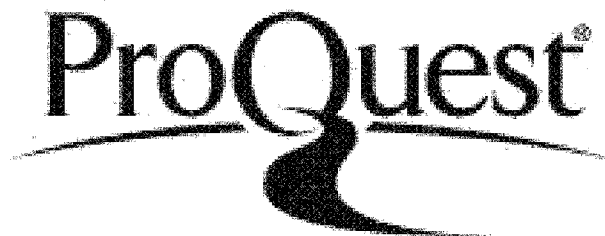


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## Abstract

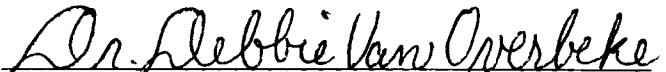
This action research examined the effectiveness of the Ten Sigma Transition System in assisting teachers with developing appropriate transition programming, goals, and objectives for students with disabilities. It also examined student perceptions of the effectiveness of the Ten Sigma Transition System in aligning his/her Individual Education Plan (IEP) postsecondary goals. Six students from a special education program participated in the study. The students' 2011-2012 IEPs were evaluated using the National Secondary Transition Technical Assistance Center Indicator 13 Checklist for a baseline score of six out of eight. The 2012-2013 IEPs were written using a checklist developed using the Ten Sigma Transition System and were again evaluated, with a score increase of 1.6 points. The students were administered two surveys based on their 2011-2012 and 2012-2013 IEPs. The students' answers indicated satisfaction with the effectiveness of the Ten Sigma Transition System in aligning his/her IEP postsecondary goals.

Action Research Committee

The members of this committee appointed to examine the action research of  
Abigail Lovas find it satisfactory and recommend that it be approved.

A handwritten signature in cursive script, reading "Dr. Verna Cornish", is written over a horizontal line.

Dr. Verna Cornish, Chair

A handwritten signature in cursive script, reading "Dr. Debbie Van Overbeke", is written over a horizontal line.

Dr. Debbie Van Overbeke

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## Table of Contents

Abstract .....	2
Action Research Committee .....	3
Acknowledgments.....	4
Table of Contents .....	5
List of Tables .....	8
Chapter	
1. Introduction.....	9
Statement of the Problem.....	10
Research Questions .....	11
Significance of the Study .....	11
Definition of Terms.....	13
Limitations and Delimitations of the Study .....	16
Organization of the Study .....	17
2. Review of Selected Literature and Research .....	19
Organization of the Chapter.....	19
History of Transition.....	19
Transition Documentation .....	21
Components of Transition.....	22
Barriers of Effective Transition .....	25
Transition Assessments.....	27
Summary .....	29

3. Methodology.....	31
Research Methodology.....	31
Population and Sample .....	32
Instrumentation .....	32
Data Collection .....	34
Data Analysis .....	36
Summary .....	38
4. Results .....	39
Response Rate.....	40
Demographic Data .....	41
Findings Related to Research Questions.....	42
Effectiveness of Ten Sigma Transition Survey.....	42
Student Perception of Effectiveness of Ten Sigma Transition Survey .....	47
Summary .....	55
5. Summary, Conclusions, Discussion, and Recommendations.....	57
Summary .....	57
Purpose.....	58
Review of Literature .....	59
Methodology.....	61
Results.....	62
Conclusions.....	64
Discussion .....	65

Recommendations.....	68
For Future Practice.....	68
For Future Study .....	69
References.....	71
Appendixes	
A. NSTTAC Indicator 13 Checklist Form A.....	74
B. IEP Writing Checklist.....	79
C. Student Transition Survey.....	82
D. Letter to Principal.....	84
E. Letter to Parents and Guardians .....	86



## List of Tables

## Table

1. Initial Evaluation of 2011-2012 Individual Education Plans using the  
NSTTAC Indicator 13 Checklist Form A .....43
2. Evaluation of 2012-2013 Individual Education Plans using the NSTTAC  
Indicator 13 Checklist Form A .....45
3. Comparison of the Initial and 2012-2013 Individual Education Plan  
Evaluations using the NSTTAC Indicator 13 Checklist Form A .....46

## Chapter 1

## Introduction

The transition process for students with disabilities has been a focus of legislation since the 1980's. It wasn't until the Individuals with Disabilities Education Act of 1990 (IDEA 1990) and again in the IDEA Amendments of 1997 (IDEA 1997) that transition was put into specific language (Johnson, Stodden, Emanuel, Lueking, & Mack, 2002). According to IDEA 1997, transition services must be well-planned and have specific steps that are outlined in the students' Individual Education Plan (IEP). There are many components involved in the transition process that are referred to as transition services. Transition services are based on the individual's needs and can include vocation exploration, community participation, daily living skills, functional skills, job skills, self-advocacy skills, counseling, related services (e.g., occupational therapy, speech/language, physical therapy), development of leisure and recreation skills, assistance with transportation and assistive technology (Fabian, Lent, & Willis, 1998).

There are new requirements under the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA 2004), which mandate the use of appropriate measurable postsecondary goals based upon age appropriate transition assessments. The United States Department of Education's Office of Special Education Programs (OSEP) developed 20 indicators to help states monitor and report progress. Indicator 13 measures the "percent of youth with IEPs aged 16 and above with an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessments, transition services, including course of study, that will

reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition service's needs" (20 U.S.C. 1416 (a) (3) (B)).

States are federally required to set the target at 100% compliance on Indicator 13. According to data collected in 2010, the state of Minnesota was meeting compliance on Indicator 13 at a rate of 57.3%. Writing appropriate postsecondary goals and annual IEP goals that correlate to the postsecondary goal is a major concern at this time.

One way to improve compliance of Indicator 13 is through the use of effective transition assessment. One transition assessment that is used by various schools throughout the country is Ten Sigma Transition System. Ten Sigma offers a variety of tools to evaluate and track transition progress for students with disabilities. One of the major components of the Ten Sigma Transition System is the transition survey. This can be given to team members in addition to the student to help evaluate the strengths and needs of the individual. This can then be used to develop annual IEP goals that will help the student reach his/her postsecondary goal.

### **Statement of the Problem**

Transition planning and writing effective and measurable goals and objectives are major concerns in special education. There are limited guidelines in the area of transition, specifically in transition assessment requirements. This creates a problem for reliability in creating plans that will help students reach their postsecondary goals.

The purpose of this study is to examine the effectiveness of the Ten Sigma Transition System in assisting teachers with the development of appropriate transition programming and measurable goals and objectives for students with disabilities in a Federal

Setting III program in a junior high school in northeastern Minnesota. This study will be conducted in rural northeastern Minnesota Junior High School. The students that will be included in the study range in age from 12 to 15-years-old.

### **Research Question**

In an attempt to examine the process of writing measurable and appropriate postsecondary goals and the role that the Ten Sigma Transition System plays in this process, the following research questions were addressed:

1. What is the impact of the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities (autism spectrum disorder, emotional or behavioral disorder, developmental cognitive disability)?
2. How do the students in a special education Federal Setting III program believe that the Ten Sigma Transition System was able to reflect their preferences, allowing for their annual IEP goals to reflect those same preferences and align with their postsecondary goal?

### **Significance of the Study**

One of the major problems that we are facing with transition is that students are not being adequately prepared for postsecondary life and teachers do not have the structure or procedures necessary for such preparation. The IEP is the mechanism used by schools and teachers to make sure students are prepared for transition (Eckes & Ochoa, 2005). Given the current state of federal statutes regarding transition services for students with disabilities, a greater emphasis has been placed on writing IEPs that support

a student's future instead of the focus being placed solely on academic progress (Hasazi, Furney, & Destefano, 1999). The goals of the IEP should break down the skills into obtainable increments so that by the time the student has graduated or aged out of school, they are ready to enter their job of choice. A dilemma faced by many schools and special education teachers is how to provide adequate preparation for transitioning students with disabilities from school to life outside of school. Many school districts are turning toward research based transition programs to help train staff and assist in developing a transition IEP that meets students' needs as well as state and federal statutes (Savage, 2005).

The audience for this study includes special educators, administrators, parents and families of individuals with disabilities. The results of the study will display the effectiveness or ineffectiveness of the Ten Sigma Transition System in developing appropriate postsecondary goals, measurable annual goals and objectives that align with the postsecondary goal, and transition planning that reflects that desires for students with disabilities.

The results of this study will benefit the special educators by evaluating a research-based transition assessment and developing a checklist to help guide the process of writing effective transition IEPs for students with disabilities. The student will be guided into developing an effective postsecondary goal, and this will be used to guide the special education teacher to writing measurable annual goals that align with and break down the postsecondary goal to make it attainable for the student. Additionally, it will offer a standardized and research-based tool for administration and special education

directors to use and support within a district for use during special education assessments.

Furthermore, this study will benefit the students within the sample of the study by producing an appropriate and effective transition plan.

### **Definition of Terms**

The following terms and phrases are provided to ensure clarity and understanding throughout the study. Those definitions not accompanied by a citation were developed by the researcher in relation to the study.

**Americans with Disabilities Act Amendment Act (ADAAA).** The Americans with Disabilities Act Amendment Act is a Federal law passed in 2008 to protect and provide equal opportunity to individuals with disabilities in their adult years (Shaw, Keenan, Madaus, & Banerjee, 2010).

**Autism spectrum disorder (ASD).** ASD is a neurologic disorder that can be characterized by impaired social interaction and communication, and by restricted and repetitive behavior.

**Course of study.** The course of study is a projected guide of the courses that a student will take throughout secondary school to provide the skills necessary to reach the postsecondary goal.

**Developmental cognitive disabilities (DCD).** Developmental cognitive disabilities is a condition that results in intellectual functioning significantly below average and is associated with concurrent deficits in adaptive behavior (MN Dept. of Education).

**Disability.** A disability is a physical or mental impairment that substantially limits on or more of the major life activities of an individual (P.L. 101-336).

**Emotional or behavioral disorders (EBD).** Emotional or behavioral disorders can be medical, biological, and psychological conditions as well as genetic dispositions that create challenging emotional or behavioral conditions that affect a student's ability to learn and function in a school setting (MN Dept. of Education).

**Federal Setting III.** A federal setting is the amount of time that a student with a disability requires special education services. A Federal Setting III indicates that a student with a disability requires 60% or more of their time be spent in a special education setting receiving special education services.

**Individuals with Disabilities Education Act (IDEA).** The Individuals with Disabilities Education Act is a federally mandated law that was created in 1990. IDEA mandated that transition be addressed for students in special education ages 16 or older by coordinating services to address student needs as they move from high school to their adult life (Johnson et al., 2002).

When IDEA was amended in 1997, the transition focus shifted to align the education services with the postsecondary goals of the student (Williams-Diehm & Lynch, 2007).

**Individuals with Disabilities Education Improvement Act (IDEIA).** The Individuals with Disabilities Education Act was amended a second time in 2004 and was renamed the Individuals with Disabilities Education Improvement Act (IDEIA). IDEIA mandates the Individual Education Program (IEP) include measurable postsecondary

goals that are based on transition assessments in the areas of education, employment, and independent living (Mazzotti et al., 2009).

**Indicator 13.** Indicator 13 is one of 20 indicators that were developed to ensure states were meeting the guidelines of IDEA (Mazzotti et al., 2009).

**Individual Education Plan (IEP).** An IEP is the legal document that defines a child's special education program. An IEP includes the disability under which the child qualifies for special education services, the services the team has determined the school will provide his yearly goals and objectives and any accommodations that must be made to assist his learning (U.S. Department of Education, Sec. 300.320).

**Measurable annual goal.** Annual goals are included in every student's IEP. It is a goal that can reasonably be accomplished within one year. An annual goal must be measurable. When a student is on a transition IEP, the annual goal must align with the postsecondary goal.

**Objectives.** Objectives are short-term benchmarks that lead to the annual IEP goal. Each annual goal must have at least two objectives.

**Postsecondary goals.** Postsecondary goals are included in every transition IEP. It is a goal that the student sets for what they would like to happen postsecondary. These goals are in the transition areas.

**Student with a disability.** A student with a disability for this study includes students diagnosed with autism spectrum disorder, emotional or behavioral disorder, or developmental cognitive disability. The disability of the student requires that the student receive special education services 60% or more of the school day.



**Summary of Performance (SOP).** The Summary of Performance is a summary of the child's academic achievement and functional performance, including recommendations on how to assist the child in meeting the child's postsecondary goals (IDEA, 2004).

**Ten Sigma Transition System.** Ten Sigma Transition System provides is a packaged program that is used to identify transition needs and write more compliant Individualized Education Programs for students.

**Transition.** Transition is the movement from secondary education to a postsecondary environment. This postsecondary environment can be vocational school, technical college, university, work force, training program, etc.

**Transition areas.** There are three main areas of transition: postsecondary training, independent living, and employment.

**Transition plan.** A transition plan is developed for all students in special education in grade 9 or higher. A transition plan consists of a postsecondary goal, course of study, transition services, and transition assessment results.

**Transition services.** Transition services are a coordinated set of activities, based on the student's needs that are designed to facilitate a student's movement into a postsecondary environment.

### **Limitations and Assumption of the Study**

This study was limited by the following limitations and assumptions.

#### **Limitations**

1. This study was limited to a small sample size. The sample was constructed from the researcher's caseload of students in 2011-2012 who were also on the researcher's caseload in 2012-2013. The sample included two seventh-grade boys, two eighth-grade girls, and three eighth-grade boys during the 2011-2012 school year.

2. The students in the study sample were all part of a Federal Setting III program, requiring at least 60% of their time spent receiving special education services due to the significance of their disability.

### **Assumptions**

1. If any of the students move out of the school district during the 2012-2013 school year before I write the IEP and gather the data, the information for that student will no longer be useful.

2. Ten Sigma Transition System could change their program, rubrics, or survey. This would cause a change in the data collection as well as the guidelines that the researcher developed for writing the postsecondary and annual goals based on the Ten Sigma Transition System.

### **Organization of the Study**

This action research study is organized into five chapters. Chapter 1 introduces the study and addresses the problem and research question. In addition, chapter 1 discusses the significance of the study, defines key terms, and explains the limitations and assumptions of the research study. Chapter 2 is a review of the related literature concerning postsecondary transition for students with disabilities. It includes the history, documentation, and components of transition. The literature review ends with the

barriers of transition which leads into the importance of transition assessments and the Ten Sigma Transition System. Chapter 3 describes the research methodology used to conduct the study which includes the design of the research, description of the population, instrumentation, data collection, and data analysis. Chapter 4 includes the results of research. It will include demographic information, response rates, and reveal the findings of the research. Quantitative data are displayed to support the research question. Finally, chapter 5 contains a summary of the study and includes conclusions drawn from the findings, a discussion, and recommendations for practice and future studies.

## Chapter 2

### Review of Selected Literature

According to the Individuals with Disabilities Improvement Act of 2004 (IDEIA), transition is a coordinated set of activities that focus on improving academic and functional achievement for students with disabilities to prepare them for postsecondary activities. In this chapter, transition literature will be reviewed. Effective transition is important because students with disabilities are twice as likely to be unemployed or unengaged in postsecondary education as their peers without disabilities (Williams-Diehm & Benz, 2008). As this literature review will demonstrate, there have been advances in the area of transition, but there are still many improvements that can and must be made to increase the post-school success of students with disabilities. This chapter will discuss (a) the history of transition legislation, (b) transition documentation required by law, (c) bringing together student, family, school, and community to increase the effectiveness of transition, (d) barriers to effective transition, and (e) transition assessments, in particular the Ten Sigma Transition Survey that is the core of this research project.

### History of Transition

There have been many movements in legislation to set guidelines for schools on how to create a successful transition for students with disabilities. In 1990, the Individuals with Disabilities Education Act (IDEA) mandated that transition be addressed for students ages 16 or older by coordinating services to address student needs as they move from high school (Johnson et al., 2002). Addressing transition in an Individual

Education Plan (IEP) was defined as including a statement of needed services and agencies that would be involved. IDEA required students' interests and needs also be considered in the development of the transition plan (Kohler & Field, 2003).

When IDEA was amended in 1997, the transition focus shifted to align the education services with the postsecondary goals of the student (Williams-Diehm & Lynch, 2007). The amendment also included providing a course of study for each student in his or her IEP (Kohler & Field, 2003). This would help to provide a clear outline of courses for the student to reach his or her postsecondary goal. The focus moved toward providing the students with the skills needed to become responsible adults (Mazzotti et al., 2009).

In 2004, IDEA was amended a second time and was renamed the Individuals with Disabilities Education Improvement Act (IDEIA). IDEIA mandates the Individual Education Program (IEP) include measurable postsecondary goals that are based on transition assessments in the areas of education, employment, and independent living (when appropriate). Each state is required to submit information on this area to the Department of Education as part of Indicator 13. Indicator 13 is one of the 20 indicators that were developed to ensure states were meeting the guidelines of IDEA (Mazzotti et al., 2009).

Many people are unaware that IDEIA does not continue to cover individuals with disabilities when they enter postsecondary education. The Americans with Disabilities Act Amendment Act (ADAAA) is the Federal law, passed in 2008, to protect and provide equal opportunity to individuals with disabilities throughout their adult years. ADAAA

brings the focus to whether an individual with a disability has equal access through reasonable accommodations and modifications. One of the goals of ADAAA is to help bridge the movement of students with disabilities from secondary schools to postsecondary institutions. The documentation provided in an IEP, which is mandated by the Individuals with Disabilities Act of 1990 (IDEA) does not provide enough documentation for accommodations and services in postsecondary institutions (Shaw, Keenan, Madaus, & Banerjee, 2010). ADAAA requires documentation that is time sensitive and identifies that the individual's disability impairs major life activities and provides current functional abilities.

### **Transition Documentation**

The most recent IDEIA and the Americans with Disabilities Act Amendments Act of 2008 (ADAAA) attempted to clarify and align the appropriate documentation for students with disabilities (Shaw et al., 2010). By creating a set of guidelines for secondary schools to follow in regard to documentation for individuals with disabilities, equal access and opportunity for postsecondary education and employment can be provided for each individual. To help provide the information required by postsecondary institutions, the Summary of Performance (SOP) required by IDEIA was developed.

All students receiving special education services receive an SOP document when they graduate from high school. IDEIA states that high schools must provide each student with a summary of the student's academic achievement and functional performance, including recommendations on how to assist the student in meeting postsecondary goals (Shaw et al., 2010). Under federal law, students with disabilities

have legal rights to academic accommodations in postsecondary education institutions (Shaw et al., 2010). However, it is the student's responsibility to disclose his or her disability to postsecondary institutions (Eckes & Ochoa, 2005). While the SOP may not be the only piece of documentation required by ADAAA, it does provide significant disability documentation.

The Summary of Performance (SOP) provides invaluable information for students with disabilities who enter the workforce after high school graduation without attending a postsecondary institution. For individuals with employment and independent living postsecondary goals, the SOP serves as a tool for the student, adult service provider, and employer. The SOP provides access, accommodations, and self-determination for individuals with moderate to significant disabilities (Kochhar-Bryant, 2007).

### **Components of Transition**

A report in 2006 by the National Collaborative on Workforce and Disability (NCWD) stated that children with disabilities need extra support throughout their transitions to make informed choices and become independent adults (Lindstrom et al., 2007b). Families offer a strong support base for an individual's success in the workforce and postsecondary institution. Lindstrom, Doren, Metheny, Johnson and Zane (2007a) conducted a study that reviewed family involvement from an early age reflected positive involvement in career related activities and planning. It is important to bridge the gap between the family, school, and community. "Special education professionals need to create specific opportunities for engaging parents in career exploration, job search, and post-school planning activities" (Lindstrom et al., 2007a, p. 348).

In addition to measurable postsecondary goals, Indicator 13 requires evidence that the student was invited to the IEP meeting (Mazzotti et al., 2009). Student involvement is important for many reasons. Having the student involved in transition planning and setting postsecondary goals leads to positive post-school outcomes (Davies & Beamish, 2009). When a student graduates from high school, the student is no longer protected under IDEIA and must advocate for his or her individual needs to postsecondary education institutes and employers (Eckes & Ochoa, 2005). Students becoming aware of their disabilities and comfortable with expressing their strengths and needs, helps to bridge the gap that can occur when transitioning from school to postsecondary environments. Person-Centered Planning (PCP) used in creating transition plans allows for both self-determination and community participation (Ferguson 2005). This can create a wider range of opportunities for individuals for disabilities.

According to Lindstrom et al. (2007b), research-based transition services include: strategies to promote self-determination; student choice; school based services; and community based services to prepare students for employment and postsecondary education. Research studies suggest (Lindstrom et al., 2007b) that focus on self-awareness and self-determination contributes to increased opportunities for employment, postsecondary education, and independent living for students with disabilities (Lindstrom et al., 2007b).

There is substantial evidence that supports schools utilizing community-based services to promote generalization of skills and contribute to successful transition outcomes (Lindstrom et al., 2007b). Gagliardi (2010), Executive Director at League



School of Greater Boston, believed that vocational success for individuals with disabilities is closely tied to their ability to integrate into adult life without the strong support systems that are provided in schools.

Flexer, Simmons, Luft, and Baer (2005) defined the components of transition for students with disabilities to postsecondary life as coordinated planning, collaboration, and decision-making by school staff, families, and community agencies. A unified team approach allows for opportunities in the community that focus on the student's needs and wants to help provide him or her with the skills necessary to reach goals and become a successful and independent adult. By providing students with the opportunity to learn and practice skills in the appropriate setting, they are able to make a smooth transition into the adult world (Gagliardi, 2010).

The role of vocational training is an example of community collaboration. Ofoegbu and Azarmsa (2010) found the Vocational Education Program (VEP) developed by the special education department in the Long Beach Unified School District (LBUSD) was an effective transition intervention program. In response to IDEIA, VEP was established to create a smooth transition to a career and adult life. Based on the research, the participants gained the skills to be viewed as competitive in the job market. Over 50 percent of the participants were able to acquire and maintain employment for at least one year post high school graduation (Ofoegbu & Azarmsa, 2010). It was found that through the training and skill development the students were able to generalize the skill to compete in the job market with non-disabled peers.

A study conducted by Willaims-Diehm and Lynch (2007), suggested a strong working relationship between school and local adult service providers in addition to providing information to students and parents on these agencies for a success transition program. It is important that the teachers and service providers know and understand their roles in the transition planning process. The National Longitudinal Transition Study findings indicated that transition plans involve “vocational education, paid work experience, parent involvement, and/or interagency collaboration had a positive impact on student outcomes” (Kohler & Field, 2003, p. 176). Further studies on the topic have found that students who were more involved in their transition planning were more likely to achieve their postsecondary goals (Kohler & Field, 2003).

### **Barriers to Effective Transition**

Park (2008) conducted a study in Canada to gain special education teachers’ perspectives on the transition process. The results determined that there are some significant barriers to providing effective transition services for students with disabilities. While this study was conducted in Canada with a very different educational system, much can be learned from cross-national comparison and the findings seem comparable to barriers in the United States and important for American educators as well.

One major barrier found in the Canadian study is the unclear guidelines and expectations in regard to transition services (Park, 2008). It is difficult to know what role each person on the team should take when there are multiple team members involved. Special education teachers, community members, transition coordinators, job coaches, and many others can make up a transition team for one individual. It is very important

that there are clear expectations in place so that all of the components can be carried out completely for the individual. Benz, Lindstrom, Unruh, and Waintrup (2004) investigated the sustainability of secondary transition by examining the Youth Transition Program (YTP). The YTP is a transition program was developed in Oregon with collaboration from the Oregon Department of Education, the Oregon Vocational Rehabilitation Division, the University of Oregon, and local schools. It was developed for students with disabilities who require supports that are not available through other programming. The YTP was examined by researchers to understand the effectiveness of secondary transition programs. The study found that clear guidelines and communication create a successful program for students (Benz et al., 2004).

A second barrier to providing effective transitional services determined in the Canadian study was the need for necessary resources, time, and money to provide effective skill building and collaboration between agencies (Park, 2008). The resources that are necessary for effective programming can include working with community agencies, a comprehensive curriculum to teach work-based skills, and transportation to and from work sites. These components can be expensive and time consuming. Hughes (2008) stated “as students approach their school exit, they should spend increasingly more time in the community learning independent living skills, interacting with coworkers and neighbors, and sampling a variety of jobs as they move toward securing a supported employment placement based on their individual strengths, preferences, and interests” (p. 101).

Williams-Diehm and Lynch (2007) provided the recommendation for what administration needs to provide special education staff with, “administrators need to provide them with the time they need to work individually with students and their families in transition planning” (p. 20). It is important to include families and community agencies in the planning process. However, this can be time consuming for team members and may not be followed through, because of lack of time or funds. The teachers involved in the Park (2008) study identified “informing families about the transition process and services as one of the most challenging, but also most crucial, tasks in supporting students with disabilities” (p. 103).

#### **Transition Assessments Including the Ten Sigma Transition Survey**

Although federal law has made movements toward defining transition requirements, there are still some areas that are undefined. IDEA requires that transition assessments are a part of the transition planning process. The only requirement that IDEA gives for transition assessments is that both formal and informal assessments be used. This leaves districts and schools to determine guidelines for assessments. Morningstar and Liss (2008) stated that a recent survey on states’ uses and implementation of IDEA transition assessment requirements indicated that state education agencies were in the process of developing guidelines for transition assessment. Only five states indicated that guidelines were in place (as cited in Mazzotti et al., 2009).

According to Sitlington (1996), transition assessment is defined as “the ongoing process of collecting data on the individual’s strengths, needs, preferences, and interest as they relate to the demands of current and future working, education, living, and personal

and social environments. Assessment data serve as the common thread in the transition process and form the basis for defining goals and services to be included in the IEP” (as cited in Kellems & Morningstar, 2010, p. 63). All successful transition plans include a comprehensive evaluation and there are numerous tools that can be used to assess student strength and needs (Savage, 2005).

Transition assessments are important components of the transition planning process. The assessments are used to measure vocational skills, interests, self-determination, and other related skills. In addition to providing present levels of performance, transition assessments help students make informed decisions about their futures (Mazzotti et al., 2009). Once transition assessment data are collected, it is used to write the measurable postsecondary goal(s) based on the student’s needs and wants. After development of the measurable postsecondary goal(s), annual IEP goals are developed in alignment with the postsecondary goal(s). By aligning the goals and transition services, students are provided with a transition plan that will teach them the skills necessary to reach their long-term goals.

Transition assessment is the starting point to transition planning (Mazzotti et al., 2009) and is an area with unclear recommendations of what tools to use. Through a careful assessment of the student’s strengths, needs, and preferences, the transition team is able to determine the individual needs (Savage, 2005).

The Ten Sigma Transition System is an informal assessment that has been implemented in various school districts throughout the United States. Based on the study conducted by Mazzotti et al. (2009), finding an effective transition assessment can help

guide the measurable postsecondary goal, annual IEP goal, and transition services. By developing a clear transition plan that focuses on the student's desires and needs, it can be implied that, with resources, the student will be prepared for the postsecondary environment. When students are taught in a systematic approach that addresses each transition area, there is further success in postsecondary environments (Williamson, Robertson, & Casey, 2010). The Ten Sigma Transition System provides an outline, through the rubric system, of a systematic transition approach for each student.

The Ten Sigma Transition System is a systematic program designed to meet the transition needs of students with disabilities. The system focuses on three main principles: making students responsible for their future, focusing on responsibility and accountability, and providing learning situations that are real-world based. There is a survey that the IEP team uses to identify the students' strengths, needs, and priorities. The results of the survey can be used to develop a transition plan and structure the goals of the IEP. Once the goals have been prioritized, rubrics can be created to track progress.

### **Summary**

Improving transition planning for students with disabilities has been a focus of special education and legislation for over 15 years. Coordinated programming with academic, work experience, adult services, postsecondary education, and self-determination provides students with the resources they need to live a successful adult life (Collet-Klingenberg & Kolb, 2011). There have been advances in the area of transition through program development and clarification of guidelines. Literature supports that there is still a need for further development and resources in this area.

This review of literature discussed the definition and history of transition from high school for students with disabilities. It provided information on the federal and state laws that mandate support for students with disabilities through postsecondary and special education. The review shed light on the components of transition, the role of vocational education and the current trends of transition planning in the schools. Transition assessments play a major role in planning effectively for students with disabilities.

In the following chapters, one specific assessment will be focused on. The Ten Sigma Transition System, an informal assessment. The goal of the Ten Sigma Transition System is to provide documentation that can be used to develop effective transition plans and programming and can help the team determine appropriate postsecondary goals and create measurable annual goals for the student to gain the skills required to be successful in the postsecondary environment. The following chapters will be important for understanding whether and how Ten Sigma affects the effectiveness of transition planning.

## Chapter 3

## Research Methodology

The purpose of this study was to examine the effectiveness of the Ten Sigma Transition System in assisting teachers with the development of appropriate transition programming and measurable goals and objectives for students with disabilities in a Federal Setting III program in a junior high school in northeastern Minnesota. Additionally, this study was designed to assist teachers in writing IEP goals that align with student postsecondary goals in order to ensure a smoother transition into postsecondary life for students with disabilities. Indicator 13 is one of the 20 indicators developed by the Department of Education to help states monitor IEPs and report progress. The target is to reach 100% compliance on Indicator 13, which focuses on postsecondary goals. According to data collected in 2010, the state of Minnesota was meeting compliance on Indicator 13 at a rate of 57.3%. Writing appropriate postsecondary goals and annual IEP goals that correlate to the postsecondary goal is a major concern. Specifically, the following questions were asked:

1. What is the impact of the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities (autism spectrum disorder, emotional or behavioral disorder, developmental cognitive disability)?
2. How do the students in a special education Federal Setting III program believe that the Ten Sigma Transition System was able to reflect their preferences,



allowing for their annual IEP goals to reflect those same preferences and align with their postsecondary goal?

### **Population and Sample**

This study was conducted during fall semester of 2012 at a rural northeastern Minnesota junior high school. The study was populated through a sample of convenience in that those participating had been placed on the researcher's special education caseload for their seventh, eighth and ninth-grade school year. Students placed on the researcher's special education case load were all Federal Setting III students, requiring 60% or more of their time in a special education setting. Students' diagnoses varied from autism spectrum disorder, developmental cognitive disability, and emotional or behavioral disorder. The case load consisted of two female students in ninth-grade, two male students in ninth-grade, and two male students in eighth-grade. All participants participated via their IEP written by the researcher during the previous school year. All participants were Caucasian males and females between 12-and 15-years-of-age.

### **Instrumentation**

Qualitative instruments were used to address the questions of this study. First, an examination of the students' IEP's from the 2011-2012 school year was completed. The IEPs were examined using the National Secondary Transition Technical Assistance Center (NSTTAC) Indicator 13 Checklist Form A (Appendix A). NSTTAC created this checklist for the use of schools, districts, or states, to review data in all postsecondary goal areas. This checklist was approved by the Office of Special Education Programs (OSEP) on September 8, 2006, and is readily available on the internet for use by special

education teachers. The IEPs were given a score of one through eight based on the number of requirements that were met.

The researcher created a checklist based on the Ten Sigma Transition System to help guide the IEP writing process (Appendix B). This checklist was used to write the IEPs of the same students for the 2012-2013 school year. This checklist included a variety of questions to prompt the researcher to reflect upon the Ten Sigma Transition Survey and the Federal requirements of Indicator 13.

Upon completion of the 2012-2013 school year, the IEPs were examined using the NSTTAC Indicator 13 Checklist Form A (Appendix A). The IEPs were given the same rating of one through eight based on the number of requirements that were met.

Finally, the students involved were administered a survey (Appendix C). The survey questions were created by the researcher and critiqued by a group of special education teachers with experience in the area of special education transition and goal writing. The critique was completed prior to the survey being given to the students. Changes were made based upon critique recommendations, to ensure content validity. The questions included in the Student Transition Survey were:

1. The area of this goal is in (circle one):

Employment      Postsecondary Education and Training      Independent Living

2. Do you feel that the “Measurable Annual Goal” is related to your “Measurable Postsecondary Goal”? (Circle one)

YES

NO

3. Do you feel that the reaching your “Measurable Annual Goal” will help you reach the “Measurable Postsecondary Goal” listed? (Circle one)

YES

NO

4. Read the “Objectives” below your “Measurable Annual Goal”. Do you feel the objectives will help you succeed in reaching your goal? (Circle one)

YES

NO

5. Do you feel that you are being given the services needed to reach your “Measurable Annual Goal”? (Circle one)

YES

NO

6. Do you feel that you are receiving the services necessary to reach your “Measurable Postsecondary Goal”? (Circle One)

YES

NO

### **Data Collection Procedures**

Prior to beginning this study, the researcher sent a letter requesting permission to conduct research to the school principal on August 27, 2012 (Appendix D). Once permission was received from the building principal, the researcher sent a letter to the parents or guardians of the students in the sample population that were to be used in the research (Appendix E). This letter was sent to parents or a guardian on September 7, 2012 with the notification that if the letter was not returned by September 21, 2012 it would be assumed that permission was granted.

Before this study could be completed, a baseline of IEP writing needed to be collected. A sample population was selected through convenience using students on the

researcher's case load. The researcher chose students in grades seven and eight to participate in the study. The researcher wrote the students IEPs during the 2011-2012 school year based on the district's training and special education knowledge.

A secondary special education coordinator, who had worked as a secondary special education teacher for 14 years and more recently attended postsecondary training through the state of Minnesota, used the NSTTAC Indicator 13 Checklist Form A to analyze the IEPs (Appendix A). A rating of one through eight was awarded to each based on the 8 questions and the requirements that it met. This created a baseline for IEP writing data.

The researcher and a group of experienced special education teachers then examined the Ten Sigma Transition Survey that was used during the transition assessment process to create a checklist to follow when writing IEPs during the 2012-2013 school year (Appendix A). The researcher used this checklist with the sample population when creating the student IEPs. The checklist was a guide to be sure that the postsecondary goals were a reflection of the student and an accurate measure of the student's ability.

Once the IEPs for the 2012-2013 school year were completed for the sample population the secondary special education coordinator evaluated them. The secondary special education coordinator used the same tool that was used on the 2011-2012 to ensure validity and consistency within the study (Appendix A). The IEPs were awarded a score using the same one through eight rating based on the number of requirements that were met.

Additionally, the students involved in the study were given the Student Transition Survey, which was developed by the researcher and critiqued by a group of special education teachers prior to its completion by the students (Appendix C). Students were given the Student Transition Survey in the fall of the 2012-2013 school year and then again after their annual IEP was written during the 2012-2013 school year. The initial survey was kept by the researcher until the second survey was completed by the entire population group. At that time, the results from the fall and after the completion of the new 2012-2013 IEP were compared to determine student perceptions.

### **Data Analysis**

Two research questions were posed in order to investigate the effects the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities in a rural northeastern Minnesota junior high school. Data collected for the posed question were thoroughly analyzed as indicated in this section.

The first research question posed was: What is the impact of the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities? To answer this question qualitatively, student IEPs written in the 2011-2012 school year, were evaluated by the secondary special education coordinator using the NSTTAC Indicator 13 Checklist Form A and awarded a score of one through eight. The score was based on the number of criteria met on the checklist (Appendix A). A checklist was then created by the researcher, based on the Ten Sigma Transition System and Indicator 13, to guide writing

student IEPs in the 2012-2013 school year (Appendix B). After the student IEPs were written for the 2012-2013 school year, the secondary special education coordinator again evaluated them using the NSTTAC Indicator 13 Checklist Form A and awarded a score of one through eight (Appendix A).

The researcher then analyzed the data and scoring of the IEPs from both the 2011-2012 and 2012-2013 school years. The scoring looked at the requirements that the Minnesota Department of Education set for developing an effective transition plan for students in special education. The researcher created a bar graph to compare the scores of the pre and post IEP evaluations for each student. The researcher used this data to determine how the use of the Ten Sigma Transition System affected the development of effective and appropriate transition programming.

The second research question posed was: How do the students in a special education Federal III Setting feel that the Ten Sigma Transition System was able to reflect their preferences, allowing for their annual IEP goals to reflect those same preferences and align with their postsecondary goal? To answer this question qualitatively, students were given the Student Transition Survey in the fall of the 2012-2013 school year (Appendix C). The students were asked to reflect upon their 2011-2012 IEPs when completing the survey at this time. Upon completion of the 2012-2013 IEP using the created checklist (Appendix B) based on the Ten Sigma Transition System to guide writing student IEPs, each student was given the survey a second time and asked to analyze their IEP and answer the questions accordingly related to the newly written IEP.

The data collected from the Student Transition Survey were then analyzed by the researcher. The answers from each student were compared as were the answers to each question. The researcher used this data to determine student perception how the use of the Ten Sigma Transition System effected the development of affective and appropriate transition programming.

### **Summary**

Chapter 3 presented the methodology that was used to conduct the study. Qualitative research was collected through the use of checklists created by the U.S. Department of Education and the researcher. Qualitative research was collected through the use of a student survey created by the researcher and critiqued by a group of experienced special education teachers. The chapter also included a description of the population selection. Details of data collection procedures and data analysis were provided. All of this was provided answer the research question. Chapter 4 presents a detailed description of the results of the research study. Finally, Chapter 5 discusses recommendations and suggestions for future research in this area.

## Chapter 4

## Results

The purpose of this study was to examine the effectiveness of the Ten Sigma Transition System in supporting teachers with the development of appropriate transition programming and measurable goals and objectives for students with disabilities in a Federal Setting III program in a junior high school in northeastern Minnesota. The students in this program spent 60% or more of their time in a special education setting. The students' diagnoses included; autism spectrum disorder, developmental cognitive disability, and emotional or behavioral disorder.

Additionally, this study was designed to assist teachers in writing Individualized Education Plan (IEP) goals that aligned with student postsecondary goals in order to ensure a smoother transition into postsecondary life for students with disabilities. Specifically, the following questions were asked:

1. What is the impact of the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities (autism spectrum disorder, emotional or behavioral disorder, developmental cognitive disability)?
2. How do the students in a special education Federal Setting III program believe that the Ten Sigma Transition System was able to reflect their preferences, allowing for their annual IEP goals to reflect those same preferences and align with their postsecondary goal?



Chapter 4 presents the results of this study. It includes the following topics: (a) response rate, (b) the demographic data regarding the population, (c) findings related to each research question, and (d) a summary of the results.

### **Response Rate**

A letter was sent to the parents or guardians of the students whose IEPs were to be used in the research (Appendix E). The letter explained the purpose of the study to the parents and asked their permission for their child's participation. The letter also stated that if there was not a response by a specific date, it would be assumed that permission is granted. Of the six letters that were mailed, four (67%) parents verbally responded giving permission. Verbal permission was given by the two ninth-grade male students' parents, one of the ninth-grade female student's parents, and one of the eighth-grade male student's parents. Two of the letters were not returned and the parents did not respond when contacted on two separate occasions. The letters were to one of the ninth-grade female students and an eighth-grade male student. No parents refused to participate in the study, so all six students were used in the study.

The students were administered a survey (Appendix C) at the beginning of the 2012-2013 school year and again after their IEP was written during the 2012-2013 school year. In total, six surveys were administered at the beginning of the 2012-2013 school year and six (100%) surveys were completed by the students in the research group. The student surveys were given as the IEPs of the students were completed throughout the 2012-2013 school year. Of those six surveys administered at the beginning of the school year, only five (83%) were completed by the students after the 2012-2013 IEP was

completed. This is due to a student moving out of the school district before his IEP was completed.

### **Demographic Data**

This study was populated through a sample of convenience. The demographic characteristics of the population in the study included Caucasian males and females between the ages of 12-and 15-years-of-age. The population consisted of six students in seventh, eighth, and ninth-grade in rural northeastern Minnesota. All students were placed in a Federal Setting III special education program, which indicates that at least 60% of their time is spent in a special education setting. The students' diagnoses varied from autism spectrum disorder, developmental cognitive disability, and emotional or behavioral disorder.

The population consisted of two female students in ninth-grade, two male students in ninth-grade, and two male students in eighth-grade. Student A was a ninth-grade male age 14 with a diagnosis of developmental cognitive disability. Student B was 14 years old female and in ninth-grade with a diagnosis of emotional or behavioral disorder. Student C was a male with a diagnosis of autism spectrum disorder and was 14 year old in eighth-grade. Student D was a 15 year old male in ninth-grade with a diagnosis of emotional or behavioral disorder. Student E was an eighth-grade student with a diagnosis of emotional or behavioral disorder that was 14 years old male. Student F was a 16 year old female student in ninth-grade with a diagnosis of developmental cognitive disability.

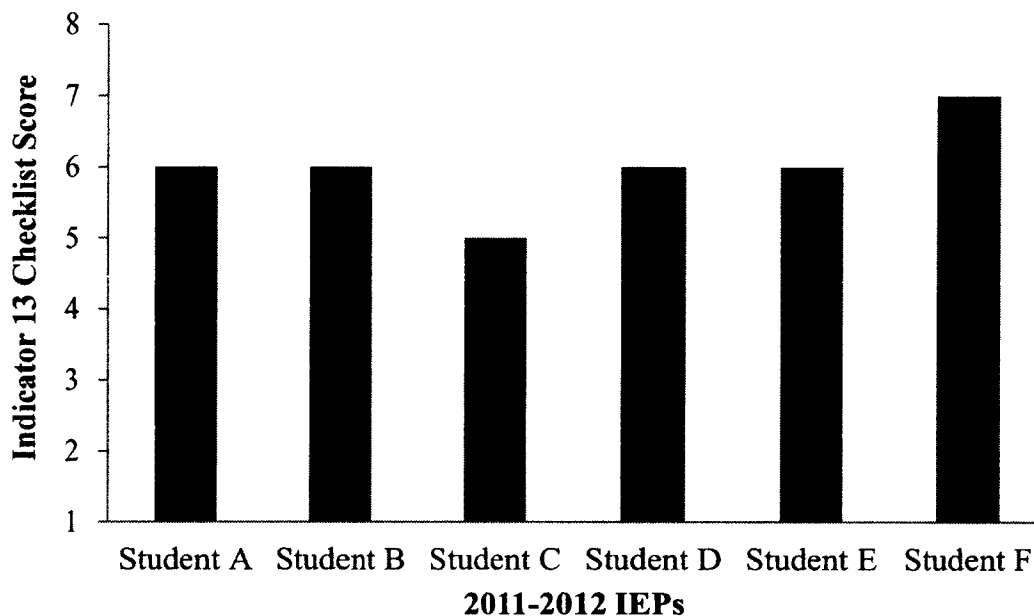
### **Findings Related to the Research Questions**

This section presents data to answer the research questions of the study. Data for the first research question were gathered using the NSTTAC Indicator 13 Checklist Form A (Appendix A), which were filled out by the secondary special education coordinator using the IEPs written during the 2011-2012 and 2012-2013 school years. The IEPs that were reviewed were of the six students in the study. Data collected from the Student Transition Survey (Appendix C), administered two times during the 2012-2013 school year, was used to answer the second research question.

#### **Effectiveness of the Ten Sigma Transition System in Transition Programming**

The question “What is the impact of the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities (autism spectrum disorder, emotional or behavioral disorder, developmental cognitive disability)?” was addressed qualitatively through the use of the NSTTAC Indicator 13 Checklist Form A (Appendix A). The IEPs written by the researcher during the 2011-2012 school year were initially evaluated using the NSTTAC Indicator 13 Checklist Form A by the secondary special education coordinator. A score of one through eight was given to each of the IEPs based on the number of criteria that were met. When the results were calculated, a point was given if the evaluator indicated a “Yes” or a “NA” for a specific question. This was completed in according to the NSTTAC Indicator 13 Checklist Form A instructions included within the checklist form (Appendix A). The researcher did not review the initial evaluations until the completion of all data collection. This was done in an effort to ensure that the post

data would reflect the IEP Writing Checklist rather than the results of the initial evaluation (Appendix B). Figure 1 shows the results of the initial evaluation of the six IEPs using the NSTTAC Indicator 13 Checklist Form A.

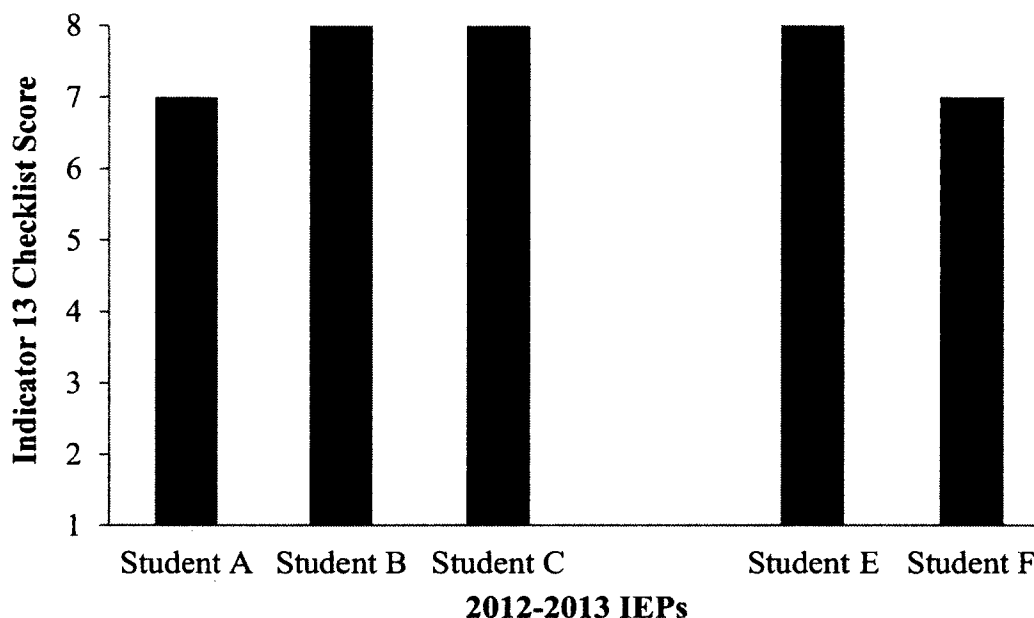


*Figure 1.* The number of criteria that was met on each student's IEP written in the 2011-2012 school year as edited by the secondary special education coordinator using the NSTTAC Indicator 13 Checklist Form A (Appendix A).

As figure 1 displays, the assessment of the 2011-2012 IEPs yielded an average of six out of eight total points. More specifically, four IEPs received a score of six. One IEP received a score of five, which indicates that three areas were missing from the IEP or needed improvement. Finally, one IEP received a score of seven based on the

NSTTAC checklist Form A (Appendix A), indicating only one area was missing from the IEP or needed improvement.

The researcher created a checklist, the IEP Writing Checklist (Appendix B), to assist in writing more effective transition IEPs during the 2012-2013 school year. The checklist was developed based on the Ten Sigma Transition System and on the requirements from Indicator 13. This checklist included a variety of questions to prompt the researcher to reflect upon the Ten Sigma Transition Survey and the Federal requirements of Indicator 13. This checklist was used by the researcher as each IEP was written during the 2012-2013 school year. After the completion of the 2012-2013 IEPs, the secondary special education coordinator again evaluated the IEPs using the NSTTAC Indicator 13 Checklist Form A (Appendix A). The IEPs were given a score of one through eight based on the number of criteria that were met. Figure 2 shows the results of the IEPs during 2012-2013 school year using the NSTTAC Indicator 13 Checklist Form A.

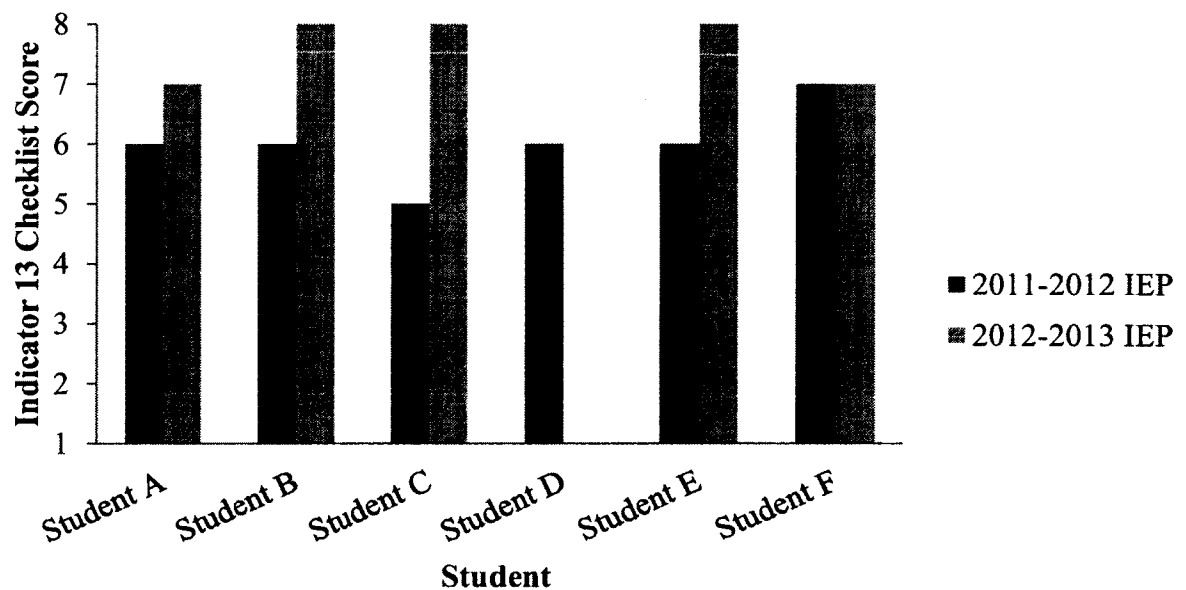


*Figure 2.* The number of criteria that was met on each student's IEP written in the 2012-2013 school year as edited by the secondary special education coordinator using the NSTTAC Indicator 13 Checklist Form A (Appendix A).

Figure 2 displays the results of assessment of the 2012-2013 IEPs. The results yielded an average of 7.6 out of eight total points. More specifically, three IEPs received a perfect score of eight. While two IEPs received a score of seven, showing that one criterion was missing from the IEP, does not indicate a strong need for improvement. Student D is eliminated from this table, due to movement from the district. The student was not planned to move from the district and moved prior to his IEP being written, therefore, he could not be included in this area of the study.

A comparison of the Individualized Education Plans of the 2011-2012 school year and the 2012-2013 school year are displayed in Figure 3 below. The IEPs were written

after implementing the IEP Writing Checklist (Appendix B). This was created to improve the IEP writing process and support the transition process for students. As a review, a score was given to each IEP of one through eight. This was based on the number of criteria that were met from the NSTTAC Indicator 13 Checklist Form A (see Appendix A). One point was given if the evaluator, the secondary special education coordinator, indicated a “Yes” or a “NA” for a specific question.



*Figure 3.* A side-by-side comparison of the evaluation results of the 2011-2012 and 2012-2013 IEPs using the NSTTAC Indicator 13 Checklist Form A (Appendix A).

By comparing the evaluations side by side in Figure 3, one can see a positive increase in the scores of the 2012-2013 IEPs. All of the 2012-2013 IEPs were completed

using the IEP Writing Checklist (Appendix B), which was influenced by the Ten Sigma Transition System and Indicator 13.

### **Student Perception of the Effectiveness of the Ten Sigma Transition System**

The second research question “How do the students in a special education Federal Setting III program believe that the Ten Sigma Transition System was able to reflect their preferences, allowing for their annual IEP goals to reflect those same preferences and align with their postsecondary goal?” was addressed qualitatively through the use of a Student Transition Survey (Appendix C). The six students whose IEPs were used in the research study were administered the survey at the beginning of the 2012-2013 school year and asked to evaluate their IEPs from the 2011-2012 school year. The same six students were planned to be administered the same survey again after their IEP were written during the 2012-2013 school year. However, one student (Student D) moved prior to his 2012-2013 IEP being written and therefore was not able to complete the survey. Therefore, five of the six students were administered the Student Transition Survey (Appendix C) and asked to evaluate their new IEP.

The next section displays the results of each student’s 2011-2012 and 2012-2013 IEP survey, a comparison between the two surveys, and a comparison across all students’ 2011-2012 and 2012-2013 IEP surveys. For purposes of data privacy, no names or personal information was used in any part of this research paper. All students were referred to and identified as a letter that was assigned to them at the beginning of the study. Each student was given the same verbal instructions from the researcher when given the Student Transition Survey (Appendix C). The researcher offered to read the



survey aloud to students, three students chose to have the survey read aloud. The students who had the Student Transition Survey read aloud were: Student A, Student D, and Student E.

Student A is a 14-year-old male student in ninth-grade with a diagnosis of developmental cognitive disability (DCD). Due to his lower reading ability and because it is an accommodation on his IEP that he is familiar with and utilized often, he chose to have the researcher read the Student Transition Survey aloud to him. Student A had a total of six measurable annual goals on his 2011-2012 IEP. His first three goals were in the area of postsecondary education and training, his fourth goal was in the area of education, and his fifth and sixth goals were in the area of independent living.

On the first and second goals in the area of postsecondary education and training, Student A answered a “Yes” on all five of the survey questions. He indicated that he felt the measurable annual goals were related to his measurable postsecondary goal, that he thought that the objectives listed would help him meet his annual goal, and that meeting the annual goal would help him reach his postsecondary goal. Student A stated he was receiving the services necessary to reach both his measurable annual and postsecondary goals.

Student A answered a “Yes” on three out of five questions on his third goal in the area of postsecondary Education and Training. He did not feel the measurable annual goal was related to his measurable postsecondary goal or that reaching the annual goal would help him reach his postsecondary goal. He did indicate that the objectives would

help him meet his measurable annual goal and that he was receiving services to help him meet both his measurable annual and postsecondary goals.

The fourth goal is in the area of employment. Student A answered a “Yes” on five of the five questions. He felt that the measurable annual goals were related to the measurable postsecondary goals and that by reaching the annual goals it would help him reach the postsecondary goals. Student A agreed that the objectives listed would help to reach the annual goals and that he was receiving services to reach both his measurable annual and postsecondary goals.

Student A’s fifth and sixth goals are in the area of independent living. He indicated a “Yes” on four out of the five questions. He indicated he did not feel measurable annual goals were related to his measurable postsecondary goal. He indicated that by reaching the annual goal, it would help him reach the postsecondary goal. Student A also felt that the objectives would help him meet the measurable annual goal. He indicated that he was receiving services to reach his measurable annual and postsecondary goals.

The 2012-2013 IEP of Student A was written in January and had a total of four annual goals. The first goal is in the area of postsecondary education and training, the second goal is independent living, and the third and fourth goals are in the area of employment. He indicated a “Yes” on five out of five questions for all four goals. Student A agreed that the measurable annual goals were related to the measurable postsecondary goals and that reaching the annual goals would help to meet the postsecondary goals. He felt that his objectives would help him succeed in attaining his

goals and receiving the services he needs to reach both his annual and postsecondary goals.

Student B is a 14-year-old female student with a diagnosis of emotional behavioral disability (EBD) in ninth-grade. On the initial Student Transition Survey, reviewing the 2011-2012 IEP, she had two goals on her IEP. She answered a “Yes” to three out of five questions, both measurable annual goals. She did not feel that the measurable annual goals were related to her measurable postsecondary goal or that by reaching the annual goals would help her reach the postsecondary goal. Student B did feel that the objectives would help to meet the annual goals and that services were being provided to help reach both annual and postsecondary goals.

On the 2012-2013 Student Transition Survey for Student B the IEP contained two measurable annual goals. Student B answered “Yes” to five out of five questions for both measurable annual goals. She indicated that the measurable annual goals were related to the measurable postsecondary goals and that reaching the annual goals would help to reach the postsecondary goals. Student B indicated that the objectives would help to obtain the annual goals and that she was receiving services to help with her annual and postsecondary goals.

Student C is a 14-year-old male in eighth-grade with a diagnosis of autism spectrum disorder (ASD). His IEP from the 2011-2012 school year contained five measurable annual goals. The first three measurable annual goals were in the area of postsecondary education and training. The fourth goal was in the area of employment and the fifth goal was in the area of independent living.

On the Student Transition Survey, Student C answered a “Yes” to five out of five questions on all five measurable annual goals. Student C indicated that the measurable annual goals were related to the measurable postsecondary goals and that by reaching the annual goals he would be closer to meeting the postsecondary goals. He also felt that the objectives would help him to reach his annual goals and that he was receiving services for meeting measurable annual and postsecondary goals.

On review of his 2012-2013 IEP, Student C completed the Student Transition Survey a second time. The 2012-2013 IEP contained five measurable annual goals: the first three in the area of postsecondary education and training, the fourth in employment, and the fifth annual goal in the area of independent living. Student C indicated a “Yes” on all five questions on the survey for all five measurable annual goals. The responses were the same as the initial survey that was given at the beginning of the school year based on the 2011-2012 school year IEP.

Student D is a 15-year-old male student in ninth-grade with a diagnosis of EBD and specific learning disability (SLD). Due to the student’s lower reading ability, he chose to have the Student Transition Survey read aloud to him by the researcher. The initial IEP from the 2011-2012 school year contained four measurable annual goals. The first two goals were in the area of postsecondary education and training, the third annual goal was in the area of employment, and the fourth goal was in the area of independent living.

When completing the Student Transition Survey, Student D indicated a “Yes” response on four out of five of the questions for all four of his measurable annual goals.

Student D answered “No” to the same question on each measurable annual goal, which was that he felt he was not receiving the services necessary to reach his measurable postsecondary goal. Student D felt that his measurable annual goals were related to his measurable postsecondary goals and that reaching his annual goals would help him reach his postsecondary goals. He also felt that the objectives supported him attaining his measurable annual goals and that he was receiving services to support him to reach his measurable annual goals.

Student D moved out of district prior to his annual IEP meeting. His 2012-2013 IEP was not written, due to his move from the district. Therefore, a follow-up survey could not be completed to see how Student D felt about his 2012-2013 IEP.

Student E is 14-years-old and in eighth-grade with a diagnosis of SLD and EBD. Due to the student’s lower reading ability and the frustration that comes with reading, he chose to have the Student Transition Survey read aloud to him by the researcher. The IEP from 2011-2012 for Student E contained four measurable annual goals. The first three goals are in the area of postsecondary education and training and the last goal is in the area of employment. Student E indicated five “Yes” responses for the first two measurable annual goals. He felt that the measurable annual goals were related to his measurable postsecondary goal and that by reaching the annual goal, he would be closer to reaching the postsecondary goal. Student E also indicated that the objectives were closely linked to attaining the annual goals and that he was receiving services that would help him meet his annual and postsecondary goals. Student E answered “Yes” to three out of five of the questions for measurable annual goals three and four. He did not feel

that the annual goals were related to the postsecondary goals and that by meeting the annual goals; he did not feel that would help him to reach his postsecondary goals. He did agree that the objectives were related to the annual goal and would help him to meet the goal. Student E also indicated that he was receiving services for his measurable annual and postsecondary goals for goals three and four.

Student E completed a second Student Transition Survey after his 2012-2013 IEP was created. The 2012-2013 IEP contained four measurable annual goals, similar to that of the 2011-2012 IEP. The first three goal areas remained the same in the area of postsecondary education and training and the last goal in the area of employment. Student E's responses varied from the initial survey that was given at the beginning of the school year.

Student E answered "Yes" to five out of five questions for all four measurable annual goals. He felt that all of his annual goals now reflected his postsecondary goals and in turn, meeting the annual goals would help him to meet his postsecondary goals. Student E felt that the objectives would help him to meet his measurable annual goals and that he was receiving services that would help him to meet both his annual goals and his postsecondary goals.

Student F is a 16-year-old female in ninth-grade with a diagnosis of DCD. Her 2011-2012 IEP contained three goals. The first goal was in the area of employment, the second goal was in the area of postsecondary education and training, and the third goal was in the area of independent living. Student F indicated "Yes" to five out of five questions for all three questions on the Student Transition Survey. She felt that her

measurable annual goals were related to her measurable postsecondary goals and would meeting her annual goals would help her reach her postsecondary goals. Student F believes that the objectives will help her to reach her annual goal and that she is being given services to meet her measurable annual and postsecondary goals.

On the follow up Student Transition Survey for the 2012-2013 IEP, Student F had an IEP that contained three measurable annual goals. The first goal on the IEP is in the area of employment, the second goal is in the area of postsecondary education and training, and the third goal is in the area of independent living. Student F answered a “Yes” to all five questions for all three goals on the Student Transition Survey, with the same responses as the initial survey.

Overall, the results for the initial assessment of the 2011-2012 Student Transition Surveys (Appendix C) for Students A, B, C, D, E, and F included a total of 16 “No” responses in all (53%). Of the 16 “No’s,” seven of the responses (44%) were indicated on question two. Specifically, Students A, B, and E felt that two of their measurable annual goals were not related to their measurable postsecondary goals. Five of the 16 “No” responses (31%) were indicated on question three. Students A, B, and E felt that reaching at least one, if not two, if their measurable annual goals would not help them in meeting their measurable postsecondary goals. Finally, Student D indicated a “No” response to all four goals (25%) to question six. He felt that he was not receiving services to help him reach his measurable postsecondary goals in all areas.

The overall results of the 2012-2013 Student Transition Survey for Students A, B, C, E, and F (Student D moved prior to assessment completion) showed drastic

improvement. All five students indicated a “Yes” response on all five questions for all of their 2012-2013 IEP goals. All students felt that they were receiving the services that they needed to meet their measurable annual and postsecondary goals; students felt that their measurable annual goals aligned with their postsecondary goals and that by meeting their annual goals they will be closer to meeting their postsecondary goals. The students also agreed that the objectives would help them to reach their measurable annual goals.

### **Summary**

Chapter 4 summarized the results and findings of the study in an analysis of both qualitative data and qualitative narratives in regard to the effectiveness of the Ten Sigma Transition System. The analysis of the 2011-2012 and 2012-2013 Individual Education Plans (IEPs) are reported through graphs and thorough description. Student Transition Surveys (Appendix C) from the 2011-2012 and 2012-2013 school years are presented through a narrative summary of each student. The data presented in chapter 4 attempts to answers the research questions in the study.

The demographics of the research study were thoroughly described including a total of six participants: one 16-year-old ninth-grade female with a diagnosis of DCD, one 15-year-old ninth-grade male with a diagnosis of EBD, one 14-year-old ninth-grade male with a diagnosis of DCD, one 14-year-old ninth-grade female with a diagnosis of EBD, one 14-year-old eighth-grade male with a diagnosis of ASD, and one 14-year-old eighth-grade male with a dual diagnosis of SLD and EBD. According to the evaluation of the 2011-2012 IEPs in comparison to the 2012-2013 IEPs, there was a positive increase in the score based on the Indicator 13 Checklist Form A (see Appendix A) for the 2012-2013



IEPs. These IEPs were created using the IEP Writing Checklist (Appendix B), created by the researcher and guided by the Ten Sigma Transition System. According to the comparison of the data from 2011-2012 and 2012-2013 Student Transition Survey (Appendix C), student perceptions indicated a significant overall gain. In the end, all students indicated all “Yes” responses on all of their IEP goals on their 2012-2013 Student Transition Survey.

In chapter 5, the researcher makes an effort to interpret the findings in relation to each other quantitatively and qualitatively. A summary of the study and final conclusions are presented and recommendations for further study are discussed.

## Chapter 5

### Summary, Conclusions, Discussion, and Recommendations

Chapter 5 is organized into four sections. The first section presents a summary of the study, including the results of the study. The second section of the chapter presents the conclusions drawn from the results of the data analysis. In the third section, there is a discussion that explores and explains the results and conclusions of the study. The final section of this chapter focuses on recommendations for practice and further study.

### Summary

This study examined the effectiveness of the Ten Sigma Transition System in supporting teachers with the development of appropriate transition programming and measurable goals and objectives for students with disabilities in a Federal Setting III special education program in a junior high school in northeastern Minnesota. The program supports students with autism spectrum disorder, emotional or behavioral disabilities, or developmental cognitive disabilities requiring 60% or more of their time to be spent in a special education setting. The transition for students with disabilities is important because students with disabilities are twice as likely to be unemployed or unengaged in postsecondary education as their peers without disabilities (Williams-Diehm & Benz, 2008). However, through a careful assessment, the transition team can determine the individual needs and develop a transition plan to help the student with a disability make a successful transition from school to postsecondary life (Savage, 2005).

The researcher wanted to improve the Individualized Education Plan (IEP) writing process through the creating of an IEP Writing Checklist (Appendix B) created with an

influence of the Ten Sigma Transition System and the Indicator 13 Checklist Form A (Appendix A). This checklist would aid in aligning the measurable annual goals toward the student-made measurable postsecondary goals. Research studies have suggested that self-determination and student choice contribute to increased opportunities for employment, postsecondary education, and independent living for students with disabilities (Lindstrom et al., 2007b). The researcher wanted the students to become aware of their IEP and feel confident that their measurable annual goals were supporting their measurable postsecondary goals, and that they were receiving the services that they needed to meet those goals. Studies by Kohler and Field (2003), found that students who were more involved in their transition planning were more likely to achieve their postsecondary goals.

### **Purpose**

The purpose of this study was to examine the effectiveness of the Ten Sigma Transition System in assisting teachers with the development of appropriate transition programming and measurable goals and objectives for students with disabilities in a Federal Setting III program in a junior high school in northeastern Minnesota. The specific research questions that were asked were:

1. What is the impact of the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities (autism spectrum disorder, emotional or behavioral disorder, developmental cognitive disability)?

2. How do the students in a special education Federal Setting III program believe that the Ten Sigma Transition System was able to reflect their preferences, allowing for their annual IEP goals to reflect those same preferences align with their postsecondary goal?

### **Review of Literature**

Improving transition planning for students with disabilities and bridging the gap between employability and postsecondary education of students with disabilities and their peers without disabilities (Williams-Diehm & Benz, 2008) is the main focus of the research and literature review in this study. This has been addressed through legislation over 15 years of transition law refinement. Studies that address the components of transition programming have contributed to an understanding of what is needed to create a successful plan for students.

There have been many movements in legislation to set guidelines for schools to create successful transition plans for students with disabilities. Transition was first addressed in 1990, when the Individuals with Disabilities Education Act (IDEA) mandated that services be coordinated to address student needs for students ages 16 or older as they move from high school (Johnson et al., 2002). In 1997, when IDEA was amended, the transition law required the IEP team to include the student and to align the education services with the postsecondary goals of the student (Williams-Diehm & Lynch, 2007). IDEA was amended a second time in 2004 and became the Individuals with Disabilities Education Improvement Act (IDEIA), which mandated the IEP include measurable postsecondary goals based on transition assessments in the areas of education,

employment, and independent living (when appropriate). Implementation of Indicator 13, which ensures that each state is meeting the guidelines of IDEA was also introduced at this time (Mazzotti et al., 2009).

The Americans with Disabilities Act Amendments Act (ADAAA), passed in 2008, is the federal law that protects and provides equal opportunity to individuals with disabilities throughout their adult years. One of the goals of ADAAA is to create a smooth transition for individuals with disabilities from secondary schools to postsecondary institutions and employment (Shaw et al., 2010). The Summary of Performance (SOP) is a document that helps to create this smooth transition and is now required under IDEA (Shaw et al., 2010).

The components of transitions are important to bring together the student, family, school, and community. Students with disabilities need additional support to make informed choices and become independent adults (Lindstrom et al., 2007b). In order to provide this support, the transition plan needs to be strong and well developed. Indicator 13 requires evidence that the student was invited to the IEP meeting as part of the IEP team (Mazzotti et al., 2009). Student involvement is important, it ensures the transition plan will be student focused which can create a wider range of opportunities for the individual (Ferguson, 2005). The role of the community and vocational training promotes generalization of skills and contributes to smooth transition into the adult world (Gagliardi, 2010). The National Longitudinal Transition Study findings indicated that transition plans involving “vocational education, paid work experience, parent

involvement, and/or interagency collaboration had a positive impact on student outcomes” (Kohler & Field, 2003, p. 176).

### **Methodology**

This action research used qualitative methodologies to address the questions in this study. Various instruments were used in this study to answer the research questions. Two different checklists were used to answer the first question: the National Secondary Transition Technical Assistance Center (NSTTAC) Indicator 13 Checklist Form A (Appendix A) and the IEP Writing Checklist (Appendix B), which was created by the researcher based in part on the Indicator 13 Checklist and the Ten Sigma Transition Survey. The Student Transition Survey (Appendix C) was created by the researcher, to support the requirements IDEIA and Indicator 13, and used to answer the second research question.

The population for this study consisted of six students with disabilities who were part of a Federal Setting III special education program, meaning they spent at least 60% of their time in the special education setting. Specifically, of the six students: four of the students were in ninth-grade, two females and two males. One of the ninth-grade female students 14-years-old with a diagnosis of EBD and the other female was 16-years-old with a diagnosis of DCD. Of the two ninth-grade boys, one was diagnosed with EBD and was 15-years-old and the other was 14-years-old and was diagnosed with DCD. The other two students were eighth-grade males, one 14-years-old and dual diagnosed with EBD and SLD and the other 13-years-old and diagnosed with ASD. The study was populated through a sample of convenience. The students were on the researcher’s

special education caseload for the 2011-2012 and 2012-2013 school years and the researcher wrote the IEPs for each student.

The students were administered the Student Transition Survey (Appendix C) at the beginning of the 2012-2013 school year and asked to complete it with using their 2011-2012 IEP. The students were administered the same survey after their new IEP for the 2012-2013 was written and asked to evaluate their new IEP. The results were then summarized and compared.

The IEPs of the six students were also analyzed by a secondary special education coordinator using the NSTTAC Indicator 13 Checklist Form A (Appendix A). The IEPs of the 2011-2012 school year were given a score of one through eight based on the number of criteria that were met. The researcher did not review these scores until receiving the scores from the follow up analysis of the 2012-2013 IEPs. The researcher created an IEP Writing Checklist (Appendix B) influenced by Indicator 13 and the Ten Sigma Transition Survey, which was used when writing all of the 2012-2013 IEPs. One of the students in the sample moved prior to his 2012-2013 IEP being written. Therefore, only five of the six original students IEPs were analyzed by the secondary special education coordinator using the NSTTAC Indicator 13 Checklist Form A and given a score of one through eight. The researcher then compared the scores from both the 2011-2012 and 2012-2013 school years.

**Results**

Qualitative data analysis revealed the following results:

**Effectiveness of the Ten Sigma Transition System in Transition Programming**

1. The assessment of the 2011-2012 IEPs generated an average score of six out of eight total points. Specifically, one IEP received a score of seven, four IEPs received a score of six, and one IEP received a score of five based on the NSTTAC Indicator 13 Checklist Form A (Appendix A).

2. The assessment of the 2012-2013 IEPs generated an average score of 7.6 out of eight total points. Specifically, three IEPs received a perfect score of eight points, and two IEPs received a score of seven based on the NSTTAC Indicator 13 Checklist Form A (Appendix A).

3. A comparison of the 2011-2012 and 2012-2013 IEPs found that the 2012-2013 IEPs yielded an overall increase of 1.6 points. Specifically, one IEP increased in points by one criterion, two IEPs increased in points by two criteria, one IEP increased in points by three criteria, and one IEP stayed the same.

**Student Perception of the Effectiveness of the Ten Sigma Transition System**

1. The results for the initial assessment of the 2011-2012 Student Transition Survey (Appendix C) for Students A, B, C, D, E, and F included a total of 16 “No” responses (53%). Of the 16 “No” responses, seven (44%) were indicated on question two, five (31%) were indicated on question three, and four (25%) to question six.

2. The results of the 2012-2013 Student Transition Survey (Appendix C) for Students A, B, C, E, and F (Student D moved prior to assessment completion) indicated



all “Yes” responses (100%) on all five questions for their 2012-2013 IEP goals. The students felt that their measurable annual goals aligned with their postsecondary goals and that by reaching their annual goals they would be closer to meeting their postsecondary goal. The students also felt that they were receiving services to assist them in meeting both their measurable annual and postsecondary goals and that the objectives were building blocks towards meeting their goals.

3. A comparison of the 2011-2012 and 2012-2013 Student Transition Survey results displayed a drastic improvement. The increase of “Yes” responses from 46.7% in 2011-2012 to 100% in 2012-2013 shows significant positive gains. The absence of Student D may have impacted the results of the survey to a point.

### **Conclusions**

The conclusions for the study are listed below:

1. Without the use of the IEP Writing Checklist (Appendix B), created with the use of the Ten Sigma Transition System, to write the IEPs, the students are dissatisfied with their IEPs and feel that they do not support them in reaching their measurable postsecondary goals.

2. The IEP Writing Checklist (Appendix B) can help create IEPs that align with postsecondary goals and are in compliance with state and federal law in the area of transition.

3. The increase in compliance with the NSTTAC Indicator 13 Checklist Form A (Appendix A) after using the IEP Writing Checklist (Appendix B) indicates the Ten

Sigma Transition System creates a positive influence on creating effective transition plans and measurable postsecondary goals and objectives.

4. The increase in student satisfaction with their annual IEP suggests a positive relationship between the Ten Sigma Transition System and its effectiveness according to the perceptions of the student population.

5. The positive increase in the 2012-2013 IEPs indicates that the IEP Writing Checklist (Appendix B) is a tool that can be used by special educators to create effective IEPs for students at transition age.

6. The Ten Sigma Transition System is an effective tool for transition planning for students with disabilities.

### **Discussion**

The discussion section will be separated into two different parts, based on the research questions of the study. This will allow for a thorough discussion of both questions and an organization of the discussion area.

#### **Effectiveness of the Ten Sigma Transition System in Transition Programming**

The positive increase in the 2012-2013 IEPs indicates that the IEP Writing Checklist (Appendix B), created by the researcher with influence from the Ten Sigma Transition Survey and Indicator 13, is a tool that can be used by special educators. The IEP Writing Checklist can help create IEPs that align with postsecondary goals and are in compliance with state and federal law in the area of transition. It guides special educators in providing the students with the skills needed to become responsible adults, which is a requirement of IDEA (Mazzotti et al., 2009). Therefore, it can be assumed that the Ten

Sigma Transition System is an effective tool for transition planning for students with disabilities.

IDEIA mandates that IEPs include measurable postsecondary goals that are based on transition assessments in the areas of education, employment, and independent living (when appropriate). By using the Ten Sigma Transition System and the IEP Writing Checklist (Appendix B), which was created with influence from the Ten Sigma Transition System and Indicator 13, special educators will be more successful in writing IEPs that meet state and federal standards. The IEP Writing Checklist (Appendix B) will make the IEP writing process easier for special educators and create a more streamline process for school districts to follow.

It continues to be supported through research and studies that finding appropriate transition assessments to guide the transition process will create a successful passage into the postsecondary life. According to a study conducted by Mazzotti et al. (2009), finding an effective transition assessment can help guide the measurable postsecondary goal, annual IEP goal, and transition services. This is exactly what special educators want for their students to help them while they are still in school. This is what the Ten Sigma Transition System is providing through the IEP Writing Checklist.

### **Student Perception of the Effectiveness of the Ten Sigma Transition System**

The Student Transition Survey showed significant gains from the 2011-2012 school year to the 2012-2013 school year. However, it is important to note that some of the students' responses may have been more a reflection on their emotional wellbeing on that particular day or their perception of the researcher at that time then on the actual

question. Although some of the responses may not have been completely accurate, there was still significant gains in student satisfaction with the relationship of their measurable annual IEP goals and objectives and their measurable postsecondary goals.

When the initial Student Transition Survey was given at the beginning of the 2012-2013 school year, the students in ninth-grade were more familiar with their IEPs than the students in eighth-grade. The familiarity came from the ninth-grade students being required members of the IEP team for the previous school year, while this was not yet a requirement for the eighth-grade students. This is reflected through IDEA and Indicator 13, with the requirement that the student be invited to the IEP meeting starting at age 14 or in ninth-grade (Mazzotti et al., 2009). This factor may have had a positive effect on the response for each of the six questions on the Student Transition Surveys (Appendix C).

Student involvement in their IEP and transition planning is important for many reasons. After a student graduates from high school, they are no longer protected under IDEA and must advocate for his or her individual needs to postsecondary education institutes and employers (Eckes & Ochoa, 2005). Student involvement also allows for both self-determination and community participation (Ferguson 2005). This can create more success in postsecondary life and a wider range of opportunity.

By using a transition assessment, such as the Ten Sigma Transition System, students' vocational skills, interests, self-determination, and other related skills are measured. This will help the students to know and understand themselves. It will also help them to understand and reflect upon what they want to do when they get older.

When students are taught in a systematic approach that addresses each transition area, there is further success in postsecondary environments (Williamson, Robertson, & Casey, 2010). The use of the Ten Sigma Transition System and the Student Transition Survey (Appendix C) will allow the student to address each transition area, set appropriate and measurable postsecondary goals, and remain involved in their transition programming.

### **Recommendations**

#### **Recommendations for Practice**

Based on the results and conclusions of this study, the following recommendations for practice are suggested:

1. It would be beneficial to have more involvement of the student when writing the IEP. Research suggests that person-centered planning allows for self-determination and can create a wider range of opportunities (Ferguson, 2005). When the student is involved the creation of their IEP allows for them to express their wants and needs and helps the team to understand the steps required to get the student to their ultimate postsecondary goal. By the student becoming aware of their disability and comfortable with expressing themselves, they are bridging the gap when transitioning from school to postsecondary life.
2. There has been significant movement in the legislation in the past 15 years. It is important that legislation continues to make gains and clarification in laws in the area of transition for students with disabilities. IDEIA and ADAAA have been attempting to align with the Summary of Performance for students with disabilities. This will help create a smooth transition for students into the adult world.

3. It is important that as special education law develops and clarifies, school districts and states continue to train and educate their staff. Teachers need to be continually updated on laws and resources so that they can provide the best services for their students. It is also important to provide the most up to date training so that school districts remain in compliance with state and federal law.

### **Recommendations for Further Study**

The results and conclusions of this study suggest that there is a need for more in-depth research. The following studies are suggested:

1. This study was limited to the perceptions of six students from a Federal Setting III special education program. It is recommended that the study be repeated with other groups of special education students before generalizations can be made.

2. This study did not identify the major barriers that were addressed in the literature review. The literature review looked at the need for necessary resources, time, and money in order to address transition appropriately. This is a concern and a need that would be beneficial to address for students with disabilities in the area of transition.

3. The Student Transition Survey could look further into the IEP for the student. It could ask more specific questions about the IEP or about what the student would like in their IEP.

a. One question that might be considered would be related to the student's accommodations and if they felt they were being provided sufficient support in the classroom. The accommodations are an important section on a transition IEP,

because it is the main part that will transfer over when the student enters into a postsecondary institution.

b. An addition question that could be considered is related to the student's service minutes that they are receiving at the time. It could be asked if the student feels they are receiving enough service minutes to meet their needs, or if they feel they require additional minutes. This could be a good indication of whether they feel they will be successful in reaching their annual or postsecondary goals.

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Appendix A

NSTTAC Indicator 13 Checklist Form A

**NSTTAC Indicator 13 Checklist Form A****(Meets Minimum SPP/APR Requirements)**

Percent of youth with IEPs aged 16 and above with an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition services needs. There also must be evidence that the student was invited to the IEP Team meeting where transition services are to be discussed and evidence that, if appropriate, a representative of any participating agency was invited to the IEP Team meeting with the prior consent of the parent or student who has reached the age of majority. (20 U.S.C. 1416(a)(3)(B))

1. Is there an appropriate measurable postsecondary goal or goals that covers education or training, employment, and, as needed, independent living? Y N
  - a. Can the goal(s) be counted?
  - b. Will the goal(s) occur *after* the student graduates from school?
  - c. Based on the information available about this student, does (do) the postsecondary goal(s) seem appropriate for this student?
  - If yes to all three, then circle Y OR if a postsecondary goal(s) is (are) *not* stated, circle N
2. Is (are) the postsecondary goal(s) updated annually? Y N
  - a. Was (were) the postsecondary goal(s) addressed/ updated in conjunction with the development of the current IEP?
  - If yes, then circle Y OR if the postsecondary goal(s) was (were) *not* updated with the current IEP, circle N
3. Is there evidence that the measurable postsecondary goal(s) were based on age appropriate transition assessment? Y N
  - a. Is the use of transition assessment(s) for the postsecondary goal(s) mentioned in the IEP or evident in the student's file?
  - If yes, then circle Y OR if no, then circle N
4. Are there transition services in the IEP that will reasonably enable the student to meet his or her postsecondary goal(s)? Y N
  - a. Is a type of *instruction, related service, community experience, or development of employment and other post-school adult living objectives, and if appropriate, acquisition of daily living skills, and provision of a functional vocational evaluation* listed in association with meeting the postsecondary goal(s)?
  - If yes, then circle Y OR if no, then circle N
5. Do the transition services include courses of study that will reasonably enable the student to meet his or her postsecondary goal(s)? Y N
  - a. Do the transition services include courses of study that align with the student's postsecondary goal(s)?
  - If yes, then circle Y OR if no, then circle N
6. Is (are) there annual IEP goal(s) related to the student's transition services needs? Y N
  - a. Is (are) an annual goal(s) included in the IEP that is/are related to the student's transition services needs?
  - If yes, then circle Y OR if no, then circle N
7. Is there evidence that the student was invited to the IEP Team meeting where transition services were discussed? Y N
  - a. For the current year, is there documented evidence in the IEP or cumulative folder that the student was invited to attend the IEP Team meeting?
  - If yes, then circle Y OR if no, then circle N
8. If appropriate, is there evidence that a representative of any participating agency was invited to the IEP Team meeting with the prior consent of the parent or student who has reached the age of majority? Y N NA
  - a. For the current year, is there evidence in the IEP that representatives of any of the following agencies/services were invited to participate in the IEP development including but not limited to: *postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living or community participation* for this postsecondary goal?
  - b. Was consent obtained from the parent (or student, for a student the age of majority)?
  - If yes to both, then circle Y
  - If no invitation is evident and a participating agency is likely to be responsible for providing or paying for transition services and there was consent to invite them to the IEP meeting, then circle N
  - If it is too early to determine if the student will need outside agency involvement, or no agency is likely to provide or pay for transition services, circle NA
  - If parent or individual student consent (when appropriate) was *not* provided, circle NA

**Does the IEP meet the requirements of Indicator 13? (Circle one)**

**Yes** (all Ys or NAs for each item (1 – 8) on the Checklist or **No** (one or more Ns circled))

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**Instructions for Completing NSTTAC Indicator 13 Checklist**

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1. **Is there an appropriate measurable postsecondary goal or goals that covers education or training, employment, and, as needed, independent living?**
  - Find the postsecondary goal(s) for this student
  - If there are appropriate measurable postsecondary goals that address *Education* or *Training* after high school, *Employment* after high school, and (if applicable) *Independent Living* after high school **and** if the identified postsecondary goal(s) in *Education* or *Training*, *Employment*, and (if applicable) *Independent Living* appear to be appropriate for the student, based on the other information regarding Present Level of Academic and Functional Performance and / or the student's strengths, preferences, and interests, circle Y
  - If there are postsecondary goals that address *Education* or *Training* after high school, *Employment* after high school, and (if applicable) *Independent Living* after high school, but are not measurable, circle N
  - If there is misalignment between the student's postsecondary goal(s), based on the information available (e.g., present level of performance, student interests, student preferences), circle N
  - If there is not a postsecondary goal that addresses *Education* or *Training* after high school, circle N
  - If there is not a postsecondary goal that addresses *Employment* after high school, circle N
  - If there is one postsecondary goal that addresses *Education* or *Training*, *Employment*, and (if applicable) *Independent Living* after high school, but it is not measurable, circle N
2. **Is the postsecondary goal(s) updated annually?**
  - If the postsecondary goal(s) for *Education* or *Training*, *Employment*, and as needed *Independent Living*, is (are) documented in the student's current IEP, circle Y
  - If the postsecondary goal(s) for *Education* or *Training*, *Employment*, and as needed *Independent Living*, is (are) not documented in the student's current IEP, circle N
  - If this is the student's first IEP that addresses secondary transition services because they just turned 16, this is considered an update, so circle Y
3. **Is there evidence that the measurable postsecondary goals were based on age appropriate transition assessment?**
  - Find where information relates to assessment and the transition component on the IEP (either in the IEP or the student's file)
  - For each postsecondary goal, if there is evidence that at least one age appropriate transition assessment was used to provide information on the student's needs, strengths, preferences, and interests regarding the postsecondary goal(s), circle Y
  - For each postsecondary goal, if there is **no** evidence that age appropriate transition assessment provided information on the student's needs, taking into account strengths, preferences, and interests regarding the postsecondary goal(s), circle N
  - If a postsecondary goal area was addressed in item #1, but was not measurable and if there is age appropriate transition assessment information, from one or more sources, provided regarding the student's needs, taking into account strengths, preferences, and interests regarding this postsecondary goal, circle Y
  - If a postsecondary goal area was addressed in item #1, but was not measurable and if there is **not** age appropriate transition assessment information provided on the student's needs, taking into account strengths, preferences, and interests regarding this postsecondary goal, circle N

4. **Are there transition services in the IEP that will reasonably enable the student to meet his or her postsecondary goal(s)?**
- Find where transition services/activities are listed on the IEP
  - For each postsecondary goal, if there is a type of instruction, related service, community experience, or development of employment and other post-school adult living objectives, and if appropriate, acquisition of daily living skill(s), and provision of a functional vocational evaluation listed in association with meeting the postsecondary goal, circle Y
  - For each postsecondary goal, if there is **no** (a) type of instruction, (b) related service, (c) community experience, (d) development of employment and other post-school adult living objective, (e) if appropriate, acquisition of a daily living skill, or (f) if appropriate, provision of a functional vocational evaluation listed in association with meeting the postsecondary goal, circle N
  - If a postsecondary goal area was addressed in item #1, but was not measurable and there is a type of transition services listed in association with meeting that postsecondary goal, circle Y
  - If a postsecondary goal area was addressed in item #1, but was not measurable and there is **no** type of transition service listed in association with meeting that postsecondary goal, circle N
5. **Do the transition services include courses of study that will reasonably enable the student to meet his or her postsecondary goal(s)?**
- Locate the course of study (instructional program of study) or list of courses of study in the student's IEP
  - Are the courses of study a multi-year description of coursework from the student's current to anticipated exit year that is designed to help achieve the student's desired post-school goal(s)? If yes, go to next instruction bullet. If no, circle N
  - Do the courses of study align with the student's identified postsecondary goal(s)? If yes, circle Y. If no, circle N
6. **Is (are) there annual IEP goal(s) that are related to the student's transition services needs?**
- Find the annual goals, or, for students working toward alternative achievement standards, or States in which short-term objectives are included in the IEP, short-term objectives on the IEP
  - For each of the postsecondary goal areas circled Y in question #1, if there is an annual goal or short-term objective included in the IEP related to the student's transition services needs, circle Y
  - For each of the postsecondary goal areas circled Y in question #1, if there is **no** annual goal or short-term objective included in the IEP related to the student's transition services needs, circle N
  - If a postsecondary goal area was addressed in #1, but was not measurable, and an annual goal is included in the IEP related to the student's transition services needs, circle Y
  - If a postsecondary goal area was addressed in #1, but was not measurable, and there is **no** annual goal included the IEP related to the student's transition services needs, circle N
7. **Is there evidence that the student was invited to the IEP Team meeting where transition services were discussed?**
- Locate the documentation of the invitation to the IEP conference for the student.
  - Was the student invitation signed (by the LEA) and dated prior to the date of the IEP conference. If yes, circle Y. If no, circle N

**8. If appropriate, is there evidence that a representative of any participating agency was invited to the IEP Team meeting with the prior consent of the parent or student who has reached the age of majority?**

- Find where persons responsible and/or agencies are listed on the IEP
- Are there transition services listed on the IEP that are likely to be provided or paid for by an outside agency? If yes, continue with next instruction bullet. If no, circle NA.
- Was parent consent or student consent (once student has reached the age of majority) to invite an outside agency(ies) obtained? If yes, continue with next instruction bullet. If no, circle NA
- If a postsecondary goal area was addressed in item #1, but was not measurable and there is evidence that agency(ies) for which parent/student had given their consent to invite, were invited to the IEP meeting to discuss transition, circle Y
- If a postsecondary goal area was addressed in item #1, but was not measurable and there is **no** evidence that agency(ies) for which parent/student had given their consent to invite, were invited to the IEP meeting to discuss transition, circle N
- If it is too early to determine if this student will need outside agency involvement, circle NA

**Does the IEP meet the requirements of Indicator 13?**

- If all Ys or NAs for each item (1 – 8) on the Checklist, then circle **Yes**
- If one or more Ns are circled, then circle **No**

Appendix B

IEP Writing Checklist



**IEP Writing Checklist**

According to the Ten Sigma Survey completed on the student, complete the following:

**Education/Instruction** Are special education services needed? \_\_\_\_ Yes \_\_\_\_ No

**Career/Employment** Are special education services needed? \_\_\_\_ Yes \_\_\_\_ No

**Independent Living** Are special education services needed? \_\_\_\_ Yes \_\_\_\_ No

**Goal Area** (Employment, Postsecondary Education and Training or Independent Living)

**Student derived Postsecondary Goal**

\_\_\_\_\_ will \_\_\_\_\_.  
 (After Graduation) (Student) (Behavior) (Where and How)  
 (After High School)

**Measurable Annual IEP Goal**

Given \_\_\_\_\_ will \_\_\_\_\_.  
 (Condition) (Student) (Behavior) (Criteria)

\_\_\_\_\_.  
 (Time Frame)

**Transition Requirements**

- ☐ Was the student invited to the meeting?
- ☐ Were the parent and teachers invited?
- ☐ Were any other agencies applicable invited?
- ☐ Was the student asked for their Postsecondary goal?
- ☐ Is the postsecondary goal written from the student's perspective?
- ☐ Does the information obtained from teachers relate to the student postsecondary goal?
- ☐ Do the present levels of performance reflect the student's strengths and needs in this area?

- ☐ What are the student's strengths and interests?
- ☐ What are the student's unique needs that result from his or her disability?
- ☐ How do these needs affect the student's participation and progress in the general curriculum?
- ☐ What are the parent's concerns for the education of their child?
- ☐ What transition needs of the student must be addressed to prepare the student for living, learning and working in the community as an adult?
- ☐ **Is the goal written with the student's interests and preferences in mind? Will the annual goal directly help the student in achieving their postsecondary goal?**
- ☐ **Does the Course of Study reflect the student's annual and postsecondary goals?**
- ☐ **Does the Transition Service Page reflect the student's annual and postsecondary goals?**

## Appendix C

### Student Transition Survey

**Student Transition Survey**

Student Name \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_

Goal # \_\_\_\_\_

1. Read the "Measurable Postsecondary Goal (student's perspective)".
2. Read your "Measurable Annual Goal".
3. Answer the following questions.

1. The area of this goal is in (circle one):

Employment	Postsecondary Education and Training	Independent Living
------------	--------------------------------------	--------------------

2. Do you feel that the "Measurable Annual Goal" is related to your "Measurable Postsecondary Goal"? (Circle one)

YES

NO

3. Do you feel that the reaching your "Measurable Annual Goal" will help you reach the "Measurable Postsecondary Goal" listed? (Circle one)

YES

NO

4. Read the "Objectives" below your "Measurable Annual Goal". Do you feel the objectives will help you succeed in reaching your goal? (Circle one)

YES

NO

5. Do you feel that you are being given the services needed to reach your "Measurable Annual Goal"? (Circle one)

YES

NO

6. Do you feel that you are receiving the services necessary to reach your "Measurable Postsecondary Goal"? (Circle One)

YES

NO

\*\*\*\* Complete the above form for each of your different goals (goal pages) \*\*\*\*

Appendix D

Letter to Principal

August 27, 2012

Dear Mr. XXXX,

As you know, I am currently attending Southwest Minnesota State University to earn my Master of Science in Special Education. As part of the program, I am working on an action research project titled "Ten Sigma Transition Survey: A Tool to Create Effective Transition Programming for Students with Disabilities".

This study will allow me to improve my proficiency in the area of IEP goal writing and increasing my compliance with special education law. I will be looking at the area of transition and goal writing as well as student perceptions to answer the following two questions:

1. What is the impact of the Ten Sigma Transition System in developing effective and appropriate transition programming, including measurable goals and objectives, for students with disabilities (autism spectrum disorder, emotional or behavioral disorder, developmental cognitive disability)?
2. How do the students in a special education Federal Setting III program believe that the Ten Sigma Transition System was able to reflect their preferences, allowing for their annual IEP goals to reflect those same preferences and align with their postsecondary goal?

To conduct my research I will be analyzing IEPs written by me during the 2011-2012 school year as well as those written by me during the 2012-2012 school year. I will also ask students to complete a short survey to gain some of their perspectives. I will not be using any names or identifying information regarding the students or the school in my action research report.

I would enjoy meeting with you to explain the details of the research I have been collecting and the procedures of the study I plan to use in the classroom. If you have any questions, please call or contact me by email to discuss any questions or concerns you may have.

☐ I give permission for this action research study to continue.

☐ I do not give permission for this action research study to continue.

Thank you for your time,

Abigail Lovas  
Special Education Teacher

Dr. Verna Cornish  
Committee Chair at SMSU

Appendix E

Letter to Parents and Guardians

September 7, 2012

Dear Parents and Guardians,

Your child is invited to participate in a study entitled, "Ten Sigma Transition Survey: A Tool to Create Effective Transition Programming for Students with Disabilities". The purpose of this study was to examine the effectiveness or non-effectiveness of the Ten Sigma Transition System in assisting teachers with developing appropriate transition programming and measurable goals and objectives for students with disabilities. This study is designed to assist teachers in writing IEP goals that align with student postsecondary goals in order to ensure a smoother transition into postsecondary life for students with disabilities.

This study is part of my Master of Science in Special Education degree requirement at Southwest Minnesota State University. My research will consist of the analyzing of IEPs that I wrote during the 2011-2012 school year, the implementation of a procedural check list for the purpose of improving my IEP writing proficiency and a final analysis of the IEPs I wrote during the 2012-2012 school year for comparison and growth ratings. Each student will complete a survey asking them to share their opinions regarding their IEPs and the relation between their annual goals and their postsecondary goals. I will not use any names or identifying information in my research. The results of the Ten Sigma Transition System in assisting teachers with developing appropriate transition programming and measurable goals and objectives for students will be reported.

The purpose of this letter is to ask permission for your child to participate in the study and to allow me to use the information gathered. To do so, please fill out the form at the bottom of this sheet and return it to the school office or to me. If you have any questions regarding the study, please contact me by phone: XXX-XXX-XXXX or by email: <XXXXXXX>. Thank you for your help!

Sincerely,

Abigail Lovas  
Special Education Teacher

-----  
Student name: \_\_\_\_\_

Parent/Guardian signature: \_\_\_\_\_

\_\_\_\_\_ Yes, I give my permission for my child to participate.

\_\_\_\_\_ No, I do not give my permission.

\*\*\* If this form is not returned by September 21, it is assumed that permission is granted.