UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE TRANSITION SUCCESS ASSESSMENT: DETERMINING SOCIALVALIDITY AND RELIABILITY

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

CHEN-YA JUAN
Norman, Oklahoma
2008

THE TRANSITION SUCCESS ASSESSMENT: DETERMINING SOCIALVALIDITY AND RELIABILITY

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

BY

_____
James E. Martin, Ph.D.

_____
Joyce A. Brandes, Ph.D.

_____
Patricia L. Hardre, Ph.D.

_____
Lawrence F. Rossow, Ph.D.

_____
Donna Kearns, Ed.D.

To My Father, My Mother-in-Law, and My Dear Husband

ACKNOWLEDGEMENTS

I must recognize the support and guidance of many people, especially my advisor, Dr. James Martin, and dissertation committee members, Dr. Patricia Hardre, Dr. Joyce Brandes, Dr. Donna Kearns, and Dr. Lawrence Rossow. Without their guidance, support and encouragement, I could have never have completed this dissertation.

I would like to gratefully thank Dr. Martin for serving as my doctoral advisor. He always gave me the faith and encouragement to make me believe that I could complete this dissertation. I really appreciate the extra time he took and the funding support provided in helping me with my academic career. Without his knowledge, guidance, support, encouragement, and opportunities provided, I would not have reached the place where I am today. I would like to thank Dr. Kearns for helping to recruit participants for this research. She always provided me the warmest greetings, support, and guidance for my research. Dr. Hardre's help with the analysis of the data and statistics was always generous. Dr. Brandes and Dr. Rossow's support and encouragement helped me get though the proposal and dissertation process.

I would also like to express my sincere appreciation to all participants in my study who generously shared their time, experience, and responses, especially those who helped me recruit students, parents, and other professionals.

A special thank you goes to Ms. Linda Gill for the support she provided for this study. Without her efforts, it would have been impossible for me to complete my dissertation. I am also immensely grateful for the additional support and feedback from all Zarrow Center colleagues, Cathy Witten, Vincent Harper, Juan Portley and his wife, Margarita Vargas Portley, Chauncey Goff, Bradley Mays, Lorraine Sylvester, Charity

Gillman, Amber McConnell, Marsha Dempsey, Donna Willis, John Graham, Nidal El-Kazimi, and other colleagues who have helped me with this study.

Finally, my heartfelt appreciation goes to my friends and loved ones near and far, new and old, whose constant faith in my abilities allowed me to take the next step every single day.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Improving postschool outcomes for students with disabilities has always been a concern for educators, researchers, service providers, and parents. IDEA 2004 requires transition assessments to assist educators, families, and students with disabilities in determining postschool and annual transition goals. This two-phase study assessed the social validity and reliability of a new transition assessment instrument, the Transition Success Assessment (TSA). The TSA instrument, developed from 41 research studies, identified 41 predictor behaviors associated with postschool success for students with disabilities. The phase I study collected feedback and comments from eight focus groups (54 professionals, parents, and students) to modify and evaluate the usefulness of three TSA instruments. The Phase II study measured Cronbach alpha and test-retest reliability with 319 completed tests across all three TSA versions. The results of the Phase I study include two major findings. First, the number of the focus group modifications did not decrease over time. Second, focus group members agreed that over 90% of the TSA items were both understandable and beneficial. The Phase II study collected 319 completed tests from 201 participants (62 professionals, 35 parents, and 104 students) to assess the internal consistency reliability. The study also obtained 225 completed retests over test-retest correlation coefficients for a four-week interval across all three TSA instruments. Results of the Phase II study indicate all three TSA instruments display high internal consistency reliability (TSA professional $\alpha = 0.95$, TSA family $\alpha = 0.94$, and TSA student $\alpha = 0.93$) and good and acceptable test-retest correlation coefficients (TSA professional $r = .80$, TSA family $r = .89$, and TSA student $r = .76$). This study found that the TSA appears to be a valid and reliable tool that secondary educators can use to

identify annual transition goals, and that postsecondary educators can use to focus intervention efforts to improve the likelihood of postsecondary success. The implications of this study and future research needs are also discussed.

CHAPTER 1

INTRODUCTION

Postsecondary transition for students with disabilities from high school to adulthood has been addressed for over half of a century. Many students who receive special education services face challenges in building a bridge from school to adult life. Research indicates the majority of youth with disabilities are less employed, prepared for postsecondary education, and representative to live on their own (Benz, Lindstrom, & Yovanoff, 2000; Dickinson & Verbeek, 2002; Fabian, 2007; Flexer & Luft, 2005; Gerber, Price, Mulligan, & Shessel, 2003; Stephens, Collins, & Dodder, 2005; Trainor, 2007; Wagner, Newman, Cameto, Garza, & Levine, 2005; Wagner, Newman, Cameto, Levine, & Garza, 2006). In order to improve postschool outcomes for students with disabilities through appropriate transition planning, federal and state laws have increasingly emphasized the importance of transition assessments.

The Individuals with Disabilities Education Improvement Act of 2004 (IDEA) requires that students with disabilities begin receiving transition services starting no later than age 16, and the Oklahoma State Department of Education advanced the transition age for students with disabilities from 16 to 14 years. In order to measure transition behaviors and performance, IDEA 2004 mandates that transition assessments are needed to develop a coordinated set of transition activities by a result-oriented process based on student needs, skills, and strengths.

Transition Assessment

Transition assessment, as IDEA 2004 mandated, should be associated to training, education, employment, and independent living skills, which may include instruction,

related services, community experiences, the development of employment and other postschool objectives combined with appropriate daily living skills and functional vocational evaluation (Kohler & Field, 2003). The Division on Career Development and Transition (DCDT) of the Council for Exceptional Children views transition assessment to include career assessment, vocational assessment, ecological or functional assessment practices, which is the ongoing process of collecting information from an individual's needs, preferences, and interests (The National Secondary Transition Technical Assistance Center, 2008). Neubert (2003) concluded that transition assessment should also assess self-determination skills in order to obtain needed supports, accommodations, and services necessary for students who intend to participate in regular education and to pursue postsecondary goals.

Test et al. (2006) further developed an APIE (Assess, Plan, Instruct, and Evaluation) model of transition assessment. The first step is to determine each student's needs, preferences, and interests in terms of desired postschool outcomes. In this step, educators need to use transition assessments (formal and informal assessments) to determine the student's strengths, interests, and needs. In the "Plan" step, educators need to synthesize and interpret assessment results to students, families, and other professionals and document in format so those results can be used during the transition planning and course of study. The assessment data can also be used to establish Individualized Education Program (IEP) goals and objectives. In the "Instruct" step, after IEP goals, objectives, and course of study have been determined, educators need to develop and provide instruction to help the student attain their goals. The skills that the student needs to learn may include self-determination, social skills, health and fitness,

community housing, community participation, and employment. The fourth step is "evaluation," which gathers all information that the student has in the earlier steps and evaluates the student's progress toward postschool outcomes and student performance in instructional environments. The student at this time may receive feedback from other people, such as teachers, peers, friends, parents, professionals, employers, and IEP team members. The evaluation may occur in different environments, but it should occur annually. To measure transition related behaviors, vocational interest inventory, adaptive behavior assessment, and self-determination assessment have been seen as three primary parts of transition assessment. Among those traditional transition assessments, no assessment uses transition success predictors to assess transition behaviors for secondary students with disabilities (Test et al., 2006).

Transition Success Assessment (TSA)

The Transition Success Assessment (TSA) instrument, a new transition assessment tool, not only gathers transition information for students with disabilities, but also provides research-based transition success predictors to measure student transition behaviors in the transition planning. This new transition assessment tool consists of 12 categories and 41 transition behaviors derived from 41 transition success studies to measure transition behaviors for secondary students with disabilities to improve their postschool outcomes. The results of the TSA instrument provide effective data for transition planning in student IEP meetings.

The development of the TSA has a strong relationship with the self-determination concept. In the transition process, self-determination, which combines a set of skills to improve the quality of life and take control of their lives for individuals with disabilities,

plays an imperative role (Field & Hoffman, 1994; Mithaug, Mithaug, Agran, Martin, & Wehmeyer, 2007). Of the 12-identified predictors of the TSA, nine predictors are referred as self-determination behaviors. Accordingly, the TSA instrument primarily comes from self-determination concept and behaviors.

The TSA allows student, parents, and educators to develop a transition planning to improve student transition behaviors periodically. The student can take the TSA in the beginning of a school year and then retake it the next school year to measure the improvement of his/her transition behaviors and skills. Because each component of the TSA is based on clusters of transition success behaviors, transition team members receive more specific, efficient, and manageable data to indicate the student's current level of transition skills or behaviors regarding the areas of postschool employment, postsecondary education, and independent living. In order to allow service providers or educators to use this new transition assessment tool, it is important to determine the validity and reliability of the transition assessment.

Validity

Test developers in special education have discussed validity in terms of three distinct types: content, criterion and construct (Cronbach & Meehl, 1955; Messick, 1993; Shepard, 1993). Content validity refers to evidence that describes how well a measure evaluates a particular domain of content, such as daily living skills, employability skills, job performance, etc. Criterion validity refers to how well a measure relates to a particular outcome, such as educational achievement, graduation from high school, employment outcome, etc. Construct validity refers to how individuals view and attribute a measurement and how this measurement assesses a particular trait or attribute within

the context of a theoretical framework, such as mental ability, work attitude, motivation, etc. Measurement experts believe that a test developer can use one certain type of validity to evaluate the quality of the measure (Cronbach, 1988; Messick, 1993; Shepard, 1993). Social validity refers to gathering information from people's perceptions of some outcomes of an experiment (Kennedy, 2005). The purpose of social validity is to understand how people perceive the assessment tool and its items. Although social validity is often used for behavior related intervention, it can be viewed as a part of construct validity (Kennedy, 2005).

Reliability

In addition to validity, reliability has also been viewed as an important step for developing a new assessment tool. Salvia and Ysseldyke (1995) considered reliability of test scores including two parts: true score and error. The reliability of a test can be viewed as the generalizability of a test because it is to assess if a test can be generalized over time and situations. Therefore, the reliability of a test needs to be measured consistently, and an instrument cannot be valid if it is not reliable (Siegle, 2007). Although researchers grouped the methods of reliability in different ways, basically, the reliability of a test can be identified through four major methods: test-retest method, alternative-form or equivalent form method, internal consistency method, and inter-rater method (Berdine & Meyer, 1987; Carmines & Zeller, 1979; Pierangelo & Giuliani, 2002; Salvia & Ysseldyke, 1995; Siegle, 2007). Of all four major methods, internal consistency reliability includes (a) split-half method, (b) Cronbach alpha method, and (c) Kuder-Richardson Formula 20 (K-R 20) and Kuder-Richardson Formula 21 (K-R 21).

Generally, a reliability of .70 indicates 70% consistency of correlation scores produced by a measurement and some tests even obtained .90 or higher reliabilities (Siegel, 2007).

A major concern, however, is to know the usefulness and value of a new assessment tool in the context of curriculum outcomes and future performance (Nitko, 1993). It is imperative to examine the validity and reliability of the new TSA. The validity of an assessment tool indicates meaningfulness, appropriateness, and usefulness. The reliability of an assessment tool implies consistency of generalizability. With sufficient validity and reliability, the TSA instrument demonstrates its utility and value, which allow educators and service providers to use it.

Problem Statement

Although transition assessments include a set of test activities across a variety of environments to measure students' current behaviors to provide information to assist students and educators in choosing postsecondary goals, tools to measure transition skills in relation to research-identified successful transition behaviors do not exist. Previous studies indicated clusters of behaviors collected from individuals who successfully transferred from high schools to postschool lives, or from postsecondary education institutions to employment settings. I examined the major transition texts (Flexer & Luft, 2005; Test et al., 2006), transition assessment books (Dais & Kohler, 1995; Miller, Lombard, & Corbey, 2007; Sax & Thoma, 2002), numerous publisher catalogs and web sites, and discussed assessments with vocational evaluators, rehabilitation counselors, and professionals. No transition assessment tool uses research-based predictor behaviors to measure transition skills in relation to their postsecondary outcomes for secondary students with disabilities. Secondary students with disabilities need access to

measurement of transition success behaviors to gather information over what behaviors need to be changed to improve transition outcomes.

Purpose of the Research Project

I undertook this research to determine the social validity and reliability of the TSA instrument, and its professional, parent, and student versions. Two phases of research investigated the TSA social validity and reliability for both secondary and postsecondary students with mild to moderate disabilities. The Phase I study established the social validity of the TSA through the use of professional, parent, and student focus groups that evaluated the benefit and understanding of assessment items across three TSA versions (professional, family, and student). The data derived from this phase validated and modified the wording of the three TSA versions. The Phase II study used data I collected from the Phase I study to determine the reliability of the three TSA versions. In the Phase II study, Cronbach alpha determined the reliability of the three TSA versions. Next, I collected test-retest data correlation coefficients with a four-week or so interval and determined correlation coefficients. The results of the Phase I study will enable us to determine if the items of the TSA will be beneficial and understandable for secondary students with mild to moderate disabilities, family members, special education teachers, and rehabilitation counselors. The results of the Phase II study will also enable us to determine if the TSA item scores are reliable.

Specific Research Question

Phase I Study

Overview

The Phase I study answered three research questions related to the TSA professional, student, and family versions. Question 1 addressed modifying the wording of each TSA item through focus group meetings. Question 2 emphasized the usefulness and benefits of each TSA item through focus group meetings. Question 3 examined the understandability of the wording for each TSA item from focus group members.

Specific Questions

1. How did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) revise each TSA item across the professional, student, and family versions to improve TSA's understandability?

2. Did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive the TSA as beneficial for secondary students with mild to moderate disabilities?

3. Did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive that the TSA is understandable for secondary students with mild to moderate disabilities?

Phase II Study

Overview

The Phase II study contained two specific research questions to determine the reliability of the TSA. The first question addressed measuring the test-retest reliability

across a four-week or so interval to determine the consistency of the item scores of the three TSA versions. The second question determined the Cronbach alpha reliability score for the item and domain scores of the three TSA versions.

Specific Questions

4. Did the test-retest correlation coefficients of the TSA total and domain scores for the parent, student, and professional versions equal or exceed .75?

5. Did the Cronbach alpha of TSA item scores for the parent, student, and professional versions equal or exceed .80?

CHAPTER 2

LITERATURE REVIEW

This chapter offers a detailed review of the literature related to transition outcomes, self-determination, transition assessment, and associated factors. The literature includes the following topics: (a) postschool outcomes, (b) clusters of behaviors found associated with postschool success, (c) self-determination, (d) transition assessment, (e) the development of the Transition Success Assessment, (f) social validity and reliability, and (g) summary.

Postschool Outcomes for Students with Disabilities

The Individuals with Disabilities Education Act (IDEA) 2004 requires all children with disabilities to receive transition services by age 16. Specifically, students should identify their employment, education, and/or needed independent living postschool goals and that educational programs and activities must be supported by transition services that should include instruction, and community experiences (Kohler & Field, 2003).

Literature Review Procedures

The investigation of postschool outcomes for students with disabilities who graduated from high school has been addressed for several decades, and continues to current years. To examine this literature I used the following criteria: (a) studies that reported on at least one post-high school outcome domain (e.g., employment, further education, or independent living); (b) data-based studies published in refereed professional journals and include adequate descriptions of participants, procedures, and results; (c) studies must include participants with disabilities; and (d) studies needed to be published in English. After using electronic search engines, reference sections, and

research by hand of special education and psychological journals, I located 69 studies. In addition to those 69 studies, I included the 2005 National Longitudinal Transition Study-2 (NLTS2) that identified the postschool outcomes for over 8,000 youth with disabilities (Wagner, Newman, Cameto, Garza, & Levine, 2005; Wagner, Newman, Cameto, Levine, & Garza, 2006).

Postschool Outcomes for Students with Disabilities

Employment Outcomes

The postschool outcomes studies for youth with disabilities primarily investigate what students do after exiting high school (National Post-school Outcomes Center, 2008). The postschool outcomes cover three basic areas: employment, further education, and independent living. Employment refers to a paid job that requires work performance at a certain time, including part-time and full-time jobs. Of 69 studies, 56 examined employment outcomes for individuals with disabilities, and four primary outcomes emerged from this research. First, individuals with mental retardation have a lower employment rate than individuals with learning disabilities (Fairbank, 1933; Hasazi, Gordon, & Roe, 1985; deBettencourt, Zigmond, & Thornton, 1989; Scuccimarra & Speece, 1990; Ramasamy, 1996). Second, the majority of individuals with disabilities work in lower occupational levels (Baller, 1936; Scuccimarra & Speece; 1990). Third, most individuals with disabilities who have paying jobs earn less than individuals without disabilities after leaving high school (Ramasamy, 1996; Fabian, 2007). Finally, most individuals with disabilities found their jobs through informal person-family-friend networks (Hasazi, Gordon, & Roe, 1985; Liebert et al., 1990; Mithaug, Horiuchi, & Fanning, 1985). The National Longitudinal Transition Study-2 (Wagner, Newman,

Cameto, Levine, & Garza, 2006; Wagner, Newman, Cameto, & Levine, 2005) investigated 8,000 youth with disabilities from 1987 to 2003. The report indicated that the part-time employment rate had been increased from 55% to 70%. Also, 18% of employed persons worked full-time jobs in 1987 compared with 39% in 2003. In contrast, the U.S. Department of Education reported high school graduates without disabilities from 1993 and 1994, 2004 and 2006 for postschool employment outcomes. The report further indicated that around 80% of high school graduates had jobs in 1993 and 1994. Between 2004 and 2006, 48% high school graduates had been employed, which is higher than high school graduates with disabilities (36%).

Postsecondary Education Outcomes

Regarding postsecondary education, research found that individuals with disabilities are underrepresented. Mithaug et al. (1985) reported that 39% of high school students with disabilities attended higher education institutions (18% to community or junior college; 13% to a state college or university; and 8% to a vocational or technical school). Shapiro and Lentz (1991) reported that only 11% of graduates with learning disabilities enrolled for postsecondary education. Karpinski, Neubert, and Graham (1992) found 17% of the graduates with learning disabilities enrolled for postsecondary programs. However, Liebert et al. (1990) found that 78.1% of the participants with physical disabilities enrolled at full-time and part-time colleges. The National Longitudinal Transition Study-2 reported high school graduates with disabilities increased the enrollment rate from 15% to 32% within six years (Wagner, Newman, Cameto, & Levine, 2005). The report also stated the greatest growth occurred in the number of students attending two-year colleges. From 1987 to 2003, attendance at four-

year institutions had increased to 8%, which remains far less than students without disabilities. Overall, about 23% of the participants were enrolled in any postsecondary education in 1987 compared with 44% in 2003 (Wagner, Newman, Cameto, & Levine, 2005). The U.S. Department of Education (2008) reported about 62% of 1993 and 1994 high school graduates without disabilities enrolled in colleges and about 68% of high school graduates without disabilities enrolled in colleges between 2004 and 2006, which is higher than graduates with disabilities in most investigation studies.

Independent Living Outcomes

Independent living refers to students' social or community adjustment. The purpose of independent living focuses on whether high school graduates with disabilities can live independently or live with their parents, and whether the graduates can fully support their independent living or if they have to depend on their parents. However, research found that high school graduates with disabilities have difficulties living independently. For example, Linden and Forness (1986) concluded that about 32% of 40 high school graduates lived independently. Frank and Sitlington's (2000) investigative follow-up study for the classes of 1985 and 1993 found that more than half of the graduates needed financial support from their parents. Moreover, Scuccimarra and Speece (1990) investigated graduates with LD, MR, PH, and ED and found that 83.1% lived with their parents. The National Longitudinal Transition Study-2 (NLTS2) also concluded that 90% of the participants with disabilities who had the lowest income lived with their parents in 2001 compared to 72.9% in 2003. None of these, with the lowest income, lived independently in 2001 compared with 6.7% of those living independently in 2003. However, for those with medium income, none of them lived independently in

2001 compared with 20% in 2003; for those with the highest income, 2.1% lived independently in 2001 compared with 15.6% in 2003 (Wagner et al., 2006).

Although youth with disabilities today are more likely to work paid jobs and obtain postsecondary education opportunities, the gap still exists between youth with and without disabilities. The U.S. Department of Education (2008) reported about 46% of high school graduates without disabilities had been employed compared to 32% of high school graduates employed in 2003 and 2004. The same as in enrollment for postsecondary education programs, about 67% of high school graduates without disabilities enrolled for further education compared to 44% of high school graduates with disabilities. In conclusion, sixteen years, between 1987 and 2003, youth with disabilities employment figures increased less than one percent per year (1987- 55%; 2003- 70%) (U.S. Department of Education, 2008). The data strongly suggest the need to improve postschool outcomes for secondary students with disabilities (Wagner, Newman, Cameto, & Levine, 2005).

Clusters of Behaviors Associated With Postschool Success

Literature Review Procedures

The previously reviewed literature indicated former students with disabilities had poor outcomes in employment, postsecondary education, and independent living. Research into postschool outcomes for individuals with disabilities has also focused on investigating factors associated positive outcomes with postschool outcomes. The 69 postschool outcome studies yielded 41 behaviors associated with postschool success. I included these studies by using the following two primary criteria: studies must meet the criteria of inclusion postschool outcome studies, and must have at least one identified and

clearly defined empirically based behaviors associated with postschool school success. I first used previous postschool outcome studies to identify the studies which included behaviors associated with transition success. Second, I used the reference sections of the initial set of studies to lead to additional papers. Third, I conducted a hand search of the special education and psychology journals to locate any remaining studies.

Positive Transition Predictor Behaviors

The collected studies represented data from across Europe, Canada, and clusters of U.S. states, and 20 individual states. These 41 predictor behaviors formed 12 clusters of predictors that had a direct relationship to students' transition behaviors: desires, goals, limits, disability awareness, persistence, use of effective support systems, coping skills, social skills, proactive involvement, making positive choices, and transition education involvement. According to the research, young adults with disabilities who have these transition behaviors tend to experience better postschool outcomes. Some studies identified more than one predictor behavior. Each predictor behavior includes at least one evidence-based reference. The references that include these 41 predictor behaviors appear in Table 1.

Table 1

A Reference List of Positive Postschool Outcome Behavior

No.	References	Predictor Behaviors
1	Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529.	goal setting, employment experience during high school, transition education, and support of school staff
2	Collet-Klingenberg, L. L. (1998). The reality of best practices in transition: a case study. *The Council for Exceptional Children, 65*, 67-78.	vocation-related practices, transition-related instruction, indirect transition practices (the commitment of key people in implementing services)
3	Dickson, D. L. & Verbeek, R. L. (2002). Wage differentials between college graduates with and without learning disabilities. *Journal of Learning Disabilities, 35*, 175-184.	productivity characteristics (such as more years of working experience)
4	Dunn, C., & Shumaker, L. (1997). A follow-up study of former special education students from a rural and urban county school system. *Career Development for Exceptional Individuals, 20*, 43-54.	employment experience during high school
5	Fabian, E. S. (2007). Urban youth with disabilities: factors affecting transition employment. *Rehabilitation Counseling Bulletin, 50*, 130-138.	prior work experience and transportation
6	Fabian, E. S., Lent, R. W., & Willis, S. P. (1998). Predicting work transition outcomes for students with disabilities: Implications for counselors. *Journal of Counseling & Development, 76*, 311-316.	complete internship during high school
7	Fourqurean, J. M., Meisgeier, C., Swank, P. R., & Williams, R. E. (1991). Correlates of postsecondary employment outcomes for young adults with learning disabilities. *Journal of Learning Disabilities, 24*, 400-405.	job experience, know what type of work they would enjoy and be good at
8	Frank, A. R., & Sitlington, P. L. (2000). Young adults with mental disabilities – does transition	work experience, transition training

	planning make a difference? *Education and Training in Mental Retardation and Developmental Disabilities, 35*, 119-134.	program involvement
9	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.	making decisions to take charge of one's life, luck, desire, goal orientation, positive attitude to one's own disability, self-awareness, persistence, goodness of fit, learned creativity, social support networks
10	Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: A comparison of the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291.	self-determination skills, self-disclosure, self-advocacy, and knowledge and use of the disability laws
11	Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.	self-awareness, proactivity, perseverance, goal setting, presence and use of effective social support systems, emotional stability/emotional coping strategies, family differences, and social relationships
12	Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164.	social skills (maintain or develop good relationships with adults, classmates, and friends), transition education, support of personal networks such as family and friends
13	Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.	work experience programs in high school
14	Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth	worked during high school

	with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*, 243-255.	
15	Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "mentally retarded." *Education and Training of the Mentally Retarded, 20*, 222-234.	transition education involvement (vocational training program involvement)
16	Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.	self-awareness, self-acceptance of disability, minimize weaknesses and maximize strengths, copping with fear, confusion, frustration, and anger, transformation, and positive attitude to disability
17	Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., et al. (2005). The relationship between quality of life and self-determination: An international study. *Journal of Intellectual Disability Research, 49*, 740-744.	self-determination (goal setting and decision making)
18	Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional children, 57*, 56-63.	support of personal networks such as family and friends, greater self-determination, the desire for more intensive guidance counseling, transition education, transportation
19	Lindstrom, L. E. & Benz, M. R. (2002). Phases of career development case studies of young women with learning disabilities. *The Council for Exceptional Children, 69*, 67-83.	stable employment, clear career goals, a sense of internal motivation, personal determination
20	Madaus, J. W. (2006). Improving the transition to career for college students with learning disabilities: suggestions from graduates. *Journal of Postsecondary Education and Disability, 19*, 85-93.	self-awareness, transition related instruction, ask and receive support and accommodations.

21	Martin, J. E., Mithaug. D. E., Cox, P., Peterson, L. Y., Van Dycke, J. L., & Cash, M. E. (2003). Increasing self-determination: Teaching students to plan, work, evaluate, and adjust. *Exceptional Children*, 69, 431-446.	self-determination skills
22	Martin, J. E., Mithaug, D. E., Oliphint, J. H., Husch, J. V. & Frazier, E. S. (2002). *Self-directed employment: A handbook for transition teachers and employment specialists*. Baltimore: Brookes Publishing.	self-determination skills
23	Masten, A. S., Burt, K. B., Roisman, G. I., Obradovic, U., Long, J. D., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology, 16*, 1071-1094.	social skills (maintain or develop good relationships with adults, classmates, and friends)
24	McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381.	self-awareness, persistence, ability to cope with confusion, difficulties, and frustration, and positive attitudes
25	Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404.	self-awareness, vocational, social skills, desire to live independently, education and special education (transition education, expressing employment and education strengths, using special education teachers as support.)
26	Rabren, K., Dunn, C., & Chambers, D. (2002). Predictors of post-high school employment among young adults with disabilities. *Career Development for Exceptional Individuals, 25*, 25-40.	employment experience during high school and transition education
27	Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice,*	internship during high school and transition education

	14, 35-49.	
28	Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned form a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.	disability awareness, proactivity, perseverance, appropriate goal setting, effective use of social support systems, and emotional coping strategies
29	Rojewski, J. W. (1999). Occupational and educational aspirations and attainment of young adults with and without LD 2 years after high school completion. *Journal of Learning Disabilities, 32*, 533-552.	high educational aspirations
30	Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.	disabilities self-awareness, institutional infrastructure, information access and social support system, autonomy, problem solving, and persistence attributed their success, self-determination
31	Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.	disability awareness, ask and receive support and accommodations, support from family, friends, instructors, and/or academic support personnel, hard work, set goals for themselves and planned their lives
32	Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.	self-determination (goal setting, goal attainment, and choice making)
33	Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-	problem-solving, understanding one's disability, goal setting, self-management, supports of peers, friends,

	242.	and parents
34	Wagner, M. M. (1995). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. *The Future of Children, 5* (2), 90-112.	transition education and social skills
35	Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf	ask and receive supports and accommodations to the student needs
36	Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf	transition education involvement, job interest depression
37	Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.	self-awareness, goal setting, goal attainment, and choice making (self-determination)
38	Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *Exceptionality, 15*, 31-44.	self-determination (goal setting, goal attainment, and choice making)
39	Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.	self-determination (goal setting, goal attainment, and choice making)
40	Wehman, P., Kregel, J., & Seyfarth, J. (1985). Transition from school to work for individuals with severe handicaps: A follow-up study. *The*	academic performance and transportation

	Association for Persons with Severe Handicaps, 10, 132-136.	
41	Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want": Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389.	productivity characteristics, employment during high school, self-determination

The following sections describe 12 clusters of predictor behaviors that presents transition behaviors contributing to successful postschool outcomes for both secondary and postsecondary education students with mild to moderate disabilities.

Desires

Research confirmed that the desire of youth with disabilities to do well in school, find a job, and live independently attribute to successful post-high school outcomes for youth with disabilities (Gerber et al., 1992; Masten et al., 2004; Mithaug et al., 1985; Rojewski, 1999). Mithaug et al. (1985) reported that those participants who reported a desire to do well in school were more likely to continue their education after high school, and those who had a desire to find a job were more likely to like their jobs. Gerber et al. (1992) found highly successful adults with learning disabilities had a desire to set goals and make decisions compared to moderately successful adults. The authors also found that this desire came earlier for some adults, but for all it was very conspicuous and powerful. To extend this point, Rojewski (1999) further compared and analyzed a national longitudinal database of participants with and without learning disabilities who graduated between 1994 and1998, and concluded that desires of wanting to do well in education and/or employment are the most important variables for individuals enrolled in postsecondary education, regardless of disability status. Masten et al. (2004) examined the transition of 173 adults with disabilities and concluded that achievement motivation

(e.g., for high scores “strives to achieve a high standard of success,” “takes pride in accomplishments”) presented important influence for adult transition. The authors also found those with high desire scores had plans and goals regarding their own transition to school or career that involved significant training/motivation and time commitment.

Goals

Research indicated that youth with disabilities who expressed academic, employment, and/or independent living IEP goals had successful post-high school outcomes (Benz et al., 2000; Gerber et al., 1992; Goldberg et al., 2003; Hasazi et al., 1989; Hasazi, Gordon, Roe, Hull, et al., 1985; Liebert et al., 1990; Raskind et al., 1999, 2002; Skinner, 2004). The literature indicated that graduates who possessed goal setting capability had a high level of self-determination attributable to better postschool outcomes (Lachapelle et al., 2005; Martin et al., 2002; Wagner et al., 2005; Wehmeyer & Palmer, 2003; Wehmeyer et al., 2007; Wehmeyer & Schwartz, 1997; Sarver, 2000). Thoma and Getzel (2005) reported that participants understood and emphasized the importance of goal setting and they believed that goals need to be realistic and precise with steps. Goal setting enabled students to see their vision and empowered their motivation to make plans (Gerber et al., 1992; Thoma & Getzel, 2005). Self-determined graduates set their goals for their future, made plans, and solved problems to achieve those goals (Gerber et al., 1992; Liebert et al., 1990; Sarver, 2000; Skinner, 2004; Thoma & Getzel, 2005; Wehmeyer & Palmer, 2003; Wehmeyer et al., 2007; Wehmeyer & Schwartz, 1997; Whitney-Thomas & Moloney, 2001). Field, Sarver, and Shaw (2003) found successful adults with learning disabilities set their goals flexibly to articulate the

learning situations to solve problems for their success. Other studies found similar results (Gerber et al., 1992; Goldberg et al., 2003; Raskind et al., 1999, 2002).

Strengths

Studies showed that individuals with disabilities who knew, understood, and expressed their strengths in academics, employment, and independent living were more likely to have more successful post-high school outcomes in employment, postsecondary education, and independent living (Gerber et al., 1992; Hasazi et al., 1989; Hasazi, Gordon, & Roe, et al., 1985; Hasazi, Gordon, & Roe, 1985; Higgins et al., 2002; Madaus, 2006; Mithaug et al., 1985; Raskind et al., 1999, 2002; Skinner, 2004; Wehmeyer & Schwartz, 1997; Wehmeyer & Palmer, 2003). Gerber et al. (1992) concluded that successful participants who understood their own strengths had a greater likelihood for success. Higgins et al. (2002) further identified that being aware of strengths enabled successful individuals with learning disabilities to fit in their environment. By understanding strengths, students are able to find a good fit (Gerber et al., 1992; Goldberg et al. 2003; Higgins et al., 2002; McNulty, 2003; Raskind et al., 1999, 2002).

Limits

Research also indicated that students, who knew, understood, and expressed their limitations about school, employment, and independent living are more likely to have more successful post-high school outcomes (Hasazi et al., 1989; Hasazi, Gordon, Roe, et al., 1985; Madaus, 2006; McNulty, 2003; Skinner, 2004; Wehmeyer & Schwartz, 1997; Wehmeyer & Palmer, 2003). However, Higgins et al. (2002) identified that individuals with disabilities should also understand their own limits, but not to dwell on them. The authors suggested that individuals should accept their own limits as part of their life as

they do their strengths (Higgins et al., 2002; Goldberg et al., 2003; Raskind et al., 1999, 2002). Students not only need to know their own limitations, understand their limits, but also consider their limits when making decisions. For example, if a student has math problems, he/she should not choose accounting as a career. Therefore, individuals with disabilities who can acknowledge their own limitations when choosing their goals in education, employment, and independent living are more likely to have successful post-high school outcomes (Gerber et al., 1992; Goldberg et al., 2003; Higgins et al., 2002; Raskind et al., 1999, 2002).

Disability Awareness

Disability awareness refers to students with disabilities becoming aware of and understanding their own disability in order to request needed supports. Being aware of one's disability becomes a very important variable for successful post-high school outcomes for students with disabilities (Gerber et al., 1992; Gerber et al., 2004; Goldberg et al., 2003; Higgins et al., 2002; McNulty, 2003; Raskind et al., 1999; Sarver, 2000; Skinner, 2004; Thoma & Getzel, 2005; Wehmeyer & Palmer, 2003; Wehmeyer et al., 2007; Wehmeyer & Schwartz, 1997). Disability awareness has been viewed as students' foundation for future accomplishments (Benz et al., 2000). It is important that students with disabilities should learn about themselves in order to be successful in post secondary settings (Thoma & Getzel, 2005). Learning about oneself is not just to know their strengths, limits, and disabilities, but also to set goals, priorities, plans, and positive attitudes about oneself (Gerber et al., 1992; Higgins et al., 2002; Thoma & Getzel, 2005). Research clearly points out the direct relationship between self-awareness and self-advocacy (Benz et al., 2000; Davies & Jenkins, 1997; Field et al., 2003; Higgins et al.,

2002). Successful individuals with disabilities recognize their own disability, and see themselves as their best teacher to find out who they are and what they need. Because individuals with disabilities are aware of their own disability, they are able to express supports and/or accommodations they need (Gerber et al., 2004; Higgins et al., 2002; McNulty, 2003; Raskind et al., 1999, 2002; Sarver, 2000; Skinner, 2004; Thoma & Getzel, 2005; Wagner, Newman, Cameto, Levine, et al., 2005; Whitney-Thomas & Moloney, 2001).

Persistence

Researchers found that when students were continually pursuing (e.g., education, employment, and independent living) goals, they had better post-high school outcomes (Gerber et al., 1992; Goldberg et al., 2003; McNulty, 2003; Raskind et al., 1999, 2002; Sarver, 2000). When Raskind (1999, 2002) examined and developed patterns of success predictors for 41 participants with learning disabilities, they found a high correlation with success and persistence. Successful individuals with disabilities usually set their goals and kept working toward their goals. Moreover, successful individuals often utilized a variety of strategies that allowed them to keep working on their goals and found a way around the obstacle to their progress (Goldberg et al., 2003). Sarver (2000) found that successful students believed persistence was essential to academic success, including studying, meeting with advisers, going to tutoring, and retaking courses when necessary. Some studies also found that persistence in attaining IEP goals is another significant variable for postschool success (Goldberg et al., 2003; McNulty, 2003; Raskind et al., 1999, 2002).

Use of Effective Support Systems

The use of effective support systems has been addressed by many postschool outcome studies. Research found that the use of effective support systems helped students with disabilities obtain needed supports and accommodations in order to be successful in transition outcomes (Benz et al., 2000; Frank & Sitlington, 2000; Halpern, Yovanoff, Doren, & Benz, 1995; Higgins et al., 2002; Goldberg et al., 2003; Liebert et al., 1990; Mithaug et al., 1985; Raskind et al., 1999, 2002; Sarver, 2000). In order to get support, successful young adults gathered needed information from the internet, doctors, and support groups; then they explained it to others and asked for accommodations (Thoma & Getzel, 2005). Students usually used trial and error as a strategy to determine what supports and accommodations work best. Because students needed to explain their needs to others for supports, it was important for students to ask and receive help from others. Classmates, friends, and family members were the most helpful resources of support for the majority of individuals with disabilities (Mithaug et al., 1985; Raskind et al., 1999, 2002; Whitney-Thomas & Moloney, 2001).

Supports included professional sources, guidance, encouragement, information, help, and accommodations to student needs. Research found successful students had significant others who held clear and realistic expectations of them and who were consistent and stable in their function (Goldberg et al., 2003; Higgins et al., 2002; Mithaug et al., 1985; Raskind et al., 1999, 2002; Sarver, 2000; Wehman et al., 1985; Whitney-Thomas & Moloney, 2001). Individuals with disabilities who had successful post-high school outcomes requested and used support systems to obtain their postschool goals (Gerber et al., 1992; Gerber et al., 2004; Goldberg et al., 2003; Hasazi, Gordon, &

Roe, 1985; Liebert et al., 1990; Raskind et al., 1999, 2002; Sarver, 2000: Thoma & Getzel, 2005; Wagner, Newman, Cameto, & Levine, 2005; Whitney-Thomas & Moloney, 2001).

Coping Skills

Studies indicated that emotional stability had high correlation to successful post-high school outcomes for individuals with disabilities. Individuals with disabilities who had better postschool outcomes knew how to cope with difficulties, stress, and frustrations in a positive manner (Higgins et al., 2002; Goldberg et al., 2003; McNulty, 2003; Raskind et al., 1999, 2002). Higgins et al. (2002) found most students with disabilities reported that they had strong emotional feelings such as fear, confusion, frustration, and anger about the issue of their disability long before it was identified. Those negative emotional feelings resulted in psychological difficulties, such as withdrawal, crying, aggression, depression, panic attacks, and anxiety (Goldberg et al., 2003; Higgins et al., 2002). Successful individuals recognized their stress, frustration, and emotional problems to develop effective strategies to cope with those negative emotional feelings (Goldberg et al., 2003). Students who can cope with their negative emotional feelings can do well in educational, employment, and social settings (Benz et al., 2000; Masten et al., 2004).

Social Skills

Research showed that appropriate social skills had a strong relationship to better post-high school outcomes for individuals with disabilities (Halpern et al., 1995; Masten et al., 2004; Mithaug et al., 1985; Wagner, 1995; Wagner, Newman, Cameto, Garza, et al., 2005; Wagner, Newman, Cameto, & Levine, 2005). Halpern et al. (1995) investigated

more than 900 students with disabilities from Oregon, Nevada, and Arizona and found students who maintained or developed good relationships with adults, classmates, and friends could be successful in the transition. Students who maintained and developed good relationships with other people established a supportive system to attain their goals (Masten et al., 2004; Mithaug et al., 1985; Wagner, 1995). For example, students who had reading difficulties could ask their friends to read to them; students who had writing difficulties could ask their friends to take notes in class. Based on previous research, students with disabilities who got along with peers, friends, and adults had better outcomes after they graduated from high school.

Proactive Involvement

Research indicated that students who engaged in extra-curricular activities had better post-high school outcomes (Goldberg et al., 2003; Liebert et al., 1990; Raskind et al., 1999, 2002; Wagner, Newman, Cameto, & Levine, 2005). Goldberg et al. (2003) found successful individuals with disabilities were proactive. Proactive persons made decision to engage the world economically, in the family, community, and school in order to make positive changes in their life. Successful individuals voluntarily participated in community activities, took an active leadership role at work and in social contexts. Students who proactively participated in school and community activities controlled their own life and affected the outcome of their lives (Goldberg et al., 2003; Liebert et al., 1990; Raskind et al., 1999).

Studies also showed that students who had paid job experience had better postschool outcomes (Benz et al., 2000; Dickson & Verbeek, 2002; Dunn & Shumaker, 1997; Fabian, 2007; Fabian et al., 1998; Fourqurean et al., 1991; Hasazi et al., 1989;

Hasazi, Gordon, & Roe, 1985; Rabren et al., 2002). In other words, students who had work experience or internships during high school were more likely to find paying jobs after they graduated from high school.

Making Positive Choices

Many studies showed that students who had better post-high school outcomes made positive choices (Gerber et al., 1992; Lachapelle et al., 2005; Liebert et al., 1990; Martin et al., 2002; McNulty, 2003; Rojewski, 1999; Sarver, 2000; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). During the process of making decisions, research found successful students first recognized, accepted, and understood their own disability, and then analyzed advantages and disadvantages of decisions prior to taking specific action toward their goals (Gerber et al., 1992; Goldberg et al., 2003). Successful individuals viewed decision making as taking responsibilities, then acting on them (Raskind et al., 2002). Successful students understood how they made good decisions (Sarver, 2000).

Transition Education Involvement

Transition education has been viewed as a variety of transition activities coordinated in a meaningful way to improve the skills of educational planning and decision making for students with disabilities (Kohler & Field, 2003). The best way to address transition education is to focus on transition planning, which should include an emerging sense of self-determination, self-evaluation, identification of transition goals, and selection of appropriate educational experiences (Halpern, 1994). Transition education involves all transition issues ranging from family-focused and interagency collaboration initiatives to dropout identification to transition from high school to

employment (Kohler & Field, 2003). Studies indicated that transition education increased transition skills for students with disabilities for a better post-high school outcome (Benz et al., 2000; Halpern et al., 1995; Hasazi et al., 1989; Hasazi, Gordon, Roe, et al., 1985; Lachapelle et al., 2005; Liebert et al., 1990; Wagner, 1995). Specifically, students understood, expressed, and discussed their interests, strengths, limits, and needs with other meeting members. Research indicated that students who actively participated in educational planning meetings (e.g., IEP meetings, educational meetings, transition meetings, etc.) had a high level of self determination, which attributed better postschool outcomes (Mithaug et al., 1985; Rabren et al., 2002; Wehmeyer & Schwartz, 1997; Wehmeyer et al., 2007). Self-determination skills included goal-setting, goal attainment, decision making, disability awareness, self-monitoring, self-advocacy, self-efficacy, etc., which helped students to take control on their current and future life (Wehmeyer, 1995). Through expressing their interests, strengths, and needs on the meetings, students would have better outcomes in employment, education, and independent living (Collet-Klingenberg, 1998; Fabian et al., 1998; Lachapelle et al., 2005; Mithaug et al., 1985; Rabren et al., 2002; Sarver, 2000; Thoma & Getzel, 2005; Wagner, 1995; Wehman et al., 1985; Wehmeyer & Schwartz, 1997). Transition education also includes arranging transportation to job sites, educational settings, or social events. Research indicated students who arranged their transportation for their jobs, classes, and social events had better postschool outcomes than those who did not (Fabian et al., 1998; Liebert et al., 1990; Wehman et al., 1985).

These 12 clusters of predictors have been identified by studies that can benefit students with disabilities in the development of successful postschool outcomes. The

Transition Success Assessment (TSA) adopted these 12 clusters of predictors as 12 domains that represent transition behaviors found in 41 studies that predicted successful postschool outcomes for individuals with disabilities. Each domain includes two to six items regarding students' academic, employment, and community experience as shown in Appendix A.

Self-Determination

Of the 12 clusters of transition success predictors, nine domains are associated with self-determination behaviors: desires, goals, strengths, limits, disability awareness, use of effective support system, proactive involvement, making positive choices, and transition education involvement.

The Importance of Self-Determination

Self-determination has been defined in terms of learning behaviors, quality of life, and equality of rights (Deci & Ryan, 1985; Nirje, 1972; Wehmeyer, 1992). Self-determination emerged from disability rights and self-advocacy movements (Field & Hoffman, 1994). The self-determination movement enabled individuals with disabilities to express their thoughts and make decisions from professional or parental constraints possessing the power from professional or parental constraints (Wehmeyer, 1992). The Individuals with Disabilities Education Act (IDEA) provides legislative support of self-determination for the lives of people with disabilities in the transition planning process (Field & Hoffman, 1994; Thoma & Rogan, 2001). Section 504, the Americans with Disabilities Act of 1990, and the Rehabilitation Act Amendments of 1992 emphasize the importance of self-determination and the rights of persons with disabilities to live independently, gain better postschool outcomes in further education and employment in

the society (Field & Hoffman, 1994; Price, Wolensky, & Mulligan, 2002). These laws empower the rights of self-determination for individuals with disabilities.

The Definition of Self-Determination

Self-determination in special education combines both social psychology and social learning theory, and includes a set of skills (e.g., decision making, goal setting, self-advocacy, self-efficacy, self-monitoring, self-evaluation, etc.) to improve the abilities of students with disabilities to control their lives and have a successful adult life (Martin, Huber Marshall, & De Pry, 2005; Mithaug et al., 2007). Although definitions of self-determination vary, the fundamental assumption across definitions enabled people to have power to control their own lives and have input on important life decisions (Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000).

The most widely used definition of self-determination for students with disabilities in the transition process views self-determination as skills, knowledge, and beliefs that facilitate individuals' engagement in goal-directed, self-regulated behavior (Field, Martin, Miller, Ward, & Wehmeyer, 1998). Self-determined individuals have a set of skills that can improve their abilities to take control of their lives and can expect a successful adult life (Mithuag et al., 2007). Martin and Marshall (1996) conceptualized that self-determined students establish goals from an awareness of their needs and interests, then develop plans, implement the plans, self-evaluate progress, and make needed adjustments to attain those goals. Mithaug et al.'s (2007) equal opportunity theory suggests that school instructional activities should increase the likelihood of self-determined actions by increasing students' self-determination skills and providing enhanced opportunities for self-determined actions. Self-determination skills include self-

awareness, self-advocacy, self-efficacy, decision making, independent performance, self-evaluation, and adjustment. Self-determination is a package of skills that can be taught, learned, applied, and adapted within and across different settings (Wehmeyer, 1999).

Self-Determination and Postschool Success

A growing body of research suggests a strong relationship between the self-determination skills of students with disabilities, their academic performance, and post-high school outcomes (Agran, Cavin, & Wehmeyer, 2006; Gerber et al., 1992; Goldberg et al., 2003; Konrad, Fowler, Walker, Test, & Wood, 2007; Lachapelle et al., 2005; Leake & Boone, 2007; Liebert et al., 1990; Martin et al., 2002; Martin et al., 2003; Raskind et al., 1999; Saver, 2000; Trainor, 2007; Wehmeyer & Schwartz, 1997; Zhang & Benz, 2006). Lachapelle et al. (2005) investigated adults with mild intellectual disabilities across four countries (Canada, U.S., Belgium, and France) and recognized the contribution of self-determination to quality of life. Raskind et al. (1999) and Goldberg et al. (2003) conducted a 20-year longitudinal study of former students with learning disabilities, and they found that self-determination attributed to predict post-high school success. Gerber et al. (1992) also found that self-determination attributed postschool success for adults with learning disabilities.

Self-Determination and Academic Performance

Researchers found students with disabilities who had higher levels of self-determination significantly improved academic performance (Liebert et al., 1990; Martin et al., 2003; Saver, 2000; Thoma & Getzel, 2005). Saver (2000) also found that college students with learning disabilities, who had higher self-determination scores, obtained better grades than students with lower levels of self-determination. Last, Agran et al.

(2006) examined the effects of self-determination instruction on the academic performance of three junior high school students with significant disabilities and concluded that the postsecondary outcomes goals for students with disabilities, aligned to district standards were met by the increased academic and employment gains.

Self-Determination and Employment Outcomes

Students with higher levels of self-determination not only had better academic performance, but also employment outcomes. Wehmeyer and Schwartz (1997) concluded that people with intellectual disabilities who had higher self-determination scores had a more positive quality of life. Martin et al. (2002) compared the employment outcomes of almost 600 workers with disabilities, who completed a systematic self-determined assessment and job placement process, to 200 workers who did not complete the assessment. Those who completed the self-determination assessment process kept their jobs significantly longer than those who did not. Wehmeyer & Palmer (2003) investigated former students with learning disabilities and found students who had higher levels of self-determination had more successful employment outcomes.

To further examine the effectiveness of self-determination interventions, some researchers collected self-determination intervention studies and conducted a meta analysis study. Algozzine et al. (2001) used the meta-analysis method to investigate the effectiveness of 22 out of 51 self-determination intervention studies, which contained one or more components of self-determination skills. The median effect size of self-determination intervention studies was 1.38, and 13 single subject studies had a median percentage of 95% nonoverlapping (PND) data and seven of 13 single subject studies presented 100% PND, which indicated strong effects of self-determination intervention.

Konrad et al. (2007) synthesized 34 self-determination intervention studies and supported the effects of self-determination intervention on improvement of academic performance for students with disabilities, especially self-management with one or more other self-determination skills.

Self-Determination and Cultural and Linguistic Diverse (CLD) Students

Recent research and syntheses of the literature by Leake and Boone (2007), Trainor (2007), and Zhang and Benz (2006) concluded that students from different ethnic, racial, and cultural backgrounds need to develop self-determination skills to increase their likelihood of post-high school success. Trainor, Lindstrom, Simon-Burroughs, Martin, and Sorrells (2008), in a Division on Career Development and Transition (DCDT) position paper on improving post-high school outcomes for diverse youth, reported that educators need to increase opportunities for students to learn to become self-determined as a means to increase their likelihood of post-high school success.

Why Self-Determination?

Transition from high school to adulthood for adolescents with disabilities is critical. Mithaug, Martin, and Agran (1987) argued that a major obstacle to successful transition involved students failing to adapt to dynamic working, community, and educational environments. Research suggests when students set strategies to regulate their desires, choices, and actions to obtain what they want, they will maximize their adjustment or adaptability to the learning environment (Wehmeyer et al., 2007). When students learn to become more self-determined they become more likely to adjust their

behaviors to attain desired goals (Mithaug et al., 1987). Therefore, self-determination becomes imperative for adolescents to learn and apply in their transition process.

After reviewing the literature related to transition for students with disabilities, self-determination has played an important role in achieving postschool outcomes. Many studies indicated self-determination behaviors as transition success predictor variables that attribute postschool outcome success for individuals with disabilities. Therefore, nine of 12 domains of the Transition Success Assessment (TSA) instrument represent self-determined behaviors. Self-determination can be viewed as the foundation of this instrument.

Transition Assessment

To achieve successful postschool outcomes for high school students with disabilities is a goal for all educators, professionals, and researchers. Transition, which allows students and their families thinking about life after high school and to make plans for their life after high school for achieving their desired goals, is the primary process to achieve successful postschool outcomes (Cox, 2003). The purpose of IDEA 2004 ensures that all children with disabilities receive a free appropriate public education and related services to prepare them for further education, employment, and independent living (IDEA, 2004, section 601[d]). A successful transition for all high school students with disabilities enables them to access postsecondary education, employment, and independent living after graduating from high school.

IDEA 1990 first included the requirement or transition planning practices to improve graduates' transition (Test, Aspel, & Everson, 2006). IDEA 1997 further expanded the focus of transition planning to improve outcomes even more. IDEA 2004

further requires that specific outcomes for students with an IEP be identified and that educational programs must be supported by transition services that should include instruction, community experiences, development of employment and other postschool adult living objectives, and if appropriate, the acquisition of daily living skills and functional vocational evaluation (Section 300.43[a]). Addition to transition education and services, IDEA 2004 made the strongest transition demands to date by adding a transition assessment requirement.

The Definition of Transition Assessment

Sitlington, Neubert, and Leconte (1997) viewed transition assessment as an umbrella to cover career assessment, vocational assessment, and ecological or functional assessment practices. In advance, DCDT defined transition assessment as the following:

> Transition assessment is the ongoing process of collecting data on the individual's needs, preferences, and interests as they relate to the demands of current and future working, educational, 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 Individualized Education Program (p. 70-71).

Although transition assessment has been defined in different ways, the definitions are similar to each other. The following are the two definitions we used the most:

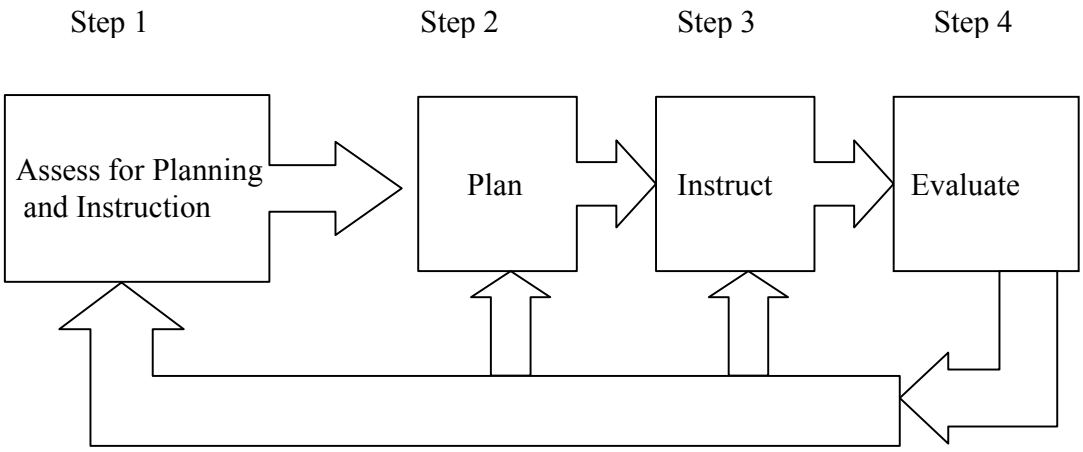
1. Transition assessment is an ongoing process that should focus on the individual's current and future roles, such as a worker, lifelong learner, family member, community citizen, and participant in social and interpersonal networks (Sitlington et al., 1997).

2. Transition assessment is to determine an appropriate focus of study, placements, and supports within educational, vocational, and community settings that will facilitate the attainment of these goals for students with disabilities (Neubert, 2003).

Transition Assessments: The Early Years

Figure 1

APIE Model for Transition Assessment



Test et al. (2006) further developed APIE (Assessment, Plan, Instruction, and Evaluation) model of transition assessment as depicted in Figure 1. The first step is to determine each student's needs, preferences, and interests in terms of desired post school outcomes. In this step, educators need to use transition assessments (formal and informal assessments) to determine the student's strengths, interests, and needs. In the "Plan" step, educators need to synthesize and interpret assessment results to students, families, and other professionals and document in format so that the results can be used during the transition planning and course of study. The assessment data also can be used to establish IEP goals and objectives. In the "Instruct" step, after IEP goals, objectives, and course of

study have been determined, educators need to develop and provide instruction to help the student attain their goals. The skills that the student needs to learn may include self-determination, social skills, health and fitness, community housing, community participation, and employment. The fourth step is "evaluation," which gathers all information that the student has in the earlier steps and evaluates the student's progress toward postschool outcomes and student performance in instructional environments. The student at this time may receive feedback from other people, such as teachers, peers, friends, parents, professionals, employers, and IEP team members. The evaluation may occur in different environments, but it has to occur annually.

Clark (1996) listed 13 types of formal transition assessments, which include learning style inventories, academic achievement, intellectual functional assessment, adaptive behavior scales, aptitude tests, interest inventories, personality scales, quality-to-life scales, social skills inventories, prevocational/employability scales, vocational skills assessments, transition knowledge and skills inventories, and medical laboratory procedures. Neubert (2003) adapted and modified Sitlington, Neubert, Begun, Lombard, and Leconte's (1996) *Making the Match* transition assessment model to a transition assessment framework, which included commercial tests, inventories, and rating scales, such as achievement, aptitude, adaptive behavior, interests, learning styles, life skills, self-determination, and social skills. In addition, Neubert added functional behavior assessments and person-centered planning approaches to assess students. Flexer and Luft (2005) concluded that transition related assessments include general skills tests, current and future working environments, current and future living environments, current and future person-social environments, and academic assessment. Three major parts of

transition assessment are discussed as the following: Self-Determination Assessment, Vocational and Career Assessment, and Adaptive Behavior Assessment.

Transition Assessment Tools Nowadays

Test et al. (2006) listed transition assessments that are widely used such as comprehensive assessments and self-determination assessments. Comprehensive assessments include Life Centered Career Education (LCCE)-Mild Curriculum Assessment System (Brolin, 1997), LCCE- Moderate Curriculum Assessment System (Loyd & Brolin, 1997), and Transition Planning Inventory (TPI) (Clark & Patton, 1998). Self-determination assessments include AIR Self-Determination Scale and User Guide (Wolman, Campeau, DuBois, Mithaug, & Stolarski, 1994), The Arc's Self-Determination Scale (Wehmeyer & Kelchner, 1995), ChoiceMaker Self-Determination Assessment (Martin & Marshall, 1996), and The Self-Determination Assessment Battery (Hoffman, Field, & Sawilowsky, 2004). Transition assessment involves all skills and components that the student needs to accomplish in transition planning.

Functional Assessments

Functional assessment provides information directly related to the student's transitional outcomes (Flexer, Simmons, Luft, & Baer, 2005). Functional assessments allow the student to compare his/her present levels of performance to a level required for success. Based on the obtained information, the student is able to receive appropriate instruction, programs, and activities that can lead the student toward a successful postschool outcome. Functional assessments especially look at the person's individual functioning in his or her surrounding environment. If the person were currently a student, then functional assessments would focus on the student's academic performance and

other related behaviors. However, if the person were a current employee, then functional assessments would consider the person's vocational performance in working environments. Functional assessments not only assess the individual's current performance, but also current or future environments (Flexer et al., 2005). For example, the student uses functional assessments to predict his/her current or future school environments (e.g., regular or special classes) or future working environments (e.g., community, work, or home settings), which may include self-care capability, community life skills, vocational interests, or functional behaviors.

Vocational and Career Assessment

Another transition assessment refers to vocational and career assessment, which is to gather relevant information about each student's strengths, interests, preferences, skills, and needs, which may help students make choices about their future roles in employment and community (Sax & Thoma, 2002). The process of vocational assessments should begin to discover who the people really are except for their disabilities, what they want, and what they might be able to contribute to employers. Individuals, parents, and professionals should get involved in the process. Various career and vocational assessment approaches have been used, which include interviews and questionnaires, observations, ecological and environmental inventories, situational assessment, curriculum-based vocational assessment, interest inventories, vocational profile, and portfolio assessment. Vocational and career assessment tools in use include *ACT Discover, The Occupation and Skill Computer-Assisted Researcher, The Career Key Test, Career Voyages,* and other assessment tools. In addition to assessments, many tools provide career awareness and exploration for the youth to browse and search. For

example, the Occupational Outlook Handbook and Job videos provide pictures, videos, and descriptions about different types of jobs, which can help individuals with disabilities explore and understand different jobs. Increasing career awareness and exploration can also be accomplished by short-term and long-term try-outs. Career and vocational assessment methods focus on measuring personal employment options and postsecondary education options. Transition assessments are used to determine student interests, skills, and needs in order to develop an outcome-oriented process to promote better postschool outcomes for individuals with disabilities. All transition assessment results should be explained to the student, parents, and IEP team members in an appropriate manner.

Adaptive Behavior Assessment

Adaptive behavior scales evolved from the belief that every individual, regardless of persons with disabilities, should be able to learn adaptive behavior skills in the environment (Emerson, 1995). Adaptive behavior scales can be perceived as the age-appropriate assessment of the daily performance of activities based on social standards and expectations (Harrison, 1987; Sparrow, Ballad, & Cicchetti, 1984). Reschly (1982) recognized adaptive behavior related to developmental factors, cultural context, and situational specificity. She also identified the domains typically assessed by adaptive behavior assessments, which should include self-maintenance or independent functioning, interpersonal relationships, social responsibility, and cognitive competencies or communication skills. To illustrate the meaning of adaptive behavior assessment, Gresham and Elliott (1987) further defined adaptive behavior should be included in the social competence. Under this umbrella, adaptive behavior scales involve six domains:

independent functioning, physical development, self-direction, personal responsibility, economic-vocational activity, and functional academic skills.

Usually adaptive behavior assessments combined with intelligent assessments to categorize the disability (Harrison, 1987; Gresham & Elliott, 1987; McCarver & Campbell, 1987). American Association on Mental Deficiency (AAMD) uses adaptive behavior assessments as a part of state and federal legislation and administrative codes governing programs for individuals with mental retardation and other developmental delay (McCarver & Campbell, 1987). Because adaptive behavior assessment assesses everyday functional behaviors, measure typical performance (e.g., social skills, academic skills, independent skills, and vocational skills), and presume modifiability in performance, it can be used to predict concurrent or future performance in education, vocational, and community living settings (Harrison, 1987; Halpern, Irvin, & Landman, 1979; Irvin, Halpern, & Reynolds, 1977; Gresham & Elliott, 1987; McCarver & Campbell, 1987). Based on the information gathered from standardized behavior adaptive assessments, persons with disabilities are referring to appropriate educational placements, vocational placements, and community placements.

Self-Determination Assessment

The assessment of instructional needs in self-determination should be emphasized as a key feature, but it is rarely mentioned in the traditional transition assessment activities. Self-determination assessment empowers evaluation framework, which is future-oriented, multiple measured, and person-centered in the process. Some self-determination focuses on measuring global self-determination while others measure

individual self-determination. Major self-determination assessment tools are listed as follows:

AIR Self-Determination Scale (Wolman, Campeau, DuBois, Mithaug, & Stolarski, 1994). This instrument assesses and develops strategies for improving student self-determination. It can be used to (a) measure student self-determination, (b) determine strengths and needs for improving self-determination, (c) identify goals and objectives, and (d) develop strategies to increase student opportunities and capacities. This scale is designed for all school-age students, grades K through 12+. This scale measures both capacity and opportunity related to self-determination. The student form can be used to assess a student's level of self-determination. The parent form is intended for use with parents who believe their children can benefit from self-determination, and the educator form is used for teachers.

The Arc's Self-Determination Scale (Wehmeyer & Kelchner, 1995). This scale is a student self-report measurement to assess the level of self-determination. It can be used by students with mild cognitive and learning disabilities. This instrument includes 72 items and covers the domain areas of autonomy, self-regulation, psychological empowerment, and self-realization. Items require the student to identify goals and break the goals into smaller steps. *The Arc's Self-Determination Scale* enables students to become more self-determined by providing appropriate supports and accommodations to evaluate their own beliefs about themselves and their self-determination, work collaboratively to identify an individual's strengths and limitations related to self-determination goals, self-assess progress in self-determination.

ChoiceMaker Self-Determination Assessment (Martin & Marshall, 1996). This assessment is a curriculum-based assessment and planning tool used with middle to high school students with emotional or behavior disabilities and mild to moderate learning problems. This curriculum may also be modified for students with more severe disabilities. This instrument measures student skills and opportunities at school in three areas: choosing goals, expressing goals, and taking action. Three parts are involved. The first part is a rating scale of student skills related to self-determination and opportunities at school to perform each of the self-determination-related skills. The second part helps the student build an assessment profile. Then student skills and school opportunities rating are measured. The third part provides objectives and corresponding goals for consideration as teaching priorities.

The Self-Determination Assessment Battery (Hoffman, Field, & Sawilowsky, 2004). This instrument assesses cognitive, affective, and behavioral factors related to self-determination based on the Field and Hoffman (1994) model of self-determination. Five components include: know yourself, value yourself, plan, act, and experience outcomes and learn. This assessment is designed for the student, teacher, and parent. There are five instruments in the battery: (a) the Self-Determination Knowledge Scale--a multiple-choice and true/false instrument for assessing student cognitive knowledge of self-determination skills based on the *Steps to Self-Determination*, (b) the Self-Determination Observation Checklist— a 38-item behavioral checklist for teachers to use, (c) the Self-Determination Student Scale— a 92-item self-report instrument, (d) Teacher Perception Scale, and (e) the Parent Perception Scale: 30-item questionnaires for teachers or parents.

Although transition assessment and adaptive behavior assessment include a set of test activities across a variety of environments to measure the student's current behaviors to provide information for their postsecondary goals, information directly to measure transition skills in relation to successful transition predictors is very limited. Previous studies indicated clusters of predictors collected from individuals who successfully transferred from high schools to postschool lives, or from postsecondary education institutions to employment settings. I examined the major transition texts (Flexer et al., 2005; Test et al., 2006), transition assessment books (Dais & Kohler, 1995; Miller, Lombard, & Corbey, 2007; Sax & Thoma, 2002), numerous publisher catalogs and web sites, and discussed assessments with vocational evaluators, rehabilitation counselors, and professionals. No transition assessment tool uses research-based predictors to measure transition behaviors in relation to their postsecondary outcomes for secondary students with disabilities. Students with disabilities need access to a direct measurement of transition behaviors in order to gather information in relation to transition success, and the gathered information also can provide data for educators to use appropriate instruction, curriculum, and activities to improve transition skills for secondary student with disabilities.

Development of the Transition Success Assessment Instrument

In a spring 2007 transition seminar class, the researcher and her advisor, who has specific expertise in issues of transition assessment, drafted an instrument titled the Transition Self-Evaluation Checklist, hereafter referred to as the Transition Success Assessment. The original concept of Transition Success Assessment (TSA) was to provide a self-report checklist for secondary students with disabilities in the transition

process. The initial instrument consisted of 10 categories with 35 items, which were derived from 15 major evidence-based studies that provided predictors of transition success. The initial 10 categories involved *Desire, Goal, Strength, Limits, Disability Awareness, Strategies, Stable Emotions, Engaged in the World, Family Involvement, and Self-Determination.* Those categories gathered clusters of predictors showing that individuals with those predictors are more likely to be successful in postschool outcomes. Each category contained 1-5 items based on predictors presented on studies. The developmental process of the Transition Success Assessment (TSA) instrument adopted Johnson's (1997) and Benson's (1998) construct validation model described as follows.

A Construct Validation Model of the Transition Success Assessment

Identify Information from Previous Research

The first step of this research study was to develop a comprehensive list of postschool outcome studies. Using ERIC, Professional Development Collection, and PsyINFO as a data source, I located 69 initial studies from 1930 to 2007 in relation to three main postschool outcomes (employment outcomes, postsecondary education outcomes, and independent living or community living). All 69 studies have met these four inclusion criterions: (1) studies have been reported on at least one post-high school outcome domain (e.g., employment, further education, or independent living); and (2) data-based studies have been published in the refereed professional journals. They include adequate descriptions of participants, procedures, and results; (3) studies have to include participants with disabilities; and (4) studies need to be published in English (due to our linguistic limitations). After reviewing 69 postschool outcome studies, I then

identified 44 transition behaviors from 41 articles that had at least one identified and clearly defined empirically based predictor of post-high school success.

Form Clusters of Transition Success Predictor Behaviors

I grouped the 41 predictor items into 12 domains to establish internal homogeneity (Patton, 1980). Then, I chose domain headings to reflect the clusters of predictors as a whole in order to establish internal homogeneity. Each cluster involved several items separately identified from research studies. Next, I compared the headings of each clusters to ensure "external homogeneity," which showed differences existed between the domain headings.

Develop Instrument Based on Transition Success Predictors with a Likert Scale

I first gathered 41 predictor behaviors under 12 domains specifically based on the research-based predictors, and then developed each assessment item based on predictor behaviors. Lissitz and Green (1975) advised using a five-point Likert-type scale because they found that the addition of more scale points did not add variability to the assessments. Taking their advice, I developed the TSA to use a rating scale ranging from 0 to 4. The user will read each item and then determine the extent that the item represents a student's behavior. As shown in table 2.2, items under each domain have supporting research studies.

Call Focus Group Meetings with Experts

After the instrument was established, several groups of experts, which included special education teachers, education support staff, rehabilitation counselors, and students with mild to moderate disabilities to socially validate the wording of the three TSA versions. Discussions were conducted in Oklahoma. The focus groups contained five to

eight experts, who spent over two hours reviewing and discussing the TSA. Participants were given a printed copy of the TSA converted into an evaluation form, and were asked: (a) is this item of the TSA beneficial for professionals, family members, and students? In addition, (b) is this item of the TSA understandable for professionals, family members, and students? I then asked the participants to comment on each item, with a focus of clarity and understanding of the key concept, and word choices.

Collect Feedbacks on Transition Success Assessment

Each participant in the focus group received a hard copy of the TSA evaluation form and was asked to write comments for each question. After completing group discussions, researchers collected and transcribed the data into a word document. The data included the discussion during the meeting and comments showed on the hard copies. The researchers then modified the questions after each focus group meeting.

Analyze Feedback and Modifying the Questions

After completing focus group discussions, the researchers asked colleagues in the Zarrow Center to further analyze the data and provide feedback. This triangulation process helped to clarify the feedback in order to determine the wording of the TSA for each version based on the purpose of this instrument and reading level of the users. Finally, the researchers edited or modified the TSA items based on the comments to increase the construct validation. The TSA version in Appendix A has been reviewed by the three expert-focus groups.

The Description of the TSA and Its Utility

Three TSA versions (i.e., Professional, Student, and Family) have been created that can be administered individually or in groups. The Professional form is designed for

special education teachers, other educators, and rehabilitation counselors. Secondary and postsecondary students with mild to moderate disabilities (i.e., learning disabilities, behavior disorders, physical disabilities, etc.) who have the adequate reading (4^{th} grade reading level) and/or comprehension skills may use the Student TSA version. Parent, grandparents, and legal guardians use the Family version.

Although three versions include different wording, the meaning of each item across the three versions remains constant. The wording changes across versions reflect different roles and complexity. For instance, in the Strength Domain the student version reads: "I talked about my academic strengths at the last IEP meeting." The wording changes in the family version to "At the last IEP meeting, my child expressed academic strengths." The Professional version reads: "At the last IEP meeting, the student expressed academic strengths." All three TSA versions contain the same number of items and each item exists in the same order.

To complete the Professional, Student, or Family TSA, the user reads the question (or listens as the question is read if reading skill or comprehension is low), then responds by marking an answer on a 0 to 4-point scale (Never, Rarely, Sometimes, Almost Always, and Always) that best corresponds to their belief. I estimate that the typical user will take less than 20 minutes to complete the TSA. This assessment can be used in a variety of environments, such as a classroom, rehabilitation counselor's office, or at a student's home. Data collected from the administration of this assessment will be provided to students, family members, and professionals in visually interpretable ways.

The Transition Success Assessment (TSA) allows students, educators, and parents to periodically measure the students' transition skills. For example, the student can take

the TSA at the beginning of the school year and again the next school year to determine if the TSA can be used to guide each student's Individualized Education Program (IEP) and Summary of Performance (SOP).

Validity

The American Psychological Association (1985) defined validity as a "unitary" concept that refers to the appropriateness, meaningfulness and usefulness of an assessment tool, and test validation should focus on the process of accumulating evidence to support an assessment tool. Wolf (1978) described social validation as a subjective value judgment from society on the importance of a study. He further recommended that consumers participate in social validation assessment to measure (a) goals, (b) procedures, and (c) effects. For goals, consumers look for the relationship between target behaviors of the study and one's society values. For procedures, consumers discover whether the intervention procedures are appropriate and acceptable. For effects, consumers determine if the outcome of the study is satisfying for study consumers.

Transition assessment should be based on valid and reliable data that leads to informed decision-making (Gajar, Goodman, & McAfee, 1993). A valid transition assessment can provide appropriate, meaningful, and useful information for service providers to make appropriate recommendations and decisions (Nitko, 1993). Therefore, assessments used by educators and/or service providers need to demonstrate sufficient validity so that students with disabilities can be assessed using measures and procedures that most adequately capture their capabilities, needs, preferences, and interests.

Measurement experts recognized the need to examine the validity of tests to determine if they are meaningful, useful, and appropriately based on sufficient evidence

(Gajar et al., 1993; Gipps, 1994; Shepard, 1993; Cronbach & Meehl, 1955). Even though measurement experts recognized the appropriateness of score-based inferences that included multiple sources of evidence, most test developers and researchers emphasized one type of content validity evidence to the exclusion of all others.

Within various opinions about how to define, label, and measure social validity, Schwartz and Baer (1991) argued that social validity should not be used to measure a program's effectiveness. Social validity assessment originally was designed typically for applied behavior analysis research as a secondary measurement (Wolf, 1978). However, Schwartz and Baer (1991) recommended that social validity measurement should be used to assess how acceptable programs are for their consumers. While social validity has received much attention in the literature, there has never been a review assessing the use of social validity assessment procedures in the area of transition assessments for youth with disabilities. There is a need for such a review for this type of assessment because it will provide valuable feedback to researchers who work in this area, but also improve this assessment instrument in many ways.

Reliability

Salvia and Ysseldyke (1995) considered reliability of test scores as including two parts: true score and error. A true score means the score that can reflect the entire domain of items of a test. Error means no correlation with true score because of a lack of generalizability, which fails to get a representative sample from the domain. For example, if we assess students' alphabet, the first four letters (A, B, C, D) seem easier for students than other letters. Therefore, the easier sample (A, B, C, D) of a test may inflate the scores, and the difficult sample (other letters) may deflate the scores of a test. The

reliability of a test suggests its generalizability over time and situations. Therefore, the reliability of a test needs to be measured consistently, and an instrument cannot be valid if it is not reliable (Siegle, 2007). Although researchers grouped the methods of reliability in different ways, basically, the reliability of a test can be identified through four major methods: test-retest, alternative-form or equivalent form, internal consistency, and interrater reliability (Berdine & Meyer, 1987; Carmines & Zeller, 1979; Pierangelo & Giuliani, 2002; Salvia & Ysseldyke, 1995; Siegle, 2007).

Test-retest reliability method. Test-retest reliability method refers to providing the same test to the same people after a short period of time, from which to obtain the correlation between scores on the two administrations of the same measurement (Carmines & Zeller, 1979; Pierangelo & Giuliani, 2002; Salvia & Ysseldyke, 1995; Siegle, 2007).

Alternative-form reliability method. Alternative-Form Reliability Method-Alternative-form or equivalent form reliability method is similar to the test-retest reliability method. Instead of giving the test-retest measurement at two different time periods, the alternative-form reliability method gives the same population the same test by using two equivalent forms, which measure the same content of the test (Berdine & Meyer, 1987; Carmines & Zeller, 1979; Pierangelo & Giuliani, 2002; Salvia & Ysseldyke, 1995).

Internal consistency reliability method. The researchers usually use Cronbach alpha to measure the internal consistency reliability of an assessment tool. When using a Cronbach's alpha to assess the internal consistency of a test, the number of items does not influence the internal consistency of a test because the value of alpha depends on the

average interitem correlation and the number of items in the scale (Carmines & Zeller, 1979).

Interrater Reliability Method. Interrater reliability, interobserver agreement, or interscorer reliability method is used to assess the consistency with the scorers for which the scores will remain the same (Berdine & Meyer, 1987). Interrater reliability examines whether the scoring procedures are clear and precise enough to ensure that each rater follows the same scoring procedure with each other.

A reliability coefficient of .8 or higher is considered as adequate. A coefficient between .7 and .8 is acceptable but some researchers would question it. A reliability coefficient of less than .7 is generally not acceptable. It indicates the performance of an assessment tool across time or across measures is not consistent so it becomes difficult to interpret the scores (Berdine & Meyer, 1987; Carmines & Zeller, 1979; Pierangelo & Giuliani, 2002; Salvia & Ysseldyke, 1995; Siegle, 2007).

Comparing the Reliability of Transition Assessments

According to Dais and Kohler's (1995) study, 97% of all 142 assessment instruments related to transition planning were formally reviewed in professional test review journals: 28 assessment instruments focused on vocational skills or aptitudes; 28 instruments on career interest; 18 on social skills, personality, and daily living and other survival skills, respectively; 18 instruments on adaptive behavior; 16 on achievement; 3 on perceptual motor; and two on hearing. This study found that 67 instruments reported internal consistency reliability (e.g., Cronbach alpha, split-half, and Kuder-Richardson 20/21). Seventy had test-retest reliability and 32 used interrater method. However, 38 instruments did not present either reliability or validity data.

Reliability measures the consistency of an assessment tool. It is important to establish the reliability for transition assessments because it allows educators to understand the student's behaviors related to transition through an on-going process. Since transition assessment is an on-going process, the reliability becomes essential for transition assessments. Although the reliability is required for assessment tools, not every transition assessment tool presents reliability data.

Table 2 presents the types of reliability for some major transition assessments, such as Transition Planning Inventory, The ARC Self-Determination Scale, AIR Self-Determination Scale, ChoiceMaker Self-Determination Assessment, AAMD Adaptive Behavior Scale (ABS), and Employment Screening Test (EST). Some transition assessment tools either were not used, or lacked the reliability description, such as Casylife Skill test, Life Centered Career Education- Competency Rating Scale (CRS), and Enderle-Severson Transition Rating Form.

Table 2

The Comparison of Major Transition Assessment Tools

	Cronbach Alpha	**Test-Retest**	**Split-half**	**Alternative-items**	**Inter-Rater**
Transition Planning Inventory	18% = .90 52% = .80-.89 30% = .70-.79 (Ave = .85)	Teachers = .87-.98 Parents = .70-.91 Students = .70-.84 (Ave = .86) (7-10 day interval)			
The ARC Self-Determination Scale	Coefficient = .90 (Autonomy = .90; Psychological empowerment =.73; Self-regulation =.62)				
AIR Self-Determination Scale (educator version)		Correlation coefficient = .74 (three-month interval)	Correlation Coefficient = .95	Correlation coefficient = .91-.98	
ChoiceMaker Self-Determination Assessment		Correlation coefficient = .80 or higher (two-week interval)			
AAMD Adaptive Behavior Scale (ABS)	Coefficient = .96 (ele. School; .97 (secondary school)				
Employment Screening Test					Coefficient = .71 jobs & .85 for employees.

Transition Planning Inventory

Clark and Patton (1998) believed the reliability coefficients of the TPI must approximate or exceed .80 in magnitude to achieve minimal reliability. The authors used Cronbach alpha method to investigate the TPI's content sample reliability. Coefficient alphas were calculated for all raters, including teachers, parents, and students with different disabilities (learning disabilities, mental retardation, and the total group). They found that 18% of the coefficient alphas were .90 or above, 52% were from .80 through .89, and 30% were from .70 through .79. The coefficient alphas indicated good reliability for all planning areas, for all raters, and all groups rated. To determine test-retest reliability, the authors used data on 36 students from various locations in Kansas who took the TPI twice, seven to 10 days separately. The mean standard scores and standard deviations for the first and second administrations range from .87 to .98 for teachers, from .70 to .91 for parents, and .70 to .84 for students. The results of test-retest coefficients are large enough to support the TPI. Overall, the average of the TPI's coefficient alpha is .85, and the average of the TPI's test-retest coefficient is .86.

The ARC Self-determination Scale

The norms of this scale included 500 students with and without disabilities (223 males, 210 females, 67 gender not know) from schools across five states (Texas, Virginia, Alabama, Connecticut, and Colorado). The authors provided the norm group an ARC Self-Determination scale and concluded that students without disabilities obtained higher scores than those with learning disabilities and mental retardation, respectively. To assess the reliability of this scale, the authors used the internal consistency reliability method (Cronbach alpha) to obtain coefficient alpha for the scale, except the *Self-*

Regulation subscale because the open-ended answer format does not meet the usage of this method. The authors also used separate analyses for subscales. As a result, the coefficient alpha for the entire scale was .90. Among those scales, alpha for the *Autonomy* domain was .90, the *Psychological empowerment* domain was .73, and for the *Self-Realization* domain was .62. However, it only provided the reliability for educators.

AIR Self-Determination Scale

The researchers provided the AIR Self-Determination Scale for approximately 440 students with and without disabilities in 70 schools and programs in San Jose, California, and New York City, New York. The population included students at the ages of 16 to 25. Of all the participants, 79% had mild to moderate disabilities and 21% had moderate to severe disabilities. Three reliability tests conducted on the self-determination instrument included alternative-item, split-half, and test-retest methods. For the alternative-item test, the authors duplicated the same items of the AIR to an equivalent form. The results indicated correlations of .91 to .98. The authors also used the split-half method to compare the odd-numbered items of the instrument with the even-numbered items, and the coefficient yielded .95. For the test-retest method, the authors conducted two administrations of the instrument before and after three months and found a correlation of .74.

ChoiceMaker Self-Determination Assessment

The ChoiceMaker Self-Determination Assessment is a curriculum-referenced assessment, which provides a tool to match the objectives of the curriculum. The reliability of this instrument was identified by a test-retest study conducted with students

in five states and found a correlation of .80 or higher correlation between the first and a second administration two weeks later.

AAMD Adaptive Behavior Scale (ABS)

The reliability of AAMD Adaptive Behavior Scale (ABS) measured by the Cronbach alpha method indicated that this instrument yielded .96 and .97 alpha coefficients separately for an elementary school form and a secondary school form.

Employment Screening Test (EST)

This instrument consists of behavioral capability and performance requirements for 26 physical demands and 11 temperament variables to determine a goodness-of-fit index and job match discrepancy analysis. The authors used inter-rater method to identify the reliability of this instrument. The correlation coefficients of inter-rater reliability method were .71 for 26 physical demands for jobs and .85 for employees. Coefficients were .64 for 11 temperamental requirements for jobs and .57 for employees (Dais & Kohler, 1995).

The authors of previous instruments used several methods to determine the reliability of transition assessment tools including the Cronbach alpha, test-retest method, split-half method, alternative-items, and inter-rater method as depicted in Table 2. For example, the TPI, the ARC Self-Determination Scale, and AAMD-ABS used Cronbach alpha to identify the internal consistency reliability of the instruments. The authors of the TPI indicated the coefficient alpha by calculating the scores of all raters and found over 70% of the raters had a coefficient alpha of .80 or higher. The authors of the ARC Self-Determination Scale indicated the reliability coefficient alpha of .90 while the reliability of *Autonomy* is higher than the reliability of *Psychological Empowerment* and *Self-*

Regulation. The reliability of the AAMD Adaptive Behavior Scale (ABS) indicated that the coefficient alpha is .96 for an elementary school form and .97 for a secondary school form. Overall, the AAMD Adaptive Behavior Scale (ABS) provided better coefficient alpha (.96 and .97) for the internal consistency reliability than the other two assessment tools. The ARC Self-Determination Scale provided better coefficient alpha than the TPI in measuring internal consistency reliability.

Three other assessment tools used test-retest method to identify the reliability. The Transition Planning Inventory assessed test-retest coefficient among three groups (teachers, parents, and students) and indicated that teachers obtained better test-retest coefficient than parents and students, while parents had bigger discrepancy coefficients (.70 -.91) than the coefficient of students (.70 - .84). ChoiceMaker calculated test-retest reliability coefficient on only one group (educators) and obtained a coefficients of .80 or higher with an interval of two weeks. The AIR obtained a coefficient of .74 when the researchers conducted a test-retest study in a three-month interval. Generally, the researchers obtain a higher coefficient with a short interval. The Employment Screening Test is the only instrument that used inter-rater to identify its reliability. The coefficients represented better outcomes for employees (.85) than the other two groups. Unlike other assessment tools, only the AIR Self-Determination Scale used test-retest, split-half, and alternative-item methods together to establish the reliability of the instrument. However, only the educator version has reliability data.

Summary

This chapter provides a review of literature considered relevant to this proposal. The poor postschool outcomes of secondary students with disabilities suggests a strong

need to improve transition planning in the secondary special education programs for students with an IEP. A review of current transition assessment tools revealed a need to develop a new predictor-based assessment, which can measure the student's current transition behaviors and skills periodically. The TSA can provide efficient data for educators, parents, and students to develop annual transition goals to achieve better postschool outcomes. Since no predictor-based transition assessment currently exists, the development of the TSA instrument provides IEP transition team members a new choice to measure the student's transition behaviors and skills. In order to determine the meaningfulness and consistency of this new assessment tool, it is necessary to conduct both validity and reliability studies for the TSA.

CHAPTER 3

METHODOLOGY

Phase I Study Methods

The Phase I study used both quantitative and qualitative research methods to collect information during focus group meetings to improve the wording and evaluate the perceived benefit and understanding of the TSA instrument items across professional, student, and family versions. This study utilized both purposive and snowball samplings to recruit and select participants. This section describes the sample, setting, the role of the researcher and efforts to prevent bias, instrument description, data collection procedures, and data analysis techniques.

Sample

I used a purposive sampling procedure to select focus group participants that included special education teachers, vocational rehabilitation counselors, high school and college students with mild to moderate disabilities, higher education disability service providers, and parents who had a high school child with a mild to moderate disability. All participants received compensation for their time and contributions.

Sample Access

To gain access to the sample, I utilized a decentralized network of 26 regional transition teams across Oklahoma as the resource to obtain educator, student, and family participants. The Oklahoma Transition Council organized 26 transition teams across the state to impact transition education practices at the local level. Each team's membership varied, but in general represented vocational rehabilitation, higher education, social service agencies, local educational agencies, parent groups, and students. The Oklahoma

Transition Council sponsors annual Transition Institutes to enable local transition teams to receive knowledge and develop plans to improve local transition. During the year, transition teams met and discussed progress in completing the goals of their transition plan. The Oklahoma Transition Council coordinated team contacts, organized the Institute and Regional Meetings, and evaluated team progress. The 26 transition teams from the 2008 Oklahoma Transition Institute (OTI) served as the primary participant source.

After obtaining support letters from representatives of the Transition Council (see Appendix B) and OU-IRB approval (see Appendix C), I used the 2008 Oklahoma Transition Institute contact list to recruit potential participants. Five professional groups, two student groups, and one parent group participated in this study.

Demographic Characteristics of Professional Focus Group Participants

Five professional focus groups formed to validate the TSA instruments. This included the Durant focus group, the Tulsa focus group, the Norman focus group, the Pryor focus group, and a higher education focus group. Each focus group consisted of five to eight special education teachers, rehabilitation counselors, and service providers who worked with secondary students and college students with disabilities in their local area. This study purposely selected participants from a contact list of the 2008 OTI members. Participants received an e-mail or telephone call invitation. The interested participants registered for focus group meetings via e-mail or by telephone call.

Table 3

Demographic Characteristics of Professional Focus Group Participants

Subject Code	Gender	Age	Race/Ethnicity	Ed. Level	Working Experience	Role
D1	F	36-40	Caucasian	Master	Less than 20 years	Special Ed. Teacher
D2	F	41-45	American Indian	Master	Less than 20 years	Special Ed. Teacher
D3	F	46-50	Caucasian	Master	6-10 years	Rehabilitation Counselor
D4	F	26-30	Caucasian	Master	3-6 years	Rehabilitation Counselor
D5	F	56-60	American Indian	Master	Less than 20 years	Special Ed. Teacher
T1	F	46-50	American Indian	Master	Less than 20 years	Special Ed. Teache
T2	M	46-50	Caucasian	Master	More than 20 years	Special Ed. Teacher
T3	F	41-45	Caucasian	Master	3-6 years	Rehabilitation Counselor
T4	F	26-30	Caucasian	Master	3-6 years	Rehabilitation Counselor
T5	F	21-25	Caucasian	Master	Less than 3 years	Rehabilitation Counselor
T6	F	46-50	American Indian	Bachelor	More than 20 years	Special Ed. Teacher
T7	M	56-60	Caucasian	Master	6-10 years	Rehabilitation Counselor
T8	F	41-45	Caucasian	Master	6-10 years	Rehabilitation Counselor
N1	M	31-35	African	Master	Less than	Special Ed.

			American		3 years	Teacher (researcher)
N2	F	56-60	Caucasian	Bachelor	Less than 20 years	Special Ed. Teacher
N3	M	41-45	Caucasian	Master	Less than 20 years	Rehabilitation Counselor
N4	F	46-50	Caucasian	Bachelor	Less than 20 years	Special Ed. Teacher
N5	M	61-65	Caucasian	Master	More than 20 years	Rehabilitation Counselor
N6	M	31-35	American Indian	Master	3-6 years	Special Ed. Teacher (researcher)
N7	F	26-30	Hispanic	Bachelor	Less than 3 years	Special Ed. Teacher
P1	F	46-50	Caucasian	Master	Less than 20 years	Special Ed. Teacher
P2	M	51-55	Caucasian	Bachelor	Less than 20 years	Special Ed. Teacher
P3	F	51-55	American Indian	Bachelor	More than 20 years	Special Ed. Teacher
P4	F	41-45	Caucasian	Bachelor	Less than 20 years	Special Ed. Teacher
P5	F	31-35	Caucasian	Bachelor	Less than 20 years	Special Ed. Teacher
P6	F	56-60	Caucasian	Master	6-10 years	Rehabilitation Counselor
P7	F	56-60	Caucasian	Ph.D.	More than 20 years	Rehabilitation Counselor
H1	F	51-55	Caucasian	Master	More than 10 years	Disability Service Provider
H2	F	46-50	Caucasian	Master	More than	Disability

					10 years	Service Provider
H3	F	31-35	Caucasian	Master	6-10 years	Disability Service Provider
H4	F	35-40	Caucasian	Master	More than 10 years	Disability Service Provider
H5	F	46-50	Caucasian	Bachelor	6-10 years	Disability Service Provider

D = Durant focus group, T = Tulsa focus group, N = Norman focus group, P = Pryor focus group, H = Higher Education Professional focus group

Professional participant characteristics appear in Table 3. I recruited a diverse group of teachers, vocational counselors, administrators to provide a wide range of viewpoints. Thirty-two professionals participated in this study, which included 16 special educators, 11 vocational rehabilitation counselors, and five disability service providers. All of the participants came from Oklahoma. Seven of the participants were male (21.9%) and 25 were female (78.1%). Their age ranged from 25 to 65 with an average age of 44.43 years. The demographics included 24 Caucasians (75%), six Native Americans (18.8%), one Latino or Hispanic (3%), and one African American (3%). Twenty-two of the participants graduated with master's degrees (68.8%), nine with bachelor's degrees (28.1%), and one had a Ph.D. degree (3%). Overall, 18 of the participants had more than 10 years of experience working with students with disabilities in schools as special educational teachers, vocational rehabilitation counselors, or service providers (five for more than 20 years). Six participants had six to 10 years of experience working with students; six had three to six years of experience; and two had less than three years of experience. Thirteen of the participants held teacher certification in special

education, 11 had certification in counseling, three had certification in other areas, such as math, social studies, and Bilingual/ESL, and eight of the subjects did not provide answers.

Of the 32 professionals, eight had received prior transition education (25%). Five had received more than six hours of transition training, one had four-to-six hours, and two had one-to-three hours of transition training. Twenty-four professionals (75%) had never received college course work in transition. Twenty professionals (62.5%) spent more than 25 hours per week working with students with disabilities per week, eight professionals (25%) spent 11-25 hours; three spent less than five hours per week; and one professional did not provide this information. Twenty professionals worked with 9th through 12th graders, seven worked with 11th and 12th graders, and five worked with college students.

Demographic Characteristics of Family Focus Group Participants

One group of eight parents who had a child with a mild to moderate disability in high school were invited to participate in this study. Eight family participants recruited from the introduction of the professional focus groups formed the expert focus group. The recruitment method used to seek family participants is the snowball sampling method, which is used to help the researcher recruit participants by seeking out who has the important information for the study (Mertens, 2005).

Table 4

Demographic Characteristics of Family Focus Group Participants

Subject Code	Gender	Age	Marital Status	Race/Ethnicity	Ed. Level
F1	F	41-45	Married	Caucasian	High School
F2	F	56-60	Single	Caucasian	High School
F3	F	51-55	Married	Caucasian	Bachelor
F4	F	46-50	Divorced	Caucasian	Master
F5	F	41-45	Married	Caucasian	High School
F6	F	41-45	Married	Caucasian	Master
F7	M	51-55	Married	Caucasian	High School
F8	M	56-60	Divorced	Caucasian	High School

F = Family member participants

Table 4 describes the individual characteristics of family participants. Eight parents who participated in this study came from the same Oklahoma city, and all but two of the participants were male. The ages of all participants ranged from 41 to 60: three were 41-45 years old, one was 46-50, two were 51-56, and two were 56-60. All participants were Caucasian. Five of the family participants were married (63%), one was single (13%), and two were divorced (13%). Most of them graduated with a high school diploma (63%), one parent graduated with a bachelor's degree (13%), and two parents graduated with master's degrees (25%).

Of eight family participants, four parents had a child with a disability, two parents had four children with disabilities, and two had two children with disabilities. None of the parents had received transition related information before. One parent participant had four children with disabilities in 2nd, 7th, 9th, and 11th grades, one participant had a child in 9th grade, three participants had children in 10th grade, one had an 11th grader, one had a 12th grader, and one checked other. Three children received 7-15 hours of special education per week in school, three children received one to six hours of special education per week in school, and two children received more than 16 hours of special education per week in school. Five parents had children with learning disabilities, two parents had children with emotional disturbance, two had visual impairment/blindness, two had mental retardation, two had developmental delay, and one had other health impairment. Two children had moderate disabilities and six children had mild disabilities.

Demographic Characteristics of Students Focus Group Participants

Two student focus groups with a total of 14 students participated in this study. One group had eight secondary students and the other group had six college students with mild to moderate disabilities. Professional focus group participants in this study recruited the student participants. The criteria for student participant selection included: (a) enrollment in a secondary or postsecondary education program in a public school district or a college or university; (b) mild to moderate disabilities (learning disabilities, emotional disabilities, ADHD, physical disabilities, visual impairments, hearing impairments, etc.); (c) at least a 4th grade reading level; and (d) parental agreement for students under 18 years old to attend a focus group meeting.

Table 5

Demographic Characteristics of Student Focus Group Participants

Subject Code	Gender	Age	Race/Ethnicity	Grade Level	Disability
S1	M	17	Caucasian	11th grade	Learning Disability
S2	M	19	Native American	12th grade	ADHD
S3	M	19	Caucasian	11th grade	Learning Disability
S4	F	18	Caucasian	12th grade	Bipolar/Depression
S5	M	17	Caucasian	11th grade	Learning Disability
S6	M	18	Caucasian	11th grade	Learning Disability
S7	F	17	Caucasian	10th grade	Learning Disability
S8	F	16	Caucasian	10th grade	Learning Disability
S9	M	27	Native American	Sophomore	Speech/Language Impairment
C1	F	25	Caucasian	Senior	ADHD
C2	F	30	Caucasian	Graduate	Specific Learning Disability, ADHD
C3	F	24	Caucasian	Senior	Dyslexia (Learning Disability)
C4	M	27	Caucasian	Graduate	Orthopedic Impairment & Cerebral Palsy
C5	M	20	Caucasian	Sophomore	Orthopedic Impairment & Specific Learning Disability

S = High school students; C = College students

Table 5 depicts student participant characteristics. The eight high school students came from a rural Oklahoma high school: two were 10th graders, four were 11th graders, and two were 12th graders. Six adult students (i.e., two graduate students, two seniors, and two sophomores) came from different colleges, five students came from a state university, and one student from a community college. The students' majors included special education, pre-education, sociology/criminology arts and sciences, instructional

psychology and technology, adult and higher education, and secondary educational science. Eight students were males and six were females. The average age of all participants was 21 with a range from 16 to 30 years old. All but two students were Native American. Seven students had learning disabilities, three ADHD, one bipolar/depression, one speech/language impairment, one had both a learning disability and ADHD, one had both orthopedic impairment and cerebral palsy, and one had both an orthopedic impairment and specific learning disability. Eight students had mild disabilities and six students had moderate disabilities. Of 14 students, four secondary and four college students were employed as a pizza deliverer, waiter/waitress, a graduate research assistant, a teaching assistant, asset protection executive, a program evaluator and process manager, and a warehouse supervisor.

Setting

Participants responded to the TSA instrument version appropriate to their role in schools, homes, and the Oklahoma Department of Rehabilitation Services offices across the state. Four professional group meetings took place at local Oklahoma rehabilitation counseling offices at Durant, Tulsa, and Pryor. One family focus group meeting convened at a local high school in Pryor. One high school student group meeting took place at an Oklahoma rural high school in Pryor. The Norman focus group meeting, one college student group, and a higher educational professional group took place at OU's Zarrow Center.

Instrument

Transition Success Assessment (TSA)

The TSA instrument includes professional, student, and family versions. The TSA instrument was designed to measure transition behaviors for both secondary and college students with mild to moderate disabilities based on identified transition success predictors. The original TSA instrument included 41 items under 12 domains: desires, goals, strengths, limits, disability awareness, persistence, use of effective support system, coping skills, social skills, proactivity involvement, making positive choices, and transition education involvement. Each domain contained up to six items. The typical user would complete this assessment in 20 minutes by considering the student's transition behavior from last year described in the item, and then indicating the frequency with which the student exhibits that behavior on a five-point Likert scale − "0" means "Never," "1" means "Rarely," "2" means "Sometimes," "3" means "Often," and "4" means "Yes/Always."

Special education teachers, other educators, and rehabilitation counselors who work with students with disabilities in both high schools and postsecondary education institutions use the TSA professional version. Other educators could also use this version, in groups or independently, as student needs require. Secondary and college students with mild to moderate disabilities who have at least a 4th grade reading level would use the TSA student version. Students can take the TSA student version in groups or independently. The TSA family version would be used with parents, grandparents, and legal guardians who are responsible for the care of a child with a mild to moderate disability and receive special education program services in high school.

The Role of the Researcher and Efforts to Prevent Bias

Qualitative research places the observer in the world to collect, interpret, and analyze the information that makes the world visible, and this concept enables qualitative researchers to study events in their natural settings. Qualitative research attempts to interpret phenomena in terms of the meanings people bring to observed issues (Mertens, 2005). Personal values and views of the world may introduce bias into conducting a qualitative study, analyzing, and reporting the findings. In this study, my personal experience and knowledge may interject background values into my study. In order to prevent or reduce bias in this study, I will describe my role as researcher, describe my personal core values, and explain my efforts to prevent or reduce bias in this study.

My Role in the Study

My role in this study is that of facilitator, data collector, interpreter, and modifier. I facilitated focus group meetings to make sure the discussion remained on the topic, provided opportunities for every member to speak, and controlled the time of each focus group meeting. As a data collector, a Zarrow Center staff person and I transcribed audiotaped information from each focus meeting and compared the results to the information on the evaluation forms. As an interpreter, I reviewed, interpreted, and analyzed data to identify the emerging themes from the transcription data. After discussion with colleagues, I also modified the wording of all TSA instrument items to make it more understandable and beneficial to users.

My Core Values

I brought my core values and my special education teaching knowledge and experience to the study of transition for secondary students with disabilities. My

perspective as a learner, teacher, researcher, and teacher-trainer for individuals with disabilities has undoubtedly influenced my research, including my conversations with experts and data analysis. For example, I believe that my reserved personality may have kept a distance between focus group members and me, which may have decreased the problems of bias and subjectivity, but it may also have decreased opportunity for revealing social conversations. The advantage of introversion is that I can study as a third person without losing my objectivity. The disadvantage of introversion is that I may not develop a close relationship in order to obtain authentic information from the participants. As an international student, English and a different culture may have caused difficulties in establishing a close relationship to make focus group members feel comfortable in discussions. Therefore, it may be difficult for me to obtain authentic suggestions or feedback about TSA instrument items.

To Avoid Bias

I incorporated strategies to improve the relationship and conversations between focus group members and myself during the discussion. First, I used e-mails or telephone calls to explain the study, provided refreshments during the meeting, provided a comfortable environment for discussions, represented documents as accurately as possible, facilitated the meeting objectively, and encouraged the participants to discuss all items. Second, I had to rely on input from committee members and colleagues at the OU Zarrow Center to foster a working relationship with the focus groups and maintain a balanced perspective throughout all meetings. My advisor, a colleague, Cathy, and I arranged and facilitated the meetings, supported each other when needed, and discussed

after each meeting to ensure the modification, feedback, and comments group members made to avoid bias.

Data Collection Procedures

The participants formed eight different focus groups (five professional focus groups, one family focus group, and two student focus groups) based on where they worked, lived, and attended school. Each focus group met separately. Professional participants discussed and evaluated two of the three TSA evaluation forms for the three TSA instrument versions (professional, family, and student versions). Parent participants discussed the TSA family evaluation form, and student participants discussed the TSA student evaluation form.

A sample evaluation form of the TSA Professional Version, as described in Appendix D, asked respondents to answer specific research questions. Evaluation forms of the other two versions used the same template as this sample but in different wording. During the discussion with focus groups, I facilitated and audio-recorded the group. I also asked each participant to review a TSA item and determine if that item was beneficial and understandable. After each meeting, I modified and updated the wording of each TSA version for the next focus group meeting. In addition, I also conducted the peer reviews between focus groups. Overall, I collected data from each discussion, comments, and answers written on the hard copies, observations, and field notes.

Focus Group Procedures for Professional and Parent Groups

Each professional meeting and family meeting followed specific procedures. First, I introduced the background of this study, including why we developed this new transition assessment tool, its development, the unique characteristics of the TSA, and how the TSA may benefit high school students and young adults with disabilities. Second, I asked if each participant had received all materials and signed the documents, and allowed participants to ask questions. Third, I began to read each item of the TSA instrument aloud and asked if the participants understood the meaning of the item. I gave the participants a few minutes to read the item themselves, evaluate the item by checking those two boxes next to the item, and write down comments on the evaluation form. Fourth, I then encouraged participants to express their understanding and perspectives regarding the item. For each TSA item, I asked, "Is this item understandable?" "Is this item beneficial?" "What do you think about this item?" "Why do you think it is confusing?" "How do you think we could make this question better?" At this point, I focused on facilitating the discussion in terms of how, why, and what participants thought would improve the TSA items. Fifth, when each participant expressed his/her thoughts about an item, I then repeated the opinion to other group members to ensure that all participants heard the same message. If too many opinions were voiced at the same time, I controlled the speaking order, organized the ideas, summarized those ideas, and made the decision on each item based on all participants' feedback and comments before moving to the next item. I took notes during the entire discussion to supplement the audio-recorded conversations. Each meeting lasted about two to two and a half hours, and all the focus group discussed TSA items using this procedure.

At the end of each meeting, I asked the participants for any additional comments or feedback, and then thanked them and asked if they had further TSA comments or feedback. I also mentioned that they were more than welcome to contact me via phone calls or e-mails.

Student Focus Group Procedures

I used a different procedure to collect data for the two student focus group meetings. For the high school focus group, two researchers and a high school teacher who had known the students jointly facilitated the meeting. Before the meeting, the teacher had obtained parent's permission for their child to participate in this study, and students had signed assent forms. In the beginning of the meeting, the teacher first introduced the researchers and detailed the purpose of this study. The teacher and researchers then helped students complete the demographic information sheet, a sign-up sheet, and stipend forms. I introduced the background and significance of this study, and the benefit to students with disabilities in the future. Unlike professional and family groups procedures, high school students completed the TSA student version first in order to provide opportunities for them to look over it before the discussion. The college students followed the same procedures as the high school students did. However, they did not need to provide their parent's permission to conduct this study. The remaining steps followed specific procedures described previously in the professional and family focus group meetings by using easy-to-understand wording with any needed interactions and assistance.

Data Analysis Procedures

I collected data from transcriptions, evaluation forms, observations, and field notes for 11 months. The primary analysis process began as soon as data collection had begun for five professional focus group meetings, two student focus group meetings, and one family group meeting. This section describes the four analysis techniques that I used. First, the narrative analysis described the transcription data from each focus group meeting. Second, I used Excel 2007 to calculate group means of understandable percentages and beneficial percentages by adding all checked items from the TSA evaluation form divided by all items of each respective TSA version. Third, I scored "yes" as "1" and "No" as "0" on each evaluation form and used One-Way ANOVA—Tukey test to measure the individual mean differences within each focus group to find whether individuals agreed to each other within a focus group. Finally, I used the coding from individual participant's evaluation form regarding benefits and understanding of each TSA version to supplement the results of understanding and beneficial analyses.

Narrative Description

Since the eight focus group meetings followed the general procedures, I used the same data analysis method to analyze the narrative descriptions for all groups. First, I used printed copies of the TSA modifications made from the focus groups. I looked for the number of item changes for each focus group meeting and described the modifications of three TSA versions (see Appendix I, J, K). Second, I analyzed the transcription from each meeting with field notes. Once I examined the narratives and evaluation forms within the group discussions, I looked for evidence of modification patterns emerging from the data, and focused on the discussions for each TSA item.

Third, a peer review process modified the TSA items after each discussion. Fourth and lastly, all focus group members and peers received the updated TSA instrument for any feedback or comments.

The evaluation form of each TSA version included "yes" and "no" checkboxes for understandable and beneficial. Each focus group member checked the box as preceding the discussion during the meeting. I collected all evaluation forms and computed the checkboxes by using Excel 2007 and SPSS16.0 to measure the group mean and individual mean differences within a group. Excel 2007 calculated individual's understandable percentage and beneficial percentage from each evaluation form and the group mean percentage of benefits and understanding. The results demonstrated the change of group means across time to determine if group means of understanding and benefits had been improved over time. In order to measure the individual mean differences within a focus group, I used the SPSS16.0 to conduct a One-Way ANOVA—Tukey test to analyze participants' evaluations. I first set "yes" as "1" and "no" as "0" on evaluation forms across the three TSA versions, and inputted into SPSS for analysis.

As analysis proceeded, I made interconnections with the literature to determine if recommendations connected to the reviewed literature. This focused on finding supportive studies for their comments, identified contradictions or clarified the original intent of the research studies. After analysis, my doctoral chair and I made final decisions about all TSA items.

Triangulation Process

A final revision was accomplished by capturing the essence of all respondents' recommendations and reflections via a process of verification called triangulation, which

"involves checking information that has been collected from different sources or methods for consistency of evidence across sources of data" (Mertens, 2005, p. 229). A triangulation process occurs when a primary researcher allows another researcher to independently code the data and return their interpretation of the data's clusters of meaning, themes, and essential essence (Creswell, 1998). In this study, I conducted a triangulation process with multiple sources, such as two independent researchers, data from hard copies of the TSA evaluation forms, transcripts, and field notes. Three researchers collected data for each focus group meeting. During the meeting, at least two researchers observed, collected data, and took notes independently. After each meeting, I collected all evaluation forms and notes from other researchers and participants to verify the data. The data included the modifications, feedback, comments, and answers participants responded with during the discussion. Lastly, two independent researchers and I looked for emerged modification patterns independently to form themes made from modifications of the three TSA versions.

Data Management

To facilitate the management of data, I used several visual matrices and tables. All evaluation forms and field logs during discussions from focus group meetings helped me capture immediate impressions, additional descriptions or intuitions, and to stay abreast of any of my own biases. All focus group meetings had been coded and transcribed line-by-line. I coded these statements from my field notes for the broader themes and compared to the transcripts to identify the accuracy of the transcription to ensure no major elements to be omitted. Finally, I refined and collapsed these major

themes into patterns to reflect the wording modification for all TSA versions across those eight focus groups.

In all, this study used four major data analysis procedures: (a) description of modifications made to all TSA items through focus group discussions, (b) coding, analyzing, and organizing the modification patterns for focus group meetings, (c) peer reviews, and (d) descriptive statistics of respondents' reflection in regard to the benefits and understanding of the three TSA versions.

Phase II Study Methods

The results of the Phase I study produced the TSA instrument used in this Phase II study. In order to determine the Cronbach alpha and test-retest reliabilities, the Phase II study used a correlation research method to measure the coefficient alpha and correlation coefficients scores across time for the three TSA versions. This section describes the sample, setting, data collection procedures, and data analysis techniques.

Sample

Two hundred and one participants completed this Phase II study after I received the OU-IRB approval (see Appendix E). Sixty-two professionals (special educators, rehabilitation vocational counselors, and other professionals who worked with students with disabilities in a high school or higher education institution), 104 high school students and higher education students with mild to moderate disabilities, and 35 parents who had a child with a disability in high schools or post-secondary education institutions participated in this study.

Participant Recruitment

I used both convenience and snowball sampling methods to recruit participants. The professional participants came from the 2008 Oklahoma Transition Institute (OTI) participants, and transition education workshop attendees. The professional participants invited potential students and parents to also participate in this study. Two recruitments occurred for this study. The first recruitment started in April 2008. Since it was so close to the end of the school year, the responding rate was less than 3%. The second recruitment started in August 2008 to recruit more participants.

I contacted and invited all professional participants via telephone or e-mail to participate in this study, to complete consent forms, three professional TSA versions, and a demographic survey. Four weeks later, they each needed to complete a second administration of the same test. Further, professional participants were requested to invite potential students and parents in their class to participate in this study using provided invitation letters (see Appendix G).

Participants

Of 100 invited professionals, 62 agreed to participate in this study, 30 declined, eight did not respond. Those 62 professionals then invited 48 parents and 120 students to participate. After receiving responses, 10 parents and 16 students declined to participate and three parents did not respond to the confirmation of participation. Altogether, 201 participants (62 professionals, 104 students, and 35 parents) consented to participate and complete the appropriate Transition Success Assessment (TSA) professional, student, and parent versions. All participants completed 319 TSA instruments (180 TSA professional, 35 family, and 104 student instruments). Four weeks after the initial administration, 43

professionals (129 TSA professional Versions), 87 students (87 TSA student versions), and nine parents (9 TSA family versions) retook the TSA instruments to complete test-retest reliability study. Each participant received a basic demographic information sheet to identify age, gender, education attainment, and ethnicity (see Appendix H). The demographic characteristics of professionals, students, and parents appear in Table 6.

Table 6

Demographic Characteristics of Participants

	Professionals (n = 62)		Students (n = 104)		Parents (n = 35)	
Gender	Male	Female	Male	Female	Male	Female
	2	60	59	45	6	29
Age	Mean = 43.02		Mean = 19.07		Mean = 47.33	
Ethnicity	3 African American (4.8%) 4 Native American (6.56%) 55 Caucasian (88.7%)		3 African American (2.9%) 16 Native American (15.4%) 1 Asian (1%) 3 Hispanic (2.9%) 74 Caucasian (71.2%) 7 Other (6.7%)		1 African American (3%) 3 Native American (9.1%) 1 Hispanic (3%) 30 Caucasian (84.8%)	
Degree	24 Bachelors (38.7%) 33 Masters (53.2%) 2 Ph.D. (3.2%) 3 Post Graduates (4.8%)		50 College students 54 High school students		19 High School (54.3%) 2 GED (5.7%) 11 Bachelors (31.4%) 2 Masters (5.7%) 1 Post Graduate (3%)	
Working Hours with Students	Mean = 22.8				Mean = 8.76	
Grade Level	8-12 grades: 45 (72.6%) 13-17 grades: 9 (14.5%) k-12 grades: 8 (12.9%)		9th grade: 1 (1%) 10th grade: 14 (13.5%) 11th grade: 5 (4.8%) 12th grade: 12 (11.5%) 13th grade: 60 (57.7%) 14th grade: 8 (7.7%) 15th grade: 4 (3.8%)		7th grade: 2 (5.7%) 10th grade: 3 (8.6%) 11th grade: 3 (8.6%) 12th grade: 14 (40.0%) 13th grade: 9 (25.7%) 15th grade: 2 (5.7%) 16th grade: 2 (5.7%)	

Professional Participants

As indicated in Table 6, 62 professionals (36 special education teachers and 26 rehabilitation vocational counselors) participated in this study, including 60 females (96.8%) and 2 males (3.2%). The age of participants ranged from 21 to 65 years and the average age was 43.02 years (SD = 2.15). Fifty-five of the professional participants were Caucasian (88.7%), four were Native American (6.56%), and three were African American (4.8%). Thirty-three of the professional participants graduated with master's degrees (53.2%), 24 with bachelor's degrees (38.7%), two had Ph.D. degrees (3.2%), and three had postgraduate courses (4.8%). Overall, professional participants had an average of 10.34 years of working experience in special education, and they spent an average of 22.8 hours weekly with students with disabilities. Forty-five professional participants worked with 8th grade to 12th grade students with disabilities, nine professionals worked with 13th to 17th grade young adults with special needs, and eight professionals indicated that they worked with students across all age levels. Forty-three professionals had special education certificates, two had English certificates, one had a Science certificate, one had a Physical Therapy certificate, one had a Social Worker certificate, and 10 professionals had more than two certificates. Overall, 52 professionals taught students with learning disabilities, 44 teachers taught students with Emotional/Behavior Disturbance, and almost every professional taught students with different types of disabilities.

Student Participants

One hundred and four students participated in this study with 59 males (56.7%) and 45 females (43.3%). Seventy-three of the student participants were Caucasian (70.2%), 15 were Native American (14.5%), three were African American (2.9%), three

were Hispanic (2.9%), one was Asian (1%), seven students checked "other," and two students did not provide answers for this question. The age of students ranged from 15 to 48 years, with an average of 19.07 years of age (SD = 4.52). More than half of the students (n = 60) were in 13th grade (57.7%), 14 students were in 10th grade (13.5%), 12 students were in 12th grade (11.5%), eight students were in 14th grade (7.7%), five students were in 11th grade (4.8%), four students were in 15th grade (3.8%), and only one student was in 9th grade (1%). Overall, 26 students reported they had specific learning disabilities (25%), 11 students reported they had mental retardation (10.6%), five had autism (4.8%), four students had developmental delay (3.8%), three students had emotional disturbance (2.9%), five students had more than two types of disabilities (4.8%), 37 students checked "other" for this question, and 13 students did not report their disabilities. Reported disabilities are as follows: 73 students indicated they had a mild disability (70.2%), 26 had a moderate disability (25%), and five students did not provide the answer for this question.

Parent Participants

Thirty-five parents participated in this study. Six males (17.1%) and 29 females (82.9%), and 7 parents (20%) indicated being in a low income group. Thirty parents were Caucasian (84.8%), three were Native American (9.1%), one was African American (3%), and one was Hispanic (3%). The age of the parents ranged from 18 to 63 years, with an average of 47.33 years (SD = 2.35). Nineteen parents graduated with high school diplomas (54.3%), 11 parents had bachelor's degrees (31.4%), two had GED diplomas (5.7%), two had master's degrees (5.7%), and one had a postgraduate degree (3%). Parents reported their children received special education services for an average of 8.76

weekly hours. Fourteen parents reported that their children were in 12th grade (40%), nine had children in 13th grade (25.7%), three had children in 11th grade and 10th grade (18.2%), and eight had children in 7th, 15th, and 16th grades (17.1%). Ten parents reported their child had specific learning disabilities (28.6%), five had mental retardation (14.3%), five had autism (14.3%), one had orthopedic impairment (3.5%), 11 parents indicated their children had more than two types of disabilities (31.4%), and one did not provide an answer.

Setting

Participants responded to the TSA instrument version appropriate to their role in their schools, homes, and at the Department of Rehabilitation Services offices across 10 states of the nation, including Oklahoma, Colorado, Arizona, Missouri, South Dakota, North Dakota, Texas, Kansas, Pennsylvania, and Massachusetts (see Table 7). Three groups (professionals, parents, and students) had two administrations of the TSA instrument in locations based on their individual roles. Student participants completed the student TSA instrument in educational settings; rehabilitation counselors and special educators completed the TSA professional instrument version in consulting offices or an educational setting; and parents completed the family TSA instrument in their homes.

Table 7

States that Participated in the Phase II Study

State	Professional	Student	Family
Arizona	3	0	2
Colorado	8	12	2
Kansas	2	4	0
Massachusetts	1	0	1
Missouri	7	2	4
North Dakota	1	0	0
Oklahoma	20	74	21
Pennsylvania	1	0	0
South Dakota	17	12	5
Texas	2	0	0
Total participants	62	104	35

Transition Success Assessment

I used the TSA professional, student, and family versions produced from the Phase I study (see Appendix F for a copy of the three versions). The three modified TSA versions include 41 items across 12 domains (desires, goals, strengths, limits, disability-awareness, persistence, use of effective support system, coping skills, social skills, proactivity involvement, making positive choices, and transition education involvement) to measure transition behaviors for both secondary and college students with mild to moderate disabilities (learning disabilities, emotional disabilities, ADHD, physical disabilities, visual impairments, hearing impairments, etc.).

The TSA includes three separate versions for professionals, students, and parents. Parents and professionals used this assessment to evaluate the student or child's transition

behaviors from last year. Students with disabilities who complete this assessment independently need to have at least a 4th grade reading level. Students with lower reading skills can request that the TSA be read to them. This assessment instrument can be used in groups or independently.

The test taker needs to score the student's current transition behavior from 0 to 4: "0" means "Never," "1" means "Rarely," "2" means "Sometimes," "3" means "Often," and "4" means "Yes/Always." Domain A measures academic, employment, and independent living desires the student had within the last year. Domain B measures the academic, employment, and independent living goals the student expressed within the last year, and whether the student used problem solving skills to attain those goals. Domains C and D assesses whether the student expressed his/her academic, employment, and/or independent living strengths and limits within the last year, and whether the student considered his/her own strengths and limits as he/she set postschool goals. Domain E assesses the level of the student's disability awareness and appropriate communication for needed supports and accommodations. Domain F measures the persistence the student possessed for pursuing academic, employment, and independent living goals within the last year. Domain G measures whether the student requested and used support from a teacher, counselor, classmates, friends, and family members within the last year. Domain H measures the student's ability in coping with stress, frustration, or difficulties in school. Domain I measures the student's social skills of interacting with other people and maintaining a friendship. Domain J measures the student's proactive involvement in school and community organizations, family, friends, and employment. Domain K assesses the student's ability in making positive academic, employment, and

independent living choices. Domain L measures the student's transition education involvement regarding actively participation of educational planning meetings, discussion of transition assessment results, and transportation arrangement to job sites, educational settings, or social events.

Data Collection Procedures

After approval by the University of Oklahoma's Institutional Review Board, I contacted each potential professional to confirm participation and mailing address via e-mail or phone call, in which a clear explanation and introduction of the study was provided (see Appendix L). At this moment, professionals were invited to ask any questions or express concerns about this study. Upon consenting to participate and getting their questions answered, each professional received a professional research copy (an informed consent form, three TSA Professional Versions, a demographic information sheet, and a postage-paid envelope) by mail and was requested to use the same pseudonyms on each TSA Professional Version. Also, each participant was requested to complete the research materials, provide potential students and parents, and complete the retest after four weeks. The participants completed the TSA instrument individually or in groups. As detailed above, with 100 mailed professional packets, 62 professionals completed the TSA instrument in their own school district and returned the materials.

After all professionals completed the first TSA Professional Version, I started to recruit parents and students for this study. Each professional received an e-mail attached with a cover letter for parents that asked the professional to recruit students and their parents to participate in this study. The cover letter included an introduction to the study and clear instruction for administering the TSA instrument. If parents had questions or

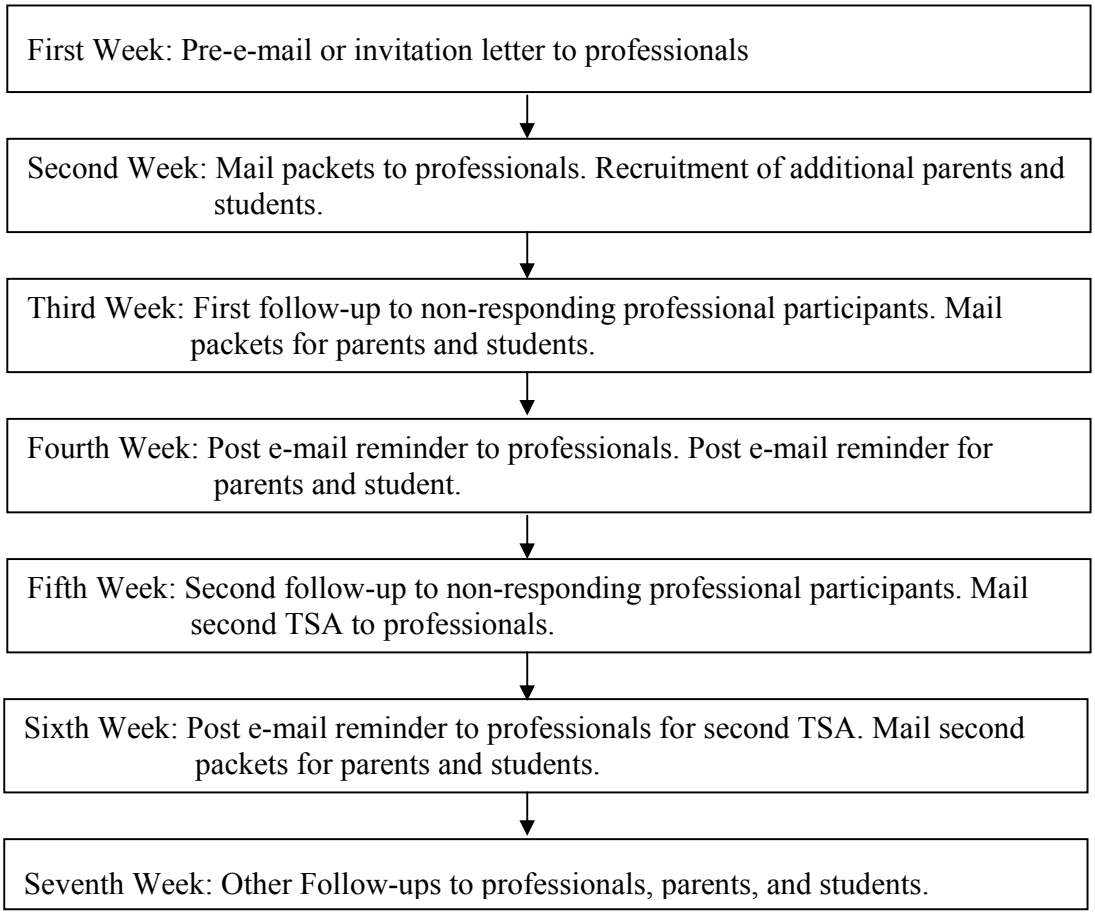
concerns, teachers were requested to contact me to answer them via e-mail or phone call. Based on the parents' responses, each professional received parent copies (a family consent form, a TSA family version, and a demographic information sheet) and/or student copies (a parent-to-child consent form, a student assent form, a TSA student version, and a demographic information sheet) to complete. Students over 18 received a consent form to complete. All parents and students used the same pseudonyms to complete the first and second administrations of the TSA instrument to protect their confidentiality. The professionals who recruited their students and parents to participate in this study were coded on the corner of the cover page on each TSA Family and Student versions for identification. I mailed parental and student packets to connected professionals to distribute. The professionals who recruited their parents and students read and explained the informed consent to his/her parents and students. After completing the research materials, each connected professional collected and returned the completed materials. I coded all data and secured the data in a locked cabinet and a password secured computer at the Zarrow Center.

I revised Salant and Dillman's (1994) survey data collection methods for this study (see Figure 2). First, participants received an e-mail or phone call to confirm the number of research packets they requested and a notation that a mailed packet would be arriving in a few days. Second, I told participants the research packet had been mailed out and provided a seven to 10 days deadline to complete and return after they received the packet. If they did not receive it after a week, I asked them to contact me for another research packet. Third, I sent a post-e-mail reminder to the participants two days before their deadlines to remind them to complete and return the packet. In addition, each

participant needed to inform me when he or she mailed the packet back to me. After four weeks, participants received the same data collection procedure to conduct the retest of the TSA instrument. I started to recruit parents and students on the second week and followed the same data collection procedures as that used with the professionals. The data collection started from August 2008 and closed by October 2008.

Figure 2

Data Collection Procedures



Cover Letter

After I contacted the rehabilitation counselors, special education teachers, students, and family members and invited them to participate, each received a letter (see Appendix G) and consent form in the packet of materials. This cover letter provided information regarding the purpose of the study, explained how to complete the TSA, as well as additional information regarding the nature of the TSA instrument, the importance of the information, confidentiality assurance, and consent procedures. I also invited respondents to contact me regarding any questions concerning the TSA instrument or to receive a summary of the research results.

Data Analysis Procedures

I used the *Statistical Package for the Social Sciences* (SPSS) 16.0 data analysis program to analyze the collected data. Initial analysis procedures included descriptive computations of frequencies, percentages, and means and standard deviations. In order to establish the internal consistency reliability of scores obtained on all of the 319 completed assessments from the Phase II study, I assessed the internal consistency of each item score for each of the three TSA instrument versions except the items I2 and J5, which had yes or no answers. I expected a Cronbach alpha of .8 or higher to indicate consistency of scores across each TSA instrument version.

The second round of the test was administered approximately four weeks later to demonstrate lack of memorizing effect, yet close enough to discount the effect of student maturity and growth of skills. In order to examine the stability of scores over time, I employed test-retest procedures using the data collected from participants over two administrations of four weeks apart. I calculated the correlation coefficients of domain

and total TSA scores between two administrations. I expected correlations of .75 or higher for the TSA test-retest reliability.

CHAPTER 4

PHASE I STUDY RESULTS

The purpose of the Phase I study was to collect feedback and comments from eight focus group meetings to improve the wording and evaluate the benefit and understanding across all items of the TSA professional, student, and family versions. Three major research questions addressed the purpose of this study. The following sections detail the findings by research questions. In addition to descriptions of modifications, the results of member check, peer review, and a One-Way ANOVA analysis will be presented.

Research Question One

How did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) revise each TSA item across the professional, student, and family versions to improve TSA's understandability?

To answer this first research question, I will present the frequency data and the modification patterns of the TSA professional, student, and family version items.

Modifications to the TSA Professional Version

Five professional focus groups modified the wording of the TSA Professional version. Table 8 describes the modifications across the five focus group meetings.

Table 8

The Description of TSA Professional Version Focus Group Meetings

Group Name	Meeting Date	Changes Made	Total Items Before Meeting	Total Items After Meeting
Durant Focus Group	Sep. 11, 2007	37	47	46
Tulsa Focus Group	Sep. 25, 2007	23	46	44
Norman Focus Group	Feb. 7, 2008	33	44	51
Pryor Focus Group	Feb.14, 2008	17	50	50
Higher Ed. Focus Group	July 10, 2008	35	46	50

As shown in Table 8, the Durant focus group meeting made 37 changes and deleted one item to the TSA Professional version. The Tulsa focus group meeting made 23 changes to the TSA Professional version and deleted two items. The Norman focus group meeting made 33 changes and added seven items. The Pryor focus group meeting made 17 changes, but did not delete or add any items. The Higher Education Professional focus group meeting made 35 changes and added four items.

Modification Patterns

Appendix I contains the TSA professional version modifications from the five focus group meetings. During focus group meetings, professionals primarily discussed four topics. First, group members clarified the meaning of each question to ensure that they shared the same understanding to the TSA items. Second, group members modified items to meet the intention of each domain and intents of original research studies. Third, group members modified items for test takers to use the rating scale. Fourth, group members modified the wording to consider the test taker's feelings as they completed the

TSA. Fifth and lastly, group members paralleled all three TSA versions to ensure that items across the three instruments items had the same meaning. In summary, five patterns describe the changes the professionals made to the TSA professional version.

Clarify wording. The Durant group added "a housing living goal" to replace "an adult living goal" on B3 to clarify the meaning of "an adult living goal." Later, when discussing C3 and D3 the group decided to change "adult living" to "independent living." In order to express the meaning of questions precisely, the Durant group also changed the wording to be more specific. For example, they used "demonstrate" to replace "express," "continues" to replace "kept," and "acknowledge" to replace "match" to improve the understanding of each item. Moreover, the Durant and Tulsa groups divided item I1 into two questions to specify the word "others" as "adults" and "peers."

The Tulsa group focused more on making each question clearer and more specific. For example, group members added "with grades and behaviors" on item A1; they also added "academic, vocational, or personal" on B4 to clarify the goals. Unlike the Durant group, the Tulsa group decided to use "expressed or exhibited" to replace "demonstrate." Moreover, the Tulsa group used "his/her vocational, housing, and academic interests" to specify "transition assessment results."

To further specify the wording of the TSA professional version, the Norman group changed "positive" to "constructive" to consolidate item H1. In addition, the group changed "positive" to "active" on J2 and J3 to specify the word "positive." Moreover, the Norman group separated one item into two to make the question clearer for domains E, G, K, and N. For example, for domain E, the group separated "disability awareness" and "identification of strengths and limitations" into two items. For domain G, the group

separated “requested and used” into two items. For domain K, the group separated “made choices” and “acted on them” into two items. However, the group combined H1 and H2 into one item “Within the last year, the student coped with difficulties, stress or frustration in a constructive way” because the group thought the meanings of “difficulties,” “stress,” and “frustration” were similar.

The primary change the Pryor group made included adding “positive” on the title of domain K, Making Positive Choices, since the Pryor group thought “positive” was appropriate when measuring students’ behavior to avoid the misunderstanding and misuse of the goal of making choices. Furthermore, the Higher Education Professional focus group added “positive” on each item of domain K.

The Higher Education Professional focus group changed words or sentences and combined or separated questions to clarify the meaning of each question. For example, the group separated the item A3 into two questions for “with support” and “without support.” They distinguished domain H of stress, frustration, or difficulties in three different environments: academic, employment, and social environments. They divided domain J1 into two questions focusing on school organizations and community organizations. The group made some changes about words, such as “finances” on items C3, D3, and F3, “interacted appropriately” on item I1, and “played” on item J3.

Match items to the intention of each domain. When discussing the TSA professional version, each group reviewed and ensured the original intention of each domain. In order to match the original intention of each domain, focus groups revised the wording with the following changes. The Durant focus group changed “wanting” to “desire” on domain A. The Durant group also revised item D4 to make the question

closer to the intention of this domain such as "Did the student acknowledge limits associated with postschool goals at the last IEP meeting?" The Higher Education Professional focus group further modified the wording of C4 to "Within the last year the student communicated about his/her strengths in relation to his/her post graduation goals" to get close to the original intention of this domain, and the group replicated the same sentence structure on D4.

The Norman group changed the wording or added an item on the domain of disability awareness to make the item more constructive and meaningful for test takers (professionals, parents, and/or student). For example, the group changed the wording of E2 (domain of disability awareness) to be more specific and exchanged the order of E1 and E2 to be more logical and constructive because the student needs to express the awareness of his/her disability before he/she could describe the disability.

Correspond items to rating scale. In order to allow professionals (teachers or counselors) to measure the student's transition behaviors, the Durant group first set-up the time frame for each question and modified "in the last year" to "within the last year." The Tulsa group deleted question J2 because experts did not think teachers or counselors would be able to measure the student's behavior with his/her family. The Norman group added "frequently" to each question to enable teachers to use the Likert scale to measure the student's behaviors.

Consider the test taker's feelings. During the discussion, focus group experts also tried to modify item wording to make the test takers feel comfortable as they completed the TSA. For example, the Tulsa group used "limitations" to replace "limits" under domain D. On the same domain, the Norman group changed "limitations" to "challenges"

or “difficulties” to indicate the student’s limits. The Higher Education Professional focus group concluded that “communicate” was more appropriate for students to speak out or express their strengths, limitations, and needs/accommodations to service providers in educational settings. The Higher Education Professional focus group changed the word “used” under domain G to “accepted” to make the item sound comfortable. The group also used “received instruction” to replace “learned” to imply that teachers may not be aware of students’ learning progress.

Parallel wording across TSA versions. All five focus groups conducted parallel comparison across at least two TSA versions item-by-item to ensure equal meaning. For example, the Durant focus group compared the TSA professional version and the TSA student version; the Tulsa focus group compared the TSA professional version and the TSA family version; the Norman focus group paralleled the wording of the TSA professional version and the TSA family version; the Pryor focus group conducted the parallel comparison of all three TSA versions; and the Higher education professional focus group ensured the wording of the TSA professional and family versions have the same meaning.

On items C1, C2, C3, and C4, Tulsa and Durant focus group meeting professionals added “In the last year” to the beginning of the sentence on both the TSA professional and family versions. Professionals also made the same modifications on items G1, G2, and G3 to “Within the last year,” and H1, H2 with “In the past year.” On items F1 to F4 group members changed “kept working” to “continued to work” to both TSA versions. If group members made any changes on one TSA version, they also

modified the same item of the other TSA version to ensure the consistency of the meaning.

The Modifications of the TSA Student Version

Four focus groups modified the wording of the TSA student version. Table 9 describes these four focus group meetings.

Table 9

The Description of Focus Group Meetings on the TSA Student Version

Group Name	Meeting Date	Changes Made	Total Items Before Meeting	Total Items After Meeting
Durant Focus Group	Sep. 11, 2007	46	46	47
Pryor Focus Group	Feb. 14, 2008	20	50	50
High School Student Group	March 6, 2008	18	50	50
College Student Focus Group	June 27, 2008	20	46	48

Two professional groups and two student groups (Durant, Pryor, High School Students, and College Students) modified and evaluated the TSA student version. As shown in Table 9, the Durant focus group made 46 changes and added one item. The Pryor focus group made 20 changes and maintained the same number test items. High school students made 18 changes and maintained the same number of items on the test. College students made 20 changes and added two items.

Modification Patterns

Appendix J includes the modifications of the TSA student version from all four focus group meetings. During the focus group meetings, professionals and students

primarily focused on simplifying the wording, improving the understanding, corresponding to the rating scale, considering the test taker's feelings, and paralleling all three TSA versions. In summary, the four focus groups modifications produced five distinct change patterns.

Simplify wording. In order to make the wording easy to understand, the Durant group simplified words and sentences of the TSA. For example, Durant experts changed the sentence "In the last year, have I talked about wanting to do well in school?" to "I want to do well in school," and "In the last year, have I played an active and a positive role in the family?" to "I play a positive role in my family." Also, the group changed "describe" to "understand," "employment" to "job," "academic" to "school," "cope" to "deal with," "attend" to "come to," "concerns" to "worries," etc. The Durant group changed B4 from "use problem solving skills to attain goals" to "know how to solve problems to get what I want." In addition, the Durant professionals reworded item D4 from "Did my limits match my goals at my lat IEP meeting?" as "Knowing my problems will help me set my goals after high school" to improve the understanding.

The Pryor group replaced some words with a lower reading level, such as using "job" to replace "employment;" using "school" to replace "academic;" "understanding" to replace "knowing;" "play" to replace "take;" "handle" to replace "deal with;" and "talk about" to replace "explain." Additionally, the group added "help" on all items of domain G for students to understand the items easier.

High school students changed some words that professionals suggested. For example, students replaced "live on my own" to "independently" on A3; "getting" goals to "setting" goals on domain B; "knew" to "learned" on B4; and "employment" to

"career" on F2. In addition, high school students reworded several questions to make it easier to understand. For example, students changed "my school strengths" to "my strengths in school;" "my strengths matched my goals" to "I matched my strengths for my goals;" "my school problems" to "my problems in school;" "my job problems" to "my problems at work;" "supports or accommodations I need" to "what I need to support my disability;" "school choices" to "good choices in school;" and "job choices" to "good choices on the job." College students changed "classes" to "education" on B1 and F1, "job" to "career" on B2 to increase the understanding.

Correspond the items to rating scale. The Durant professionals changed TSA student items from questions to statements and deleted the time frame (In the last year…) to correspond with the rating scale. The Durant group changed "Did I talk about an academic goal at the last IEP meeting?" to "I talked about my academic goal at the last IEP meeting," and "Did I talk about academic strengths at the last IEP meeting" to "I talked about my academic strengths at the last IEP meeting." The Pryor group suggested providing some examples for the items in B, C, and F domains (i.e., employment goal, academic goal, and adult living goal) on the three TSA versions and decreased the four-point scale to a three-point scale. The College Students focus group divided A3 and F3 into two items with "live independently with help" and "live independently without help" for evaluation.

Consider the test taker's feelings. The Durant group replaced the word "limits" with "problems" to make the item sound better for both students and their parents. The high school student focus group changed "use" on domain G to "take advice." The high school students reworded the items of proactivity from "take an active role" to "play an

important part." High school students also thought the items of domain N were too long for them to read. They suggested the teacher should read to their students and help them complete the test in groups. College students changed "strengths and problems" to "strengths and needs" to make it sound better. On domain J, they added, "I felt" within the sentences to express uncertainness about the role they played with their family and friends.

To improve understanding of the wording. The college student focus group not only addressed simplifying the wording, but focused more on improving the understanding of questions. For example, college students concluded, "used problem solving skills" presented more specific meaning on B4 than just stating, "solved problem." For item C4, college students used "applied my strengths" to replace "matched my strengths" to improve the understanding. When discussing E1, the group argued that "know about" one's disability did not make sense for them; only "understanding" his/her disability makes sense for them in the transition process. In addition, college students used "have explained" to improve the word "described" on E2. On H1, college students preferred "used coping skills to handle" to replace just "handled" because they believed "coping skills" are key words that should not be missed. The group argued item I2 "had friends" should be extended to "maintained the friendship" to improve understanding.

Parallel wording across TSA versions. The professional focus groups conducted parallel comparison across at least two TSA versions item-by-item to ensure equal meaning. They changed the wording and combined/divided questions based on the modifications of the TSA professional version (see Appendix J for the Durant and Pryor

group modifications). All modifications have been paralleled across all three TSA versions.

The Modifications of the TSA Family Version

Three professional focus groups (Tulsa, Norman, and Higher Education) and one parent group discussed and modified the TSA family version at various times. Table 10 describes the modifications across the four focus group meetings.

Table 10

The Description of TSA Family Version Focus Group Meetings

Group Name	Meeting Date	Changes Made	Total Items Before Meeting	Total Items After Meeting
Tulsa Focus Group	Sep. 25, 2007	33	46	46
Norman Focus Group	Feb. 7, 2008	41	44	50
Family Focus Group	March 6, 2008	6	50	50
Higher Education Group	July 10, 2008	32	46	50

As shown in Table 10, the Tulsa focus group made 33 changes and maintained the same number test items. The Norman focus group participants made 41 changes on the test and added six items. The Family focus group participants made only six changes and maintained the same number test items. Finally, the Higher Education Professionals made 32 changes and added four test items.

Modification Patterns

Appendix K contains the TSA family version modifications from the four focus group meetings. Tulsa, Norman, and Higher Education Professionals focus group participants modified the TSA family version based on the changes they made in the TSA

Professional version. During focus group meetings, professionals and parents focused on simplifying the wording, improving the understanding, paralleling all three TSA versions, and matching parents' expectations. Four patterns describe the changes the professionals and parents made to the TSA family version.

Simplify wording. The Tulsa focus group used "skills" to replace "strengths" under domain of strengths but deleted "used" under domain of "use of effective support system." The Family focus group replaced "postschool" to "post graduation" on C4 and D4 on a domain of limits. The Higher Education Professional focus group used "talk about" to replace "express" on domains goals, strengths, limits, and disability awareness; "problem solving skills" to replace "solved problems" of a domain of goals.

Improve understanding. The Tulsa focus group used "continued to work" to replace "kept working," combined H3 to H1 with stress and frustration on a domain of coping skills, and changed "active" to "positive" role on the item of J2. Parents used "attainment" to replace "achievement" on domain N to improve parents' understanding. Parents suggested providing examples for life skill goals or limitations to help parents understand the TSA better and be able to evaluate their child's transition behaviors.

Parallel wording across TSA versions. Three professional groups conducted parallel comparison item-by-item based on the modifications they made from the TSA professional version. Appendix K contains the modifications professionals made to the TSA family version. The Tulsa professionals modified A1, domains B, D, I, M, N, and E3. The Norman focus group modified the wording of every domain. The Higher Education Professional focus group modified the word "academic limitations" on D1 to

"academic struggles" for parents. The Higher Education Professionals paralleled both the TSA Professional and Family versions except for item D1.

Match parents' expectations. The Family group added "appropriately" on domain E and replaced "active" with "positive" on J2, J3, and domain K E3 in order to have their child learn appropriate and positive behaviors. On the social skills domain, parents had a difficult time with the word "adults" because they were concerned if items under domain I referred to maintaining good relationships with adults in school or out of school, but they decided to keep the item as it was.

Peer Reviews

Peer reviews took place after each focus group meeting. Peers consisted of about thirty experts in the field of transition in special education. Ten peer reviews occurred—eight peer reviews happened at OU Zarrow Center and two reviews happened at professional conferences. A panel of experts formed at OU Zarrow Center checked the TSA content validity and made final decisions on all TSA modifications. This expert panel consisted of a post-doctorate researcher, a doctoral student, and a master student. Another two peer reviews occurred at the 2007 Division on Career Development and Transition (DCDT) International Conference and at the 2007 National Secondary Education and Transition Technical Assistance Center (NSTTAC) state capacity building institute.

Peers at the Zarrow Center reviewed the modified TSA instrument based on three factors. First, peers reviewed the parallel comparison changes to ensure all TSA items across the three versions maintained the same meaning for each item. Second, peers changed all the TSA items from questions to statements. Third, peers examined the

changes focus group members made in comparison to the research studies where the items first appeared. Based on these three principles, these groups completed the work begun by the focus groups.

After making modifications for all three TSA versions, all focus group members received e-mails with updated TSA versions and they were asked to review the modified TSA's and make any suggestions. Six responded e-mails. Four focus group members were satisfied with the modified TSAs, and two members made changes and suggestions on the TSAs. One professional group member changed "within the last year understanding my problems will help me set my goals after high school" to "within the last year I understand that talking about my problems will help me set better goals for after high school," and the other professional group member suggested using "frequently" on all TSA items.

Summary

Overall, all three TSA versions have been modified and updated 16 times from TSA draft 34 to TSA draft 50 during the Phase I study and have been expanded from secondary students with mild to moderate disabilities to include postsecondary students with mild to moderate disabilities. The eight focus groups spent 16.5 hours discussing and evaluating the three TSA versions. A total of 262.4 hours were spent transcribing the focus group meetings.

Each professional group evaluated two TSA versions. The Durant focus group discussed and evaluated the TSA professional and student versions; the Tulsa focus group discussed and evaluated the TSA professional and family versions; the Norman group evaluated TSA professional and student versions, the Pryor group discussed TSA

professional and family versions, and higher education professionals discussed TSA professional and student versions. Parent and student groups discussed and evaluated the TSA version based on their role (parents—TSA family version; students—TSA student version). All TSA items had been improved between and after each focus group based on the feedback and comments of each focus group meeting and peer reviews.

TSA Professional Version Modifications

Five focus group meetings (Durant, Tulsa, Norman, Pryor, and Higher Education Professionals) discussed and modified all items of the TSA professional version. Their experts made 145 changes and added six new items. In general, the Pryor focus group made the fewest changes (17) and maintained the same test items and the Durant focus group made the most changes (37) and deleted one test item. As focus group meetings proceeded to discuss the TSA items, the experts focused on clarifying the meaning of each sentence, matching the item to the intent of each domain, changing wording to match the rating scale, modified items in consideration of the test taker's feelings, and checked parallel construction of the TSA versions.

TSA Student Version Modifications

Two professional and two student focus groups (Durant focus group, Pryor focus group, High School Students focus group, and College Students focus group) discussed and modified the TSA student version items. They made 104 changes and added three new test items. In general, the High School students made the fewest changes (18) and the Durant focus group made the most changes (46). While the discussion proceeded, group experts focused on simplifying the wording, improving the understanding,

matching the wording to the rating scale and the test taker's feelings, and checked parallel construction of all three TSA versions.

TSA Family Version Modification

Three professional focus groups and one family focus group modified the TSA family version (Tulsa, Norman, Higher Education Professionals, and Family groups). Group experts made 112 changes and added four test items. The Family focus group made the least changes (six changes) and the Norman focus group made the most (41 changes). Group experts focused more on simplifying the wording, improving the understanding, matching parents' expectations, and checked the parallel construction of all three TSA versions.

Final TSA Versions

The final TSA professional, family, and student versions draft 50 ended with 41 items across 12 domains (desires, goals, strengths, limits, disability awareness, persistence, use of effective support systems, coping skills, social skills, proactive involvement, making positive choices, and transition education involvement). Draft 50 also included the TSA Profile and Transition Success Assessment (TSA) goal identification matrix. The matrix enabled users to establish a pool of transition goals for items marked "0," "1," or "2" on the TSA instruments. The finalized three TSA versions appear in Appendix L.

Research Question Two

Did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive the TSA as beneficial for secondary students with mild to moderate disabilities?

Overview

Eight focus groups (n = 54) discussed and modified the TSA version items independently and answered question two. The following section presents the beneficial percentage group means of focus group evaluations in which each group member evaluated the TSA versions item-by-item. I used the group means comparison to present the change. A one-way ANOVA investigated the individual differences of each member's evaluation within each group. Lastly, I quoted participants' comments regarding the benefits of using the TSA instrument.

The TSA Professional Version

The beneficial percentage group means came from each group member's beneficial percentage, in which I summed the items each member considered beneficial and divided by the total items. For instance, a Durant participant considered 44 of 46 items to be beneficial, thus this TSA professional version yielded a 96% beneficial score. The analysis determined if the beneficial percentage improved after each modification across time. Table 11 describes the TSA professional beneficial percentage group means.

Group Means Comparison

Table 11

TSA Professional Group Means Beneficial Percentage

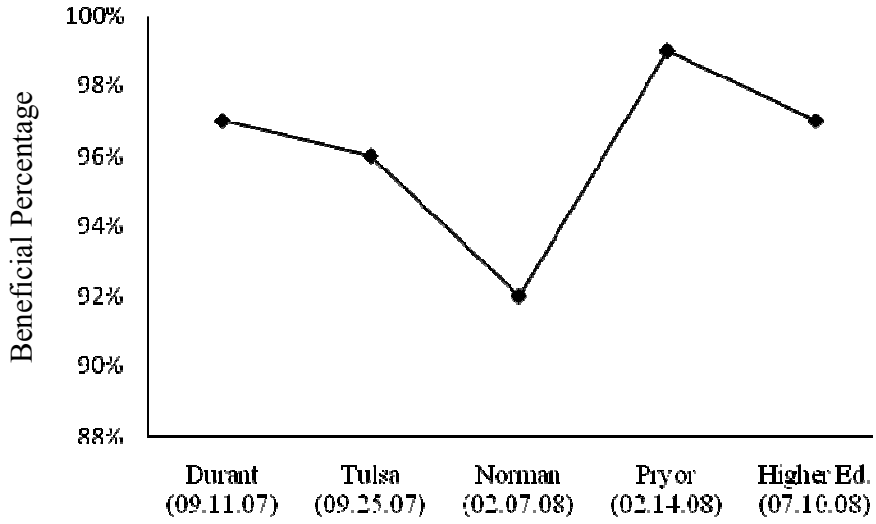
Group Name	Durant (n = 5)	Tulsa (n = 8)	Norman (n = 7)	Pryor (n = 7)	Higher Ed. (n = 5)
Group Mean	97%	96%	92%	99%	97%

As shown in Table 11, five professional focus groups (n = 32) determined if each TSA professional item was beneficial. The Durant focus group considered 97% of the

TSA professional version items beneficial. The Tulsa focus group had 96% items beneficial. The Norman focus group had 92%, the Pryor focus group had 99%, and the Higher Education Professional focus group had 97% of the items as beneficial.

Figure 3

TSA Professional Group Means Benefits Across Time



Further analyzing, Figure 3 presents group means across time. The x axis refers to five focus group meetings that occurred in order. For example, the Durant focus group meeting occurred on September 11, 2007, and it is presented as Durant 09.11.07. The y axis presents the beneficial percentages of each group mean. Figure 3 indicates beneficial percentage group means over 95% except for the Norman focus group, which had a 93% beneficial rate.

Tukey Analysis

I used a one-way ANOVA (Analysis of Variance between groups) to conduct the Tukey analysis for individual differences of each group expert's evaluation across 14 TSA domains within each group. This analysis investigated whether everyone within a group agreed with each other's evaluation in the same group by each TSA domain. On each TSA professional version evaluation form, all items shared the same response scale (Yes = 1 and No = 0), so that high scores on the total scale indicate a higher beneficial rate on the TSA professional version. This section presents the results of the Tukey test with the significant level set at $\alpha = 0.05$. If $p > 0.05$, the focus group showed no significant differences for individual's scores; if $p < 0.05$, the focus group showed significant differences for individual's scores. The results of the Durant participants found no significant difference, $F(4, 65) = 0.084$; $p > 0.05$ as did the Tulsa participants ($F[7, 104] = 0.42$; $p > 0.05$), Norman participants ($F[6, 91] = 0.41$; $p > 0.05$), Pryor participants ($F[6, 91] = 0.031$; $p > 0.05$), and Higher Education participants ($F[4, 65] = 0.047$; $p > 0.05$). I then evaluated the individual mean differences within each focus group using the Tukey test.

Table 12

Tukey Analysis of Individual Means within Focus Groups on the Beneficial Rates of the TSA Professional Version

Source		The Beneficial Rate of The TSA Professional Version								
Durant Participants	*Participant*	*1*	*2*	*3*	*4*	*5*				Group Mean
	Mean	3.28	3.21	3.14	3.07	3.21				3.18
	Subset	1	1	1	1	1				
Tulsa Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	
	Mean	2.71	3.14	3.07	3.21	3.21	3.21	3.21	2.92	3.08
	Subset	1	1	1	1	1	1	1	1	
Norman Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	2.5	2.78	3.14	2.85	3.14	2.78	2.92		2.87
	Subset	1	1	1	1	1	1	1		
Pryor Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	3.57	3.57	3.57	3.57	3.5	3.35	3.57		3.53
	Subset	1	1	1	1	1	1	1		
Higher Ed. Participants	*Participant*	*1*	*2*	*3*	*4*	*5*				
	Mean	3.07	3.29	3.28	3.14	3.14				3.18
	Subset	1	1	1	1	1				

Table 12 demonstrates individual means for groups in homogeneous subsets within each focus group. The results show the homogeneous subset for each participant within the group. Individual participants categorized as subset 1 show homogeneity to each other. Therefore, there is no significant difference between individual means of beneficial rates of the TSA professional version evaluation within the group. The results indicate that each participant within the group agreed with each other as they evaluated the TSA Professional items.

Participant Quotes

Professionals considered the TSA professional version as beneficial for high school students with disabilities. The following quotes from focus group members demonstrate their strong positive opinions.

- "I believe it will help tremendously with better transition planning for students."
- "It helps my student to look at strengths for the future."
- "Student needs to be more involved in his/her IEP, and also be asked to describe his/her disability."
- "Students aren't aware of their disabilities as much as they should be and aren't involved enough in IEP and transition as they should be."
- "Yes, the TSA will benefit the students and help teachers evaluate how they are helping the kids transition and what areas they need to work on individually."
- "It is individualized which is very important."
- "It will help all involved think regarding transition aspects."
- "It helps students have the skills needed to advocate for themselves. It helps them become an "active" participant in their IEP."
- "Students learned knowledge about themselves."

Higher Education Professionals also believed this assessment tool would be beneficial for college students with disabilities, as indicated by their strong positive comments.

- "I really like the desire and goal questions. It will really help them achieve more."
- "I think they are beneficial especially since this test is based on research that suggests certain characteristics will result in greater success for students with disabilities."
- "My hope is that this test would only be a starting point. That if a person scores low in one area, the professional, parent and student decide to work on that area to improve that skill."
- "I think this test will help teachers to keep a transition focus."

Almost every professional stated how the TSA will assist them in their work with students with disabilities.

- ". . . because we can understand students more."
- "It would be beneficial to all persons wishing to use the tool while transitioning a student."
- "I think it will broaden how they may view students with disabilities in a comprehensive way and what challenges they must prepare to face."
- "The TSA helps educators identify areas of need."
- "It helped me get insight of students."
- "It would allow me to organize my thoughts on while the student is in a more holistic manner."
- "The TSA allows teachers more focus on transition."
- "This test allows me focus more on their strengths, etc."
- "It will be an effective tool to assist in post-secondary plans/goals."

- "The TSA allows teachers to know students' opinions about their strengths and weaknesses in regard to a variety of areas."
- "It should make educators more aware of crucial transition education behaviors. Educators will know areas of need but not the scope of the need."
- "Of course, it may assist in increasing teachers' awareness of the role they play in preparing students for the future."
- "For higher education, we will have a better understanding of our students and their backgrounds."
- "It could be aware of gaps."
- "It is not too time consuming."
- "It helps me get more insight into his/her ability to educate."
- "It provides very helpful information."
- "This tool will encourage protracted thought on transition issues."
- "It gave a better overall picture for my student."
- "I learned that are their goals aligned with strengths."
- "It will let me know what the student does or does not know and what areas to work on."
- "I will get more accurate and direct information about my students."

Overall, professionals viewed this assessment tool positively and believed that it will benefit high school and college students with disabilities, and it will aid professionals themselves. In addition, the professionals suggested that their modifications would increase the benefits of this assessment tool. However, many teachers and counselors presented concerns about completing this test. For example, two special education

teachers thought it would take them a lot of time to complete this test, and another teacher thought that this test would give them extra work to do. The Durant participant stated that "not all kids are going to live independently maybe semi-independently you're going to live with a brother or grandmother," and "to me it doesn't always mean living totally by yourself because to most kids living independently is impossible." Higher Education professionals had a few concerns about using this tool, and using it for their students.

- "It needs NA or No column on the rating scale."
- "I think that is probably a good idea. My only caution is that a person neither may more likely nor answer a question they could answer, stating they did not observe it enough. If the option is not available the person is forced to answer it—but it could be an incorrect representation of the student."
- "Someone might not take time to answer appropriately."
- "As I said in the professional evaluation, I am concerned that educators will fill it out and think that is all they need to do."

The TSA Student Version

The following section describes the beneficial percentage group means for the four focus groups that evaluated the TSA student version items. I used the same methods as previously mentioned to analyze the evaluation of the benefits to the TSA student version. Four focus groups (n = 26) discussed and evaluated the benefits of all TSA student version items.

Group Means Comparison

Table 13

TSA Student Version Group Means Beneficial Percentage

Group Name	Durant (n = 5)	Pryor (n = 7)	High School Students (n = 8)	College Students (n = 6)
Group Mean	89%	96%	88%	96%

Table 13 shows the beneficial percentage group means in order. The Durant focus group perceived 89% of the TSA student version items beneficial. The Pryor focus group considered 96%, high school students considered 88%, and college students considered 96% of the TSA student version items as beneficial.

Figure 4

TSA Student Group Means Benefits Across Time

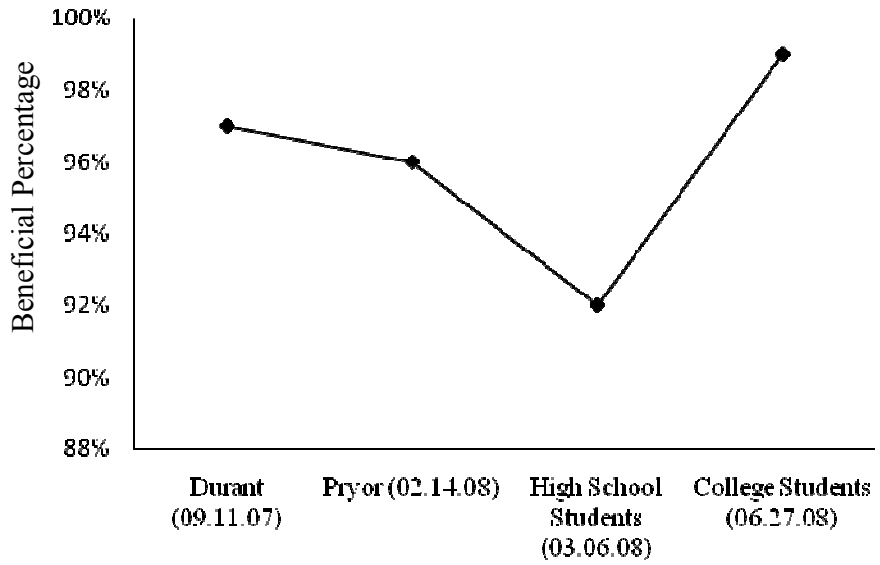


Figure 4 demonstrates group means across time. Although beneficial percentage group means improved from the Durant to the Pryor focus group, it decreased at the High School Student Group (Mean = 88%). In the last group meeting, the group mean of college students increased to a 96% beneficial rate. In general, the group means ranged from a low of 88% to a high of 96%.

Tukey Analysis

The result of a Tukey analysis found the High School participants (F [7, 104] = 3.62; $p < 0.05$) significant differences for individual means in the same group. Participants in other focus groups did not demonstrate significant differences: Durant participants (F [4, 65] = 0.84; $p > 0.05$), Pryor participants (F [6, 91] = 0.99; $p > 0.05$), and College participants (F [5, 78] = 0.121; $p > 0.05$). Participants in those focus groups had similar opinions with each other within the group. I then evaluated the individual mean differences within each focus group using a Tukey test.

Table 14

Tukey Analysis of Individual Means within Focus Groups on the Beneficial Rates of the TSA Student Version

Source		The Beneficial Rate of The TSA Student Version								
Durant Participants	*Participant*	*1*	*2*	*3*	*4*	*5*				Group Mean
	Mean	2.07	3.28	2.85	3.28	3.07				2.91
	Subset	1	1	1	1	1				
Pryor Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	3.14	3.57	3.5	3.42	3.5	3.28	3.5		3.41
	Subset	1	1	1	1	1	1	1		
High School Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	***6***	*7*	*8*	
	Mean	*2.14*	3.57	3.57	3.57	3.57	***1.42***	3.57	3.57	3.12
	Subset	*1,2*	2	2	2	2	***1***	2	2	
College Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*			
	Mean	3.21	3.28	2.85	3.14	3.28	3.21			3.16
	Subset	1	1	1	1	1	1			

The results of a Tukey test show the homogeneous subsets for each participant within the group as indicated in Table 14. Individual participants categorized as subset 1 show homogeneity to each other. Durant, Pryor, and College participants are all categorized as subset 1, which shows no significant difference between individual means of beneficial rate of the TSA Student evaluation within the group. However, evaluations of the high school group demonstrated that seven of the eight participants had equal scores within the group, but only participant 6 had a different evaluation compared to others within the High School focus group as shown in bolded in Table 14.

Participant Quotes

Professionals considered the TSA student version as beneficial and important for their students' transition. The following quotes from professional focus group members demonstrate their strong positive opinions.

- "We have work to do with students' transition."
- "Teachers should start using this test as soon as transition is addressed."
- "It allows teachers to know how much they understand what's going on in their academic and transition worlds."
- "It allows me to learn new things about the student."
- "I learn what my student and I need to discuss."
- "I learn that they need to be more involved in transition."
- "Being able to go over it with the students and to get them to talk about the different areas."

Similar to feedback of the TSA professional version, teachers and counselors also considered "time" as the key useable concern because "We don't have time to do it."

High school students expressed their positive views about using the TSA student version with the following comments:

- "I liked it, just change a few things and you got it down."
- "I liked how the test was made and set up. It made me think about what I want to do after school."
- "I like the test."
- "I liked it. It was different and interesting."
- "I think it kinda help me with understanding of transition. By testing this test it helped teachers and school staff."

The college students also believed that this assessment tool could be beneficial for students with disabilities.

- "This test gauges what they think about their transition situation."
- "This test should be used in sophomore year of their high school."
- "Of course, it is VERY beneficial."
- "This tool could enable educators to better understand the scope of crucial transition education behaviors."
- "I will use this tool if I were a special education teacher because it helps my students think about their disability."
- "I think teachers should use it in middle school or high school because they can begin to work on skills needed for successful transition."
- "The TSA provides valuable insight for students with disabilities."
- "I don't really know much about transition areas, but from what I could see the TSA covered the important areas."

- "From the TSA, you could learn how the program is affecting the student's progress in transition."
- "From the TSA, I learn strengths and opportunities."
- "This tool is helpful and informative."
- "The individuals in the wide range of age groups may need to understand the questions on the same level. With a thorough introduction and discussion before it would work very well."

However, one student expressed worries about this test. For example, one college student questioned its accuracy and "stigmas," involved in answering the questions.

- "Some students may be not willing to discuss family involvement and disability awareness, but I think this may be applicable at present. My experience is a background that involves negative stigmas and keeping secrets to avoid embarrassment."

Two high school students directly expressed their frustration about this test, such as "I really didn't get it," and "I was a little confused, but it was ok."

The TSA Family Version

Four focus groups (n = 28) discussed and evaluated the TSA family version items. Table 15 describes the beneficial percentage group means across time.

Group Means Comparison

Table 15

TSA Family Version Group Means Beneficial Percentage

Group Name	Tulsa (n = 8)	Norman (n = 7)	Family (n = 8)	Higher Ed. (n = 5)
Group Mean	88%	87%	97%	99%

As shown in Table 15, the Tulsa focus group determined 88% of the TSA family version items beneficial. The Norman focus group had 87%, the Family group had 97%, and Higher Education professional focus group had 99% of the TSA family version items as beneficial.

Figure 5

TSA Family Group Means Benefits Across Time

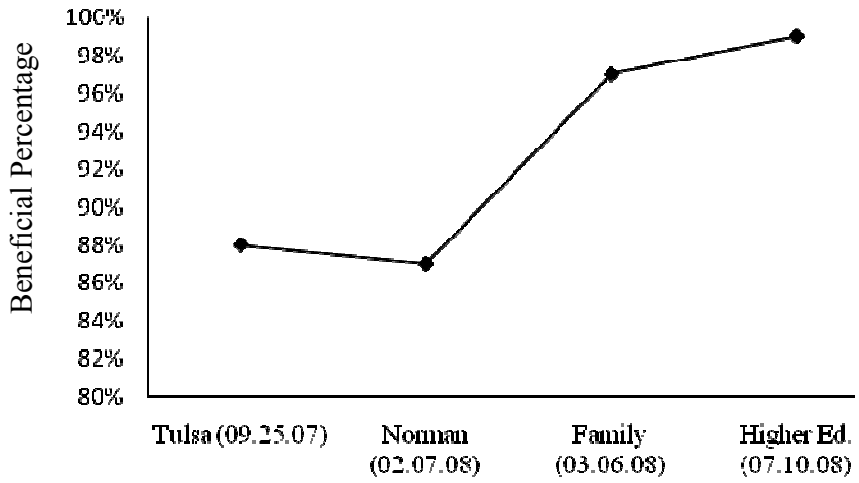


Figure 5 depicts group means across time. The Tulsa and Norman focus groups concluded a similar beneficial percentage of the TSA family version items (88% and 87%). The Family and Higher Education Professional focus groups improved the

beneficial rate to 97% and 99% separately. In general, the beneficial percentage group means for the four focus groups demonstrated improvement every time after each modification.

Tukey Analysis

According to a one-way ANOVA analysis, the results of Tulsa participants found a significant difference for individual means in the same group (F [7, 104] = 3.96; $p < 0.05$). Other focus groups did not demonstrate significant differences: Norman participants (F [6, 91] = 1.69; $p > 0.05$), Family participants (F [7, 104] = 0.57; $p > 0.05$), and Higher Ed. participants (F [4, 65] = 0.007; $p > 0.05$). Groups that did not show significant differences had similar evaluations with each other in the same group. I then evaluated the individual mean differences within each focus group using a Tukey test.

Table 16

Tukey Analysis of Individual Means within Focus Groups on the Beneficial Rates of the TSA Family Version

Source		The Beneficial Rate of The TSA Family Version								
Tulsa Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	***8***	Group Mean
	Mean	*2.28*	3.21	3.07	3.21	3.21	3.21	3	***1.42***	2.83
	Subset	*1,2*	2	2	2	2	2	2	***1***	
Norman Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	2.71	2.92	3.14	1.78	2.57	3.14	2.78		2.72
	Subset	1	1	1	1	1	1	1		
Family Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	
	Mean	3.57	2.57	3.57	3.57	3.57	3.57	3.57	3.57	3.44
	Subset	1	1	1	1	1	1	1	1	
Higher Ed. Participants	*Participant*	*1*	*2*	*3*	*4*	*5*				
	Mean	3.21	3.28	3.21	3.21	3.28				3.24
	Subset	1	1	1	1	1				

The results of a Tukey test show the homogeneous subsets for each focus group except the Tulsa group as indicated in Table 16. Individual participants categorized as subset 1 show the homogeneity to each other. Norman, Family, and Higher Education participants' scores categorized as subset 1 demonstrated similarities of each participant's evaluation within each group. Seven of the eight participants had homogeneous evaluations in the same group, and only participant 8 demonstrated different evaluation on the TSA family version than other participants in the same group as shown in bolded in Table 16.

Participant Quotes

Professionals considered the TSA family version beneficial to parents who have children going through the transition process.

- "Parents may be enlightened about issues needed to be discussed."
- "Yes, I believe they will allow parents to focus more on their child's post-secondary plans."
- "Parents get to know what their child's vocational interests and skills are."
- "It will encourage thinking and promote greater transition planning."
- "I think it enables the parents to ask or request teachers to help their kids' transition better."
- "It will get parents thinking about their child."
- "It will help parents and teachers to work together."

Parents also perceived the TSA family version beneficial for their children in the transition process.

- "These assessments will be beneficial because they are continued on a yearly basis."
- "I think the assessment is a positive approach to unify the students, parents and other adults."
- "Assessment is good and needs to be kept working. Students need to do one every year so you can see the improvement."

However, professionals had some concerns using the TSA family version with their parents.

- "Parents involvement in completing it who are not active in their kids IEP's."
- "Parent's readying level; are they actively involved with child's school and will they follow through?"
- "I think it depends on their interest level to determine if parents understand the scope of crucial transition education behaviors."

Summary

The group means of focus groups demonstrated a high beneficial percentage level across all three TSA versions. The average beneficial percentage on the TSA professional version yielded 96.2%. The TSA student version had 92.25% and the TSA family version had 92.73% of the items rated beneficial.

Beneficial Percentage Group Means on TSA Versions

Regarding the change of group means, only the beneficial percentage group means on the TSA family version improved consistently over time. The group means on both the TSA professional and student versions did not demonstrate improvement across time. The beneficial percentage group means on the TSA professional version varied

across time. Although the fourth focus group meeting in Pryor rated the TSA professional version the highest, the other focus groups did not improve the beneficial percentage in order. The first focus group meeting—the Durant focus group— perceived a higher beneficial rate on the TSA professional version than the second and third group meetings. The same finding occurred with the TSA student version. The Pryor group rated the TSA student version higher than the first and third focus groups.

Individual Agreement within Each Group

The results of a one-way ANOVA and Tukey test indicated no significant differences for each participant's scores within a focus group. To be more specific, the groups that evaluated all TSA professional version items found no significant differences for individual scores within the group. When group members evaluated the TSA student version items, the High School Students group presented statistically significant differences on the evaluation scores in the group. High School students rated lower than other groups. When group members evaluated the TSA family version items, the Tulsa group demonstrated significant individual differences. Only one of the group members in those two groups (the High School Student and Tulsa Groups) demonstrated different evaluation scores than others within the group.

Participant Quotes

Group member comments supported the results of the statistical analysis. Most group members considered the TSA instrument important and beneficial for both high school students and students in postsecondary education. The TSA instrument helps professionals collect the student's background information to be able to better develop transition planning, and also helps students to be aware of their disabilities and other

transition behaviors that they can improve. This instrument makes students think about what they want to do after school and what they can do now to achieve their goals. In addition, the TSA enlightens parents on the issues that they need to discuss with their child. The TSA may help parents put more efforts into their child's postsecondary plans. It is not just another assessment tool; it provides an opportunity for professionals, students, and parents to work together for the same purpose, to help students with disabilities to achieve a successful transition to adult life.

However, three higher education professionals thought the TSA didn't cover all the important transition areas,

- "I think the family involvement was not very comprehensive and may not show an accurate picture of the family's involvement. Also, I think it is important to cover resources— do the students have their basic needs (food, shelter water, safety). If a student does not have these then they won't be successful."
- "I wonder if the research shows that lack of community resources results in lower success. Students who do not have access to proper medical care, do not have healthy meals or who need mental health or community support (i.e. church). Also, the family involvement section seemed too small to me."
- "I think a family member attending or not attending an IEP is a good indication. However, a single parent may have a job that makes it difficult for them to attend IEPs but the parent could be really connected and supportive of the student (maybe attends their games, provides emotional support). Also, visa-a-versa a parent may go to the IEP but is not actively involved in the

student's life. Maybe a general question asking is the family actively involved in the student's life."

Group experts also presented their concerns about the application of this new transition assessment instrument. For example, some teachers might think it is extra work for them to complete; other teachers would think it takes them a lot of time; they also concerned that parents who will complete this test are not actively involved in their child's IEP meetings or not interested in their child's transition.

Research Question Three

Did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive that the TSA is understandable for secondary students with mild to moderate disabilities?

Overview

The following section presents the understandable percentage group means of focus group evaluations on the TSA version items. I used the same methods in research question two to present the change of the group means across time. A one-way ANOVA investigated the individual differences of each member's evaluation within each group. Lastly, I quoted participants' comments regarding the benefits of using the TSA instrument.

The TSA Professional Version

Five focus groups (n = 32) evaluated and determined if the wording of the TSA professional version items is understandable. This analysis determined if the understandable percentage improved after each modification across time. Table 17 describes the TSA professional understandable percentage group means.

Group Means Comparison

Table 17

TSA Professional Version Group Means Understandable Percentage

Group Name	Durant (n = 5)	Tulsa (n = 8)	Norman (n = 7)	Pryor (n = 7)	Higher Ed. (n = 5)
Group Mean	97%	95%	91%	99%	88%

As shown in Table 17, the Durant focus group determined 97% of the TSA professional version items understandable. The Tulsa focus group had 95% items understandable. The Norman focus group rated 91%, the Pryor focus group found 99%, and the Higher Education Professional focus group perceived 88% of the items as understandable.

Figure 6

TSA Professional Group Means Understanding Across Time

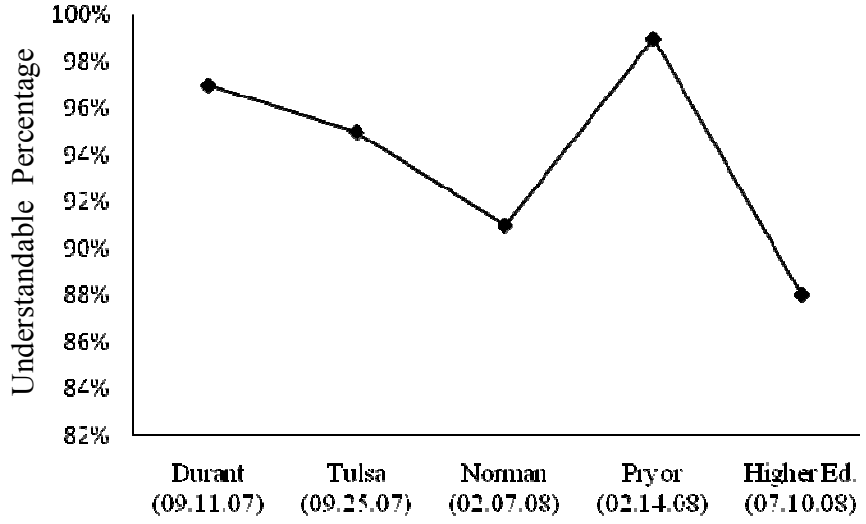


Figure 6 suggests the understandable percentage group means did not show consistent improvement across time. The understandable percentage decreased from

Durant focus group to Norman focus group and increased to Pryor focus group. The Higher Education professionals rated the understandable percentage lower than other focus groups. The understandable percentage group means over 90% except for the Norman focus group, which had a 88% understandable rate.

Tukey Analysis

Durant participants found no significant difference for each participant's scores on the evaluation, F (4, 65) = 0.084; $p > 0.05$ as did the Tulsa participants (F [7, 104] = 0.575; $p > 0.05$), Norman participants (F [6, 91] = 0.583; $p > 0.05$), Pryor participants (F [6, 91] = 0.056; $p > 0.05$), and Higher Ed. Participants (F [4, 65] = 2.84; $p > 0.05$). All focus group participants had similar evaluations with each other in the same group. I then used a Tukey test to further analyze the individual mean differences within each focus group.

Table 18

Tukey Analysis of Individual Means within Focus Groups on the Understandable Rates of the TSA Professional Version

Source		The Beneficial Rate of The TSA Professional Version								
Durant Participants	*Participant*	*1*	*2*	*3*	*4*	*5*				Group Mean
	Mean	3.28	3.21	3.14	3.07	3.21				3.18
	Subset	1	1	1	1	1				
Tulsa Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	
	Mean	2.71	3.21	3.14	3.07	3.21	3.21	3.14	2.71	3.05
	Subset	1	1	1	1	1	1	1	1	
Norman Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	2.78	2.78	3.14	2.85	3.14	2.35	2.92		2.85
	Subset	1	1	1	1	1	1	1		
Pryor Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	3.57	3.57	3.57	3.71	3.5	3.35	3.5		3.54
	Subset	1	1	1	1	1	1	1		
Higher Ed. Participants	*Participant*	*1*	*2*	*3*	*4*	*5*				
	Mean	3	3.28	3.28	1.64	3.21				2.88
	Subset	1	1	1	1	1				

Table 18 demonstrates individual means for groups in homogeneous subsets within each group. The results show the similarities of all participants' scores on the TSA professional evaluation within each group. Individual participants categorized as subset 1 show the homogeneity to each other. Thus, there is no significant difference between individual means of understandable rates of the TSA professional version evaluation within the group. Each participant within the group agreed with each other's evaluation on the TSA professional version items.

Participant Quotes

Professionals considered the TSA professional version easy to understand and straightforward.

- “I found this tool to be very understandable to quite straightforward.”
- “It was right to the point!”
- “The questions were simple to understand.”
- “Yes, the TSA is very clear.”
- “It is clear and to the point.”
- “Yes, all TSA items are understandable, very good job and very well organize.”
- “Yes, it is well-rounded.”
- “The TSA is very user friendly and offers conclusions for students.”
- “It was self-explanatory.”

Participants expressed satisfaction with the changes and suggestions made during the discussion and believed those changes made this tool more understandable.

- “The questions were understandable, but many times it was just the wording needed changed.”
- “Other than the wording on several of the questions, I enjoyed this tool and feel it provides a great opportunity for useful results.”
- “The TSA is understandable provided word changes are made.”
- “The TSA is very understandable especially after our meetings.”
- “I think a few words need to be changed in order to make it more understandable, to limit misunderstanding.”

Participants also thought the rating scale made the tool more understandable.

- “Specific and direct questions are used, and the use of a Likert system made the TSA easy to use.”

- "The TSA is easy to use, and the rating scale also improved the TSA to be more understandable."
- "I think this test would be a quick tool to use."

The TSA Student Version

The following section describes the understandable percentage group means for the TSA student version items. Four focus groups (n = 26) discussed and evaluated understanding of all TSA student version items.

Group Means Comparison

Table 19

TSA Student Version Group Means Understandable Percentage

Group Name	Durant (n = 5)	Pryor (n = 7)	High School Students (n = 8)	College Students (n = 6)
Group Mean	89%	96%	81%	95%

As shown in Table 19, the Durant focus group found 89% of the TSA professional version items understandable. The Pryor focus group perceived 96%, high school students found 81%, and college students considered 95% of the TSA student version items as understandable.

Figure 7

TSA Student Group Means Understanding Across Time

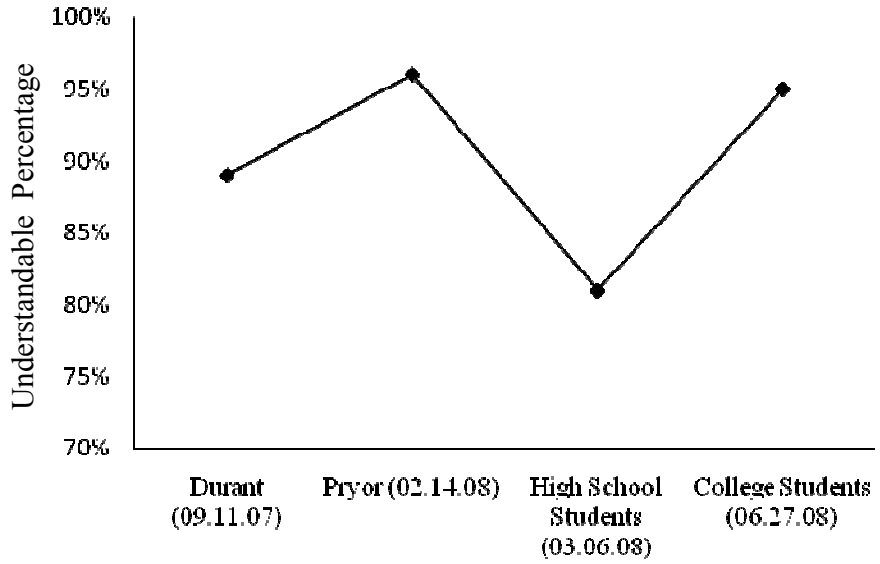


Figure 7 indicates that although the group means improve from the Durant to the Pryor focus group, it declined dramatically with the High School Student Group. In general, the understandable percentage group means stayed about 90% or higher except for the High School Student group.

Tukey Analysis

The result of a Tukey analysis with the High School participants (F [7, 104] = 2.59; $p < 0.05$) found statistically significant individual means. Participants in other focus groups did not demonstrate significant differences: Durant participants (F [4, 65] = 2.37; $p > 0.05$), Pryor participants (F [6, 91] = 0.99; $p > 0.05$), and College participants (F [5, 78] = 0.20; $p > 0.05$). I then evaluated the individual mean differences within each focus group using a Tukey test.

Table 20

Tukey Analysis of Individual Means within Focus Groups on the Understandable Rates of the TSA Student Version

Source		The Beneficial Rate of The TSA Student Version								
Durant Participants	*Participant*	*1*	*2*	*3*	*4*	*5*				Group Mean
	Mean	2.07	3.18	2.85	3.28	3.07				2.91
	Subset	1	1	1	1	1				
Pryor Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	3.14	3.57	3.5	3.42	3.5	3.5	3.28		3.41
	Subset	1	1	1	1	1	1	1		
High School Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	***6***	*7*	*8*	
	Mean	2.14	*3.57*	2.85	*3.57*	3.21	***1.42***	3.21	3	2.87
	Subset	1,2	*2*	1,2	*2*	1,2	***1***	1,2	1,2	
College Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*			
	Mean	3.14	3.21	2.71	3.21	3.28	3.21			3.13
	Subset	1	1	1	1	1	1			

The results of a Tukey test showed the homogeneous subsets of each participant's scores within the group as indicated in Table 20. Individual participants categorized as subset 1 showed homogeneity to each other. Durant, Pryor, and College participants showed no significant individual differences on the TSA Student evaluation within each group. However, high school participants presented the diverse evaluations within the group. Participant 6 rated understandable different from others within the group as shown in bolded in Table 20. In general, the evaluation scores of each participant within three of the four focus groups presented the similarities on the TSA student version items.

Participant Quotes

Professionals considered the TSA student version as understandable and straight forward to their students.

- "It is easy for them to understand and to complete."

- "It is very clear."
- "It is simple and easy to understand."

Two high school students considered the TSA student version items as easy to understand.

- "I thought for the most part it was pretty easy to understand."
- "I think this assessment is pretty good and easy to use. It just needs a little work."

College students reported the TSA student version as an easy tool to use.

- "Overall, the TSA is understandable, especially a description of each domain in a short paragraph."
- "The TSA is understandable; a few adjustments to questions are needed."
- "The TSA is easy to use because the majority of the questions are easily understandable."
- "I think the TSA is easy to use because of short sentences."
- "The descriptions for each area are easy to understand to help speed up to answer the questions with ease."

The TSA Family Version

Four focus groups (n = 28) discussed and evaluated all items of the TSA family version items. Table 21 describes the understandable percentage group means across time.

Group Means Comparison

Table 21

TSA Family Version Group Means Understandable Percentage

Group Name	Tulsa (n = 8)	Norman (n = 7)	Family (n = 8)	Higher Ed. (n = 5)
Group Mean	88%	89%	97%	88%

As indicated in Table 21, the Tulsa focus group determined 88% of the TSA family version items understandable. The Norman group concluded 89%, the Family group perceived 97%, and the Higher Education Professionals group considered 88% of the TSA family version items as understandable.

Figure 8

TSA Family Group Means Understanding Across Time

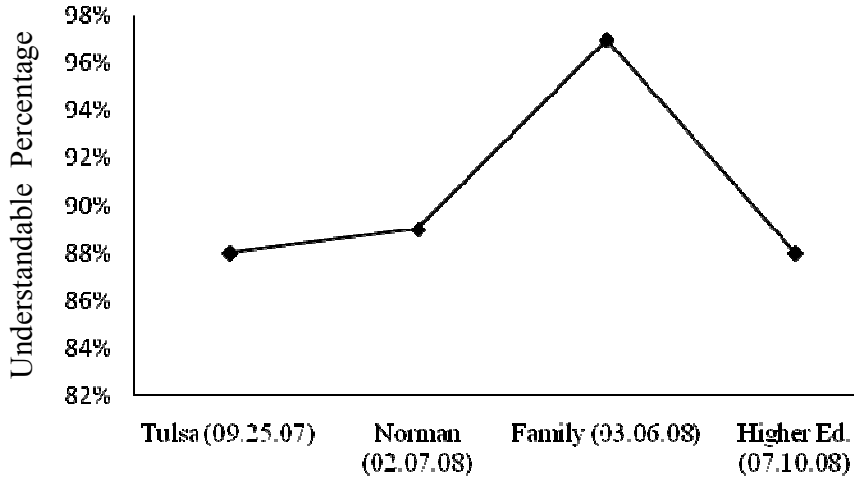


Figure 8 depicts group means across time. The understandable percentage Group means improved consistently from the Tulsa focus group (88%) to the Family focus

group (97%) but declined when the Higher Education Professionals focus group (88%) evaluated the items.

Tukey Analysis

The results of a one-way ANOVA analysis indicated the Tulsa participants (F [7, 104] = 4.089; $p < 0.05$) and Higher Ed. participants (F [4, 65] = 3.82; $p < 0.05$) found statistically significant individual means. Other focus groups did not demonstrate significant individual differences within each group: Norman participants (F [6, 91] = 2.18; $p > 0.05$) and Family participants (F [7, 104] = 0.57; $p > 0.05$). I then analyzed the individual mean differences using a Tukey test.

Table 22

Tukey Analysis of individual Means within Focus Groups on the Understandable Rates of the TSA Family Version

Source		The Beneficial Rate of The TSA Family Version								
Tulsa Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	***8***	Group Mean
	Mean	*2.28*	3.21	3.07	3.21	3.21	3.21	3	***1.42***	2.83
	Subset	*1,2*	2	2	2	2	2	2	***1***	
Norman Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*		
	Mean	2.71	2.92	3.14	1.78	2.57	3.14	2.78		2.72
	Subset	1	1	1	1	1	1	1		
Family Participants	*Participant*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	
	Mean	3.57	2.57	3.57	3.57	3.57	3.57	3.57	3.57	3.44
	Subset	1	1	1	1	1	1	1	1	
Higher Ed. Participants	*Participant*	*1*	*2*	*3*	***4***	*5*				
	Mean	3.21	3.28	3.28	***1.36***	3.28				2.88
	Subset	2	2	2	***1***	2				

As indicated in Table 22, the results of a Tukey test show the homogeneous subsets for Norman and Family participants, in which evaluations of individual participants within these two groups are homogeneous. Participants in Tulsa and Higher

Education groups demonstrated the individual differences on TSA family evaluation within the group. Seven of the eight participants in the Tulsa group and four of the five participants in the Higher Education group had equal evaluations within the group. Tulsa participant 8 and Higher education participant 4 had different evaluations with other group members in the same group as shown in bolded in Table 22. In general, two of the four groups presented homogenous evaluations on the TSA family version items.

Participant Quotes

Professionals rated the TSA family version items as understandable and clear.

- "Yes, it is very clear."
- "I think this assessment is very clear and helpful to keep track of where the student is and where they are lacking and need help."
- "I think this assessment was very understandable. Just needs a few clarifications on some words. This needs to be an ongoing thing."
- "Yes, it is understandable and it has simple questions."

One professional presented his/her concern about parents returning the test:

- "Yes, items of this version are clear, but some parents may not complete it if sent home with them."

Parents indicated the overall TSA family version items were clear and easy for them to understand.

- "It is simple to understand and not time consuming and it covers a variety of areas."
- "It is specific, not wordy, in basic language."

- "Overall, this assessment seemed clear and to the point. I feel that this assessment does a good job."

Summary

Overall, the focus group indicated a high level of understanding across the three TSA versions. The TSA professional version received a 94% understanding rating, the TSA student version received a 90.25% understanding rating and the TSA family version had a 90.5% understanding rating.

Understandable Percentage Group Means on TSA Versions

The three TSA versions demonstrated inconsistent improvement on the understanding percentage group means. The Pryor group rated the highest level of the understanding on the TSA professional and student versions. High school students presented the lowest rate of the understanding on the TSA student version, and parents rated the highest rate of the understanding on the TSA family version.

The results of a one-way ANOVA and Tukey test examined the homogeneity of each participant's evaluation on the three TSA versions. The results found no significant differences for individual's evaluations on the TSA professional version. One of the four groups showed significant differences on the TSA student version items for each participant's evaluations; and one of the four groups showed significant differences on the TSA family version items for individual's evaluations.

Participant Quotes

The coding from professionals, parents, and students concluded that the TSA instrument was easy to use, very understandable and clear, quite straightforward, and to

the point. All group experts believed the modifications, short and simple questions, and the rating scale improved the understanding of the TSA instrument.

Although most group experts thought the TSA was easy to use, some of them suggested that they would like to see instructions accompany the TSA. Some higher education professionals thought the TSA may not be used for college students, but they would like to see it's use high schools. Although they were uncertain about using the TSA in college, they viewed this test as a tool to ensure all students receive appropriate transition services. Besides those concerns, group experts suggested students use this assessment in the 8th grade and above. All thought that once the test takers are familiar with the TSA, it may only 10 to 15 minutes to complete.

PHASE II STUDY RESULTS

The Phase II study determined the test-retest reliability and the internal consistency reliability of the TSA professional, student, and family versions. The following sections detail the findings from 201 participants (62 professionals, 104 students, and 35 parents), which included the test-retest reliability across the TSA total and domain scores and the Cronbach's alpha across the TSA item and domain scores. Each student and parent completed one TSA version based on their role, and each professional completed one to three TSA professional versions for their students with disabilities. Forty-three professionals, 87 students, and nine parents (n = 225) completed the same TSA instruments four weeks after completing it the first time.

Research Question Four

Did the test-retest correlation coefficients of the TSA total and domain scores for the parent, student, and professional versions equal or exceed .75?

Test-retest reliability is the method to assess how scores remain consistent from one occasion to another (DeVellis, 2003). Same groups of professionals, students, and parents completed two administrations of the three TSA versions (professional, student, and family) four weeks apart. The scores from the first administration could be correlated with those from the later administration. The following section provides the results of the test-retest correlation coefficients of the three TSA versions.

Table 23

Test-retest Correlation Coefficients of the Total and Domain Scores for the TSA Professional, Student, and Family Versions

Domains \ Total Scores	The TSA Professional (n = 129)	The TSA Student (n = 87)	The TSA Family (n = 9)
	$r = .80$, $p < .01$	$r = .76$, $p < .01$	$r = .89$, $p < .01$
A. Desires	$r = .68$, $p < .01$	$r = .59$, $p < .01$	$r = .82$, $p < .01$
B. Goals	$r = .71$, $p < .01$	$r = .69$, $p < .01$	$r = .87$, $p < .01$
C. Strengths	$r = .70$, $p < .01$	$r = .54$, $p < .01$	$r = .90$, $p < .01$
D. Limits	$r = .64$, $p < .01$	$r = .61$, $p < .01$	$r = .97$, $p < .01$
E. Disability Awareness	$r = .70$, $p < .01$	$r = .67$, $p < .01$	$r = .97$, $p < .01$
F. Persistence	$r = .65$, $p < .01$	$r = .66$, $p < .01$	$r = .82$, $p < .01$
G. Use of Effective Support Systems	$r = .70$, $p < .01$	$r = .41$, $p < .01$	$r = .57$, $p < .01$
H. Coping Skills	$r = .66$, $p < .01$	$r = .47$, $p < .01$	$r = .46$, $p < .01$
I. Social Skills	$r = .73$, $p < .01$	$r = .25$, $p < .05$	$r = .97$, $p < .01$
J. Proactive Involvement	$r = .78$, $p < .01$	$r = .68$, $p < .01$	$r = .91$, $p < .01$
K. Making Positive Choices	$r = .66$, $p < .01$	$r = .74$, $p < .01$	$r = .93$, $p < .01$
L. Transition Education Involvement	$r = .64$, $p < .01$	$r = .50$, $p < .01$	$r = .87$, $p < .01$

As depicted in Table 23, a series of correlation analyses indicated that the test-retest reliability of the final, 41-item total scores of the TSA professional, student, and family versions exceeded .75. The TSA professional version had .80 correlation coefficients for two administrations, the TSA student version a .76, and the TSA family version a .89 correlation coefficients respectively ($p < .01$). The correlation coefficients of each domain on the TSA professional version ranged from .64 to .80 ($p < .01$). The correlation coefficients of each domain on the TSA student version ranged from .25 to .76 ($p < .01$), and .46 to .97 for the TSA family version ($p < .01$). When the correlation coefficients demonstrate statistically significant, the correlation between two tests become strong.

For the TSA professional version, domains of goals, strengths, disability awareness, use of effective support systems, social skills, and proactive involvement demonstrated acceptable reliabilities ($r = .70+$, $p < .01$). For the TSA student, the domain of Making Positive Choices presented high correlation reliability between two administrations, but domains of Desires, Strengths, Use of Effective Support Systems, Coping Skills, Social Skills, and Transition Education Involvement demonstrated lower correlation reliability between two administrations ($r = .60-$). For the TSA family version, almost every domain demonstrated high correlation reliability across two administrations except the domains of use of effective support systems and coping Skills.

Research Question Five

Did the Cronbach alpha of TSA item scores for the parent, student, and professional versions equal or exceed .80?

Technically, Cronbach's alpha is a measure of the squared correlation between observed scores and true scores (Carmine & Zeller, 1979). To answer question five, internal consistency of each item of the TSA professional version, the TSA family version, and the TSA student version and its domain scores were examined using coefficient alphas. According to Nunnally (1978), alphas of .70 signify acceptable, .80 signifies well, and .90 signifies excellent reliabilities respectively. Forty items, excluding the items of I2 and J5, were examined across the three TSA versions. Domains H and I of the TSA could not be assessed for the Cronbach's alpha because those two domains only included "yes" and "no" in the scale. The following section presents both the results of Cronbach's alphas of each TSA item and domain scores for all three versions.

The TSA Professional, Student, and Family Versions showed excellent internal consistency. As shown in Table 24, Cronbach's alpha of the TSA Professional was 0.95 (Mean = 100.46, SD = 26.58). The Cronbach's alpha of the TSA student version was 0.93 (Mean = 115.63, SD = 26), and the Cronbach's alpha of the TSA family version was 0.94 (Mean = 81.47, SD = 28.17). These results indicate the high internal reliability of the three TSA versions present.

The Cronbach's alpha for the individual domains of the TSA student version ranged from 0.52 to 0.92. The Cronbach's alpha for the individual domains of the TSA professional and family versions ranged from .68 to .92 and .65 to .88 respectively. Table 23 provides the summary of internal consistency reliability on all three TSA versions.

Table 24

Internal Consistency of Each Domain and Total Scores of the TSA Professional, Student, and Family Versions

	Cronbach's α		
	TSA Professional Version (n = 267)	TSA Student Version (n = 176)	TSA Family Version (n = 36)
39 items / Domain	Overall α = 0.95	Overall α = 0.93	Overall α = 0.94
A. Desires	0.68	0.55	0.74
B. Goals	0.80	0.75	0.86
C. Strengths	0.81	0.70	0.86
D. Limits	0.84	0.92	0.88
E. Disability Awareness	0.92	0.87	0.88
F. Persistence	0.68	0.73	0.78
G. Use of Effective Support Systems	0.88	0.84	0.88
H. Coping Skills	n/a	n/a	n/a
I. Social Skills	n/a	n/a	n/a
J. Proactive Involvement	0.82	0.52	0.67
K. Making Positive Choices	0.72	0.52	0.72
L. Transition Education Involvement	0.68	0.82	0.65

As depicted in Table 25, the Corrected Item-Total Correlation refers to the correlation of each item with the sum/total of the other items of the TSA instrument. If the correlation is moderately high or high (e.g., > .40), the item is probably at least moderately correlated with most of the other items, and will make a good component of this assessment. However, if the item-total correlation is negative or too low (e.g., < .40),

the item should be re-examined. The column of Alpha if Item Deleted indicates what the alpha would be if the researcher deleted the item (Leech, Barrett, & Morgan, 2008).

As indicated in Table 25, the TSA professional version presented item-total correlations ranged from .18 to .67. The results indicated items D3 “Within the last year the student communicated independent living limits related to his/her disability,” J1 “Within the last year the student participated in school organizations,” and K2 “Within the last year the student made positive employment choices and acted on them” had lower item-total correlations with the other items of the TSA professional version. If we delete those items (D3, J1, and K3), the Cronbach’s alpha will be increased to .95. Table 25 describes the summary of item-total statistics for the TSA professional version.

Table 25

Item-Total Statistics for the TSA Professional Version

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A1	97.6255	672.671	.657	.948
A2	97.6030	677.549	.520	.949
A3	98.0487	676.077	.492	.949
B1	97.8764	669.522	.680	.948
B2	97.7341	672.647	.619	.948
B3	98.1461	671.388	.573	.948
B4	98.0037	667.613	.747	.947
C1	98.1536	669.386	.676	.948
C2	98.1798	676.509	.587	.948
C3	98.2846	674.031	.613	.948
C4	98.0787	668.862	.675	.948
D1	98.3521	676.522	.513	.949
D2	98.9775	679.804	.461	.949
D3	99.1985	687.257	.317	.950
D4	98.7303	667.476	.626	.948

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E1	98.4682	672.964	.535	.949
E2	98.5918	666.964	.570	.948
E3	98.4270	665.471	.627	.948
F1	97.6816	672.676	.615	.948
F2	97.9963	669.530	.569	.948
F3	98.1236	673.011	.558	.948
G1	97.5655	675.450	.608	.948
G2	97.3221	678.392	.613	.948
G3	97.9625	671.743	.594	.948
G4	97.7528	672.623	.597	.948
G5	97.7790	680.827	.433	.949
G6	97.6442	682.546	.412	.949
H1	97.8577	677.521	.597	.948
I1	97.4007	683.196	.566	.949
J1	96.6367	698.074	.182	.950
J2	98.3034	669.558	.490	.949
J3	98.7528	665.736	.585	.948
J4	97.7041	675.442	.566	.948
K1	97.6891	671.666	.633	.948
K2	98.0936	668.860	.334	.952
K3	97.7453	669.777	.686	.948
L1	98.0899	664.375	.589	.948
L2	98.2697	669.145	.590	.948
L3	97.4944	673.093	.606	.948

For the TSA student version, the inter-item correlation ranged from -.12 to .85 with a mean of .26. As shown in Table 26, the TSA student version presented item-total correlations ranged from .17 to .64, which had lower than those of the TSA professional version. Five rather than three items had lower item-total correlation (<.40) compared to the other items of the TSA student version. The items of A2 “I want a job,” A3 “I want to live independently with or without help,” J1 “Within the last year I participated in school

organizations," J4 "Within the last year I was important to my friends," and K2 "Within the last year I made good job choices and acted on them" had lower item-total correlation with the other items of the TSA student version. If those identified items were deleted, the Cronbach's alpha will be increased to .93. Table 26 describes the summary of item-total statistics for the TSA student version.

Table 26

Item-Total Statistics for the TSA Student Version

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A1	112.0114	657.166	.485	.930
A2	112.0114	666.251	.281	.931
A3	112.3466	659.668	.329	.931
B1	112.8068	638.934	.635	.928
B2	112.6989	640.280	.597	.929
B3	112.5852	645.696	.514	.929
B4	112.7557	643.294	.532	.929
C1	112.6989	651.332	.473	.930
C2	112.5625	645.585	.549	.929
C3	112.7386	646.046	.489	.929
C4	112.7386	639.897	.615	.928
D1	113.3352	639.618	.468	.930
D2	113.5398	631.644	.549	.929
D3	113.6818	634.470	.497	.930
D4	113.5170	629.828	.572	.929
E1	113.1307	640.423	.436	.930
E2	113.4886	629.954	.569	.929

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E3	113.5511	627.792	.594	.928
F1	112.3182	650.858	.549	.929
F2	112.5909	638.975	.584	.929
F3	112.6023	637.509	.593	.928
G1	113.0114	641.657	.529	.929
G2	112.7386	643.954	.562	.929
G3	112.7784	652.928	.415	.930
G4	112.6818	649.864	.462	.930
G5	112.6705	651.856	.412	.930
G6	112.5966	646.836	.498	.929
H1	112.4886	653.063	.438	.930
I1	112.2500	656.897	.472	.930
J1	112.0227	661.039	.383	.930
J2	113.3523	641.338	.433	.930
J3	113.6818	640.058	.441	.930
J4	112.2727	664.108	.217	.932
K1	112.1818	658.344	.401	.930
K2	112.6989	657.617	.173	.934
K3	112.5227	647.622	.584	.929
L1	112.7727	638.302	.556	.929
L2	113.2102	643.116	.447	.930
L3	113.2159	634.422	.567	.929

The analysis of the TSA family version items presented a range of -.43 to .9 inter-item correlations with a mean of .24. As shown in Table 27, the item-total correlations ranged from -.14 to .80. The results indicated 13 TSA Family items had lower item-total

correlations compared to the other items: all domain Limits items, all domain Disability Awareness items, G4 “Within the last year my child accepted advice or help from peers or friends,” G6 “Within the last year my child accepted advice or help from a family member,” I1 “Within the last year my child got along with other people,” J1 “Within the last year my child participated in school organizations,” and K1 “Within the last year my child made positive academic choices and acted on them” had lower item-total correlations compared to the other items of the TSA family version. If I deleted those 13 items, the Cronbach’s alpha would increase to .94. Table 27 describes the summary of the item-total statistics for the TSA family version.

Table 27

Item-Total Statistics for the TSA Family Version

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A1	78.9722	740.428	.729	.933
A2	78.9167	742.079	.670	.934
A3	79.7500	752.536	.491	.935
B1	79.4167	745.107	.668	.934
B2	79.3056	741.818	.750	.933
B3	79.5833	754.364	.534	.935
B4	79.6111	741.559	.659	.934
C1	79.4722	746.313	.674	.934
C2	79.6944	745.361	.687	.934
C3	80.0556	750.568	.674	.934
C4	79.8333	748.886	.660	.934
D1	79.9722	782.771	.143	.938
D2	80.2222	769.321	.358	.936

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
D3	80.5833	768.707	.393	.936
D4	80.4722	767.513	.381	.936
E1	79.8611	782.809	.136	.938
E2	80.2222	777.035	.226	.937
E3	80.2778	769.349	.403	.936
F1	78.8889	742.044	.749	.933
F2	79.3056	735.418	.696	.933
F3	79.3889	761.844	.438	.936
G1	78.9722	754.199	.598	.934
G2	78.8889	752.216	.632	.934
G3	79.5278	771.571	.304	.937
G4	79.4444	772.940	.280	.937
G5	78.5833	768.821	.426	.936
G6	78.8611	768.352	.384	.936
H1	78.9722	759.171	.647	.934
I1	78.1111	790.902	.050	.938
J1	78.0278	778.142	.173	.938
J2	79.6667	744.286	.557	.935
J3	80.2778	752.778	.557	.935
J4	78.3611	764.866	.446	.936
K1	78.7222	770.492	.259	.937
K2	79.2778	731.749	.536	.935
K3	79.1944	729.818	.801	.932
L1	79.6667	739.314	.618	.934
L2	80.4722	755.628	.504	.935
L3	79.6667	740.171	.615	.934

Overall, the Cronbach's alpha of each item and domain scores for the three TSA versions exceeded .80; .95 for the TSA professional version, .93 for the TSA student version, and .94 for the TSA family version. The excellent reliability of the three TSA versions indicated the scores of the TSA yielded the same results consistently on repeated trials and were reliable across 39 items. For the TSA professional version, the analyses presented that domains Desires, Persistence, and Transition Education Involvement had lower internal consistency reliability than other domains. For the TSA student version, domains Desires, Proactive Involvement, and Making Positive had lower Cronbach's alpha than the other TSA domains. However, the results indicated that only the domain of Transition Education Involvement of the TSA family version had lower reliability than the other TSA domains. Moreover, the domain of Disability Awareness on the TSA professional version, the domain of Limits on the TSA student version, and domains of Limits and Disability Awareness on the TSA family version displayed higher internal consistency reliability.

The results of the item-total statistics on the three TSA versions indicated items that had moderately high to high (e.g., >.40) correlations made a good component of a summated assessment instrument. For example, TSA professional version items A1, B1, C1, C4, and K3 had high correlations, but items of D3, J1, and K2 presented lower item-total correlations. The alpha increased to .95 if those items were deleted. For the TSA student version, items of B1, C4, and K3 presented high item-total correlations and items of A2, A3, J1, J4, and K2 had low correlations. If those items were deleted, the alpha increased to .93. For the TSA family version, items of A1, A2, B1, B2, B4, C1 to C4, F1,

F2, G2, H1, K3, and L1 all presented high item-total correlations but items of D1 to D4, E1 to E3, G3 to G4, G6, I1, J1, and K1 presented low item-total correlations.

CHAPTER 5

DISCUSSION

Overview

The goal of this study was to determine the social validity and reliability of a new transition assessment instrument, the Transition Success Assessment (TSA). The Phase I study improved the wording of all TSA items and determined if students, parents, and professionals thought the TSA items would be beneficial and understandable. The Phase II study measured the test-retest reliability and internal consistency of the TSA professional, family, and student versions. Specifically, this research attempted to answer the following research questions:

1. How did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) revise each TSA item across the professional, student, and family versions to improve TSA's understandability?

2. Did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive the TSA as beneficial for secondary students with mild to moderate disabilities?

3. Did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive that the TSA is understandable for secondary students with mild to moderate disabilities?

4. Did the test-retest correlation coefficients of the TSA total and domain scores for the parent, student, and professional versions equal or exceed .75?

5. Did the Cronbach alpha of TSA item scores for the parent, student, and professional versions equal or exceed .80?

This chapter provides an overall summary of both Phase I and II studies and a discussion of the results. I will also discuss the implications and conclusion, and suggest future research that needs to be completed.

Findings on the Social Validity of Phase I Study

The following sections present the summary and discussion of the results for the first three research questions of the Phase I study in the following order: (a) findings of professional, student, and parent focus group discussions, (b) comparison of item changes to the research literature, (c) the TSA beneficial rate, and (d) the TSA understanding level.

Findings of Professional, Parent, and Student Focus Group Discussions

The focus group and expert reviews produced a socially valid TSA professional, family, and student versions that included 41 items across 12 domains. Fifty-four experts spent 16.5 hours in eight focus group meetings examining 44 to 51 TSA items, and produced 955 changes. Five focus groups discussed and modified the TSA professional version and produced 110 item changes, which ranged from 17 to 37 per group. The first focus group meeting occurred in September 2007 and the last meeting occurred in February 2008. Two of the professional groups (Durant and Pryor) and two student groups discussed and modified the TSA student version and produced 94 item changes, which ranged from 18 to 46 changes per group. The first group meeting occurred in September 2007 and the last group meeting occurred in June 2008. Three professional groups (Tulsa, Norman, and Higher Education) and one family group examined the TSA family version and made 112 changes, which ranged from 6 to 41 per group. The first

group meeting occurred in September 2007 and the last group meeting occurred in July 2008.

Summary of Phase I Study Results

When modifying the TSA, professionals, parents, and students focused on different content. Professional focus groups tended to clarify the meaning of each item, match the intention of items to the domain, match items to the rating scale, consider test taker's feelings, and verify item similarity across TSA versions. Student's discussion focused on understanding the TSA student version. Rather than simplifying the TSA wording, high school and college students changed the words that they considered more appropriate. For example, they changed "live on my own" to "independently," "getting goals" to "setting goals," and "knew" to "learned" or "understood." The parents' discussion emphasized expectations for their children's transition behaviors. For example, two parents wanted to improve their child's social skills, and they changed "people" to "adults." Parents who were concerned their child would misunderstand and misuse the TSA, added positively and appropriately on most TSA items.

Participant Behaviors and Reflections

Professional participants' discussions had more similarities than differences. In the beginning of a professional focus group, few professionals expressed their own opinion. I encouraged each participant to express their perspectives about TSA items by asking questions such as "What do you think about this item?" and "How could we make this item better?" After one or two members started to share their concerns, other professionals gradually joined the discussion. I also found that some professionals talked more than others. Therefore, I needed to ensure that all members had an equal

opportunity to express their opinions by asking the silent member to talk. I provided a few seconds of silence after I asked questions about each item to allow members time to talk. Most professionals started to talk about their views and ideas after 10-15 minutes of discussion, and most professionals connected the discussions to their students' transition behaviors.

When parents discussed the TSA family version, they created a comfortable and relaxing discussion environment. Since all parents knew each other before the meeting, they felt comfortable talking about the test and their children. Parents tended to use their knowledge of their children to connect to the TSA item. Mothers dominated the discussion and made final decisions about the changes. Most parents showed interest in the background of this assessment tool, and some of them expressed their unfamiliarity with special education "transition" concepts.

The same situation occurred in students' meetings. Both high school and college students did not know the meaning of special education terms such as "transition," or "IEP meeting." High School students expressed concerns for the length of items. For example, they thought the items of domain N were too long to read. During the discussion, high school students showed great interest in the discussion. They were glad that they had the opportunity to contribute to this assessment tool. Although during the discussion, some students appeared quieter than others, six out of the eight participants joined the discussion and provided feedback and proactive suggestions. They spent more time on discussing "strengths," "use effective support systems" and "proactive involvement," but had little to say about "coping skills," "social skills," "job experience," and "family involvement." College students appeared somewhat uncomfortable

discussing the TSA student version items. Two college students seemed concerned others might recognize them at the meeting. After understanding the purpose of the TSA, the college students became more involved in the discussion. They tended to use their own experience to verify or change the wording of the TSA items. During informal conversations with college students after the meeting, some students shared their own transition experience when they were high school students. Other students described the importance of the disability awareness domain, they worried if students knew more about their disability stigma might create barriers to their daily life and family relationships. One college student worried that family members might not accept their disability and their disability would bring shame to their family. Most did not have a good transition from high school to college, so they thought the TSA would benefit high school students with disabilities and make the transition into college easier.

Factors Influencing the Phase I Study Results

After reviewing each group's modification, four major findings emerged. First, the characteristic of the focus groups influenced the number of modifications. The focus group that consisted of special education teachers, vocational rehabilitation counselors, and higher education disability service providers made more changes than parent and student groups. Professionals made 66 changes on the TSA student version items, while students made only 38 changes. Professionals made an average of 35 changes while parents only made six.

Second, the more time the group spent discussing TSA items, the more modifications made. Professionals spent about two hours discussing the TSA professional version items, but parents and students only spent about one hour discussing the TSA

items. Professionals made more changes than parents and students. All professional groups reviewed the TSA professional version items prior to reviewing the TSA student or family version items. More professionals expressed being tired after finishing the discussion of the TSA professional version, which may have influenced the results of the TSA student or family version modifications.

Third, each focus group tended to bring their particular professional frame of reference to the discussion. Special education teachers tended to view the items from a teacher's perspectives. Teachers tended to focus on how to manage the students' behaviors. They were afraid that students would use some of the TSA items as an excuse to avoid tasks or responsibilities in school. For example, students might decide not to do their assignments because they made their own decisions. Students might run away from home without telling their parents because they wanted to live independently. Students might also drop out of school because that is their goals. Vocational rehabilitation counselors were more concerned how to use the Likert scale appropriately. Parents paid more attention to independent living and social skills. They wanted to know if their child could live independently after high school, and they wanted their child to have more good friends who could help them solve life problems. Higher Education disability service providers focused on item wording to make them more appropriate for adult students.

Beside those factors, the results showed that focus groups made contrary comments while discussing TSA items. For example, the Durant group changed "wanting" to "desire" in the desire domain, but the Tulsa group changed "desire" to "wanting." The Durant group changed "adult living" to "independent living" in the strengths domain, but the Norman group changed "independent living" to "adult living."

The Higher Education professional group changed “adult living” to “independent living” again. Also, the Norman group extended the making positive choices domain from three to six items, but the Higher Education Professional group combined the six items into three. When reviewing the TSA student version item E1, the Pryor group modified the wording from “understand my disability” to “know my disability,” but college students thought “understand my disability” was more appropriate than “know my disability.”

In the Phase I study, I invited participants from diverse backgrounds to provide comments and feedback, which expanded the scope of the TSA items. To finalize focus group changes, I went back into the research literature to compare changes with the studies that identified specific behaviors.

Comparison of Item Changes to The Research Literature

To finalize changes to the wording of the TSA items, I returned to the reviewed literature to match changes to identified success behaviors. TSA items needing to be verified came from goals, limits, social skills, making positive choices, and transition education domains. The following section discusses the verification process.

Goals Domain

The goals domain primarily focuses on the importance of goal setting for students with disabilities. Studies that compared successful and unsuccessful individuals with disabilities, indicate goal setting as one of the attributes for positive transition outcomes. Gerber et al. (1992) found that successful adults with disabilities usually set goals. Goldberg et al. (2003) conducted a 20-year longitudinal study and concluded that successful participants set their goals. Sarver (2000) interviewed 88 college students and found that highly academic successful students with learning disabilities set their

academic goals by taking account of their disability and asked for support and accommodations to solve problems. Masten et al. (2004) conducted a 20-year longitudinal study of 173 participants from childhood through adulthood and found students who had set long term goals (e.g., who and what they would become in the future) had higher academic scores and better social skills compared to those who did not set their goals in the future.

The importance of goal setting has been emphasized in many other studies, too. Benz et al. (2000) investigated the transition outcomes of secondary students with disabilities and found that students who had set and completed goals were almost four times more likely to be employed after they left the transition program than those who did not. Wehmeyer et al. (2000) found that students who set their instructional goals, learned to solve problems, and implemented plans improved their school performance. Thoma and Getzel (2005) found students who have high levels of self-determination set career goals to reflect their interests.

Researchers further found that setting goals helps students with disabilities increase their likelihood for successful transition from school to adult life for the following reasons. First, goal setting motivates individuals with disabilities to have realistic and durable plans. Gerber et al. (1992), Sarver (2000), Goldberg et al. (2003), and Thoma and Getzel (2005) believed that it is important for students with disabilities to have realistic and flexible goals they can break down into small steps to attain what they want. Second, Gerber et al. (1992) indicated goal setting enables students with disabilities to focus. Finally, once students with disabilities achieve even a very small goal, this

success encourages them to face more challenging goals (Gerber et al., 1992; Sarver, 2000).

Regarding TSA item B3 (Within the last year the student communicated a goal about where he/she would like to live after graduation), focus groups provided different opinions about how this item should be written. Thoma and Getzel (2005) defined independent living goals as "a goal about where he/she would like to live after graduation." The following studies all indicated the importance of goal setting for transition and specifically pointed out the meaning of independent living. Liebert et al. (1990) examined educational, employment, and community outcomes for graduates with physical disabilities. The community outcomes include the marital status and students' housing arrangements. Both Wagner (1995) and Blackorby and Wagner (1996) defined residential independence as living alone, with a spouse or roommate, in a college dormitory or military housing, not as a dependent. Wehmeyer and Schwartz's (1997) follow-up study measured student independent living status and activities, and they used terms such as banking or paying for groceries. Wehmeyer and Palmer (2003) examined the outcomes of adults with mental retardation or learning disabilities one and three years after they left school. They also focused on the independent living status and asked about students banking, paying rent, utilities, phone, and groceries. Using these studies for guidance, I modified the wording of item B3 to state "Within the last year the student communicated a goal about where he/she would like to live after graduation" to match the intention of the studies.

Limits Domain

During the group discussions, different focus groups examined the wording of limits. Each group tried to find a better word to replace "limits" so that it sounded better for all test takers. Many studies indicated that students who knew their strengths and limitations had better transition outcomes after they left school. Gerber et al. (1992) conducted interviews with individuals with learning disabilities after they left high school and found that highly successful adults with learning disabilities knew their strengths and limitations. These former students knew what they were good at, and what areas they needed to improve. The successful group tried to fit themselves to environments in which they would optimize their skills and abilities to succeed and minimize the impact of their limits. Higgins et al. (2002) also found that successful adults with learning disabilities knew of their differences and could talk about their strengths and limits.

By understanding their own strengths and limits, former students with disabilities established a survival-based value system that accepted their own disability as one part of their life and solved problems by using supports or accommodations matched to their needs (Davies & Jenkins, 1997; Goldberg et al., 2003; Hasazi et al., 1989; Higgins et al., 2002; Madaus, 2006; McNulty, 2003; Raskind et al., 2002; Skinner, 2004; Thoma & Getzel, 2005; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). In Higgins et al.'s (2002) study one of the participants reported, "I think it was just a matter of getting me to focus my attention on the subject and not give up. I think that was my learning problem" (p. 8). Thoma and Getzel (2005) found that students reported knowing their limitations focused priority problem solving. When these students realized their strengths and limits they used many strategies to be successful in education, employment, and with

social interaction. Many other studies found the similar results (Davies & Jenkins, 1997; Greenbaum et al., 1996; Hasazi et al., 1989; Higgins et al., 2002; Madaus, 2006; McNulty, 2003; Skinner, 2004; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997).

Regarding the wording of limits, studies used different phrases. For instance, Raskind et al. (2002) used the word "difficulties," "These individuals were able to compartmentalize their disabilities . . . seeing their difficulties as only one aspect of themselves. They also accepted their LD and utilized appropriate services to overcome difficulties whenever possible" (p. 202). Higgins et al. (2002) used "weakness," "problems," or "differentness" to represent the participants' limitations. Goldberg et al. (2003) used the word "difficulties," "problems," and "limitations" to express, as the following question demonstrated, "Although they were well aware of their learning limitation, they were not overly defined by them;" or "successful informants reach a level of recognition of their talents along with an acceptance of their limitations" (Goldberg et al., 2003, p. 226). From the reviewed literature, the original intention of the wording refers to students' limits to improve individual's self-awareness. Therefore, I decided to use the word "limits" across all items in the limits domain.

Social Skills Domain

Students who actively maintained contact with significant others had outcomes that are more successful after they left school. Maintaining friendship is important for students with disabilities during their transition from high school to adult life. Gerber et al. (1992) found that successful individuals with learning disabilities usually surrounded themselves with supportive and helpful people, including spouses, family members,

friends, or professionals. Wagner (1995) retrieved data from the National Longitudinal Transition Study of special education of students with serious emotional disturbance and found that students who maintained friendship with their peers were more successful than those who could not get along with peers. Halpern et al. (1995) found that students who got along with other people had a higher participation rate in postsecondary education. Raskind et al. (2002) found successful individuals with learning disabilities frequently received support, guidance, and encouragement from their friends, mentors, teachers, therapists, coworkers, or family members. Sarver (2000), Goldberg et al. (2003), and Thoma and Getzel (2005) found that it is important for students with disabilities to find support from peers, friends, and mentors as role models to succeed during the transition. Masten et al. (2004) further concluded that "a close, warm relationship with an adult other than mother or father" (p. 1080) attributed to successful transition for individuals with disabilities.

In summary, the research shows that students who interacted appropriately with other people and saw those people as their role models to seek support, help, encouragement, and guidance had more successful outcomes after they left high school. The focus groups, like the studies, suggested different wording to represent friends or peers in TSA item I1. After reviewing literature again, I decided to use "other people" to cover adults, peers, friends, spouse, and mentors. I also combined the items of domain I as "Within the last year the student interacted appropriately with other people" to measure the student's social skills for a more successful transition.

Making Positive Choices Domain

Research indicated that students with disabilities who could make decisions, plans, and implement those plans would be successful in education, employment, and/or independent living. Students who make their own decisions take charge of their own life. Gerber et al. (1992) concluded that successful individuals with learning disabilities made internal decisions to take charge of their life. All student recognition, acceptance, and understanding of their disability do little unless they do take specific action toward attaining their goals. Raskind et al. (2002) found successful former students with disabilities made decisions, after analyzing the advantages and disadvantages, and then acted on their decisions. Successful students with disabilities believed that making decisions showed responsibility for one's action. Sarver (2000) also found that successful students made decisions for their plans and carried out their plans to achieve the goals they set in college. Successful individuals with disabilities understood how they made good decisions and implemented them with flexibility and persistence. Other studies also emphasized the importance of decisions making and acting on the decision (Lachapelle et al., 2005; Lindstrom et al., 2002; Martin et al., 2003; Masten et al., 2004; Rojewski, 1999; Sarver, 2000).

Based on the reviewed literature, I decided to combine two the items of "making decisions" and "acting on those decisions" together as one item. The intention of this domain is to assess whether the student takes responsibility for the decisions and made efforts to attain their goals.

Transition Education Involvement Domain

Transition education involvement has been viewed as one of the important predictors for successful transition (Benz et al., 2000; Halpern, 1994; Halpern et al., 1995; Hasazi et al., 1989; Hasazi, Gordon, Roe, et al., 1985; Kohler & Field, 2003; Lachapelle et al., 2005; Liebert et al., 1990; Wagner, 1995). Students involved in transition education including the involvement of educational planning meetings (e.g., IEP meetings, educational meetings, etc.) to discuss transition goals, plans, assessment results and transportation to job sites, educational settings, or social events. Based on the reviewed literature, students with disabilities who are actively involved in the educational planning meetings to discuss their transition goals, plans, accommodations, supports, plans of study, transition assessment results, transportation, and other transition issues, appear to have better transition outcomes.

Devlieger and Trach (1999) found that most IEP meetings did not provide sufficient transition planning for students with disabilities due to the limited proportion of time within the IEP meeting and absence of support and mediated action for the students' successful transition. Students' active discussion during the meeting could make the IEP decision process more effective. Halpern et al. (1995) thought that participation in transition planning meetings was asociated to transition success for secondary students with disabilities. Students who arranged transportation to job sites, educational settings, or social events have more successful outcomes than those who did not (Fabian et al., 1998; Liebert et al., 1990; Wehman et al., 1985)

Additionally, studies indicated that students with a higher level of self-determination had better postschool outcomes (Gerber et al., 1992; Gerber et al., 2004;

Lachapelle et al., 2005; Liebert et al., 1990; Lindstrom & Benz, 2002; Martin et al., 2002; Mithaug et al., 1985; Raskind et al., 1999; Sarver, 2000; Wehmeyer & Schwartz, 1997; Wehmeyer & Palmer, 2003). In a recent self-determination study, Shogren et al. (2007) examined the impact of self-determination for students with learning disabilities. The findings indicated that students' capacity, opportunity, and transition empowerment related to their level of self-determination. With higher self-determination levels, students could actively express, discuss, and participate in their own meetings with transition planning for the future success. Students actively involved in IEP meeting discussions had increased self-determination skills. A logical conclusion could be inferred that those self-determined students would have better postschool outcomes.

TSA item L1 (within the last year the student actively participated in educational planning meetings to discuss issues such as goals, accommodations, supports, or his/her plans of study) was a new item suggested by peers and some focus group members. After looking at the reviewed literature, we found support for this item on the TSA instrument. I included this item in the TSA.

TSA's Beneficial Rating

Based on the second set of the Phase I study analyses, in which 54 participants from eight focus groups rated the benefit of all TSA items. The following section discusses (a) the average beneficial rates for all three TSA versions, (b) the change of beneficial rates across time for all three TSA versions, and (c) the implications of comments and feedback from participants.

Average Beneficial Rates

Overall, the average beneficial rating for all three TSA versions exceeded 90% (TSA professional version—96.2%, TSA student version— 92.25%, TSA family version— 92.73%), which indicated the focus group participants were satisfied with all items of the three TSA versions. Although all three TSA versions appeared to be beneficial for students with mild to moderate disabilities, some focus groups rated the TSA versions higher than the others did. For example, the Pryor focus group had higher scores than other focus groups on the TSA professional version (99%). The Pryor focus group also gave the TSA student version the highest scores on (96%). In contrast, the Norman focus group rated the TSA professional version and the TSA family version lower than other groups did (92% and 87% respectively).

The Change of Beneficial Rates Across Time

Only the TSA family beneficial rates indicated improvement across time (from 88% to 99%). The TSA professional and student beneficial rates did not present improvement after each modification. The TSA professional beneficial rates appeared somewhat variable across time (97%, 92%, 99%, and 97%). According to a Tukey analysis, everyone agreed with each other within each focus group. Although each professional group was satisfied with their modifications and thought the TSA could benefit students, parents, and themselves, a new professional focus group might continually make another modification. The TSA student beneficial rates showed variability as well (89%, 96%, 88%, and 96%). The ANOVA analysis indicated two high school students had different opinions with the other six high school students within the focus group. Some high school students got frustrated about the TSA student version. For

example, one of the participants said, “I still can’t get it” and the other student said, “I am a little bit confused, but it is ok.” Their frustration did not only come from the items of the TSA student version, but also from the purpose of the TSA. During the discussion, they had never heard of the terms transition or IEP meetings. Additionally, they did not know how this assessment tool would help them after they leave high school. Since most high school students are already in the transition process, they felt the TSA instrument would not influence their postschool outcomes. Those feelings might influence the beneficial scores on the TSA items.

Factors Influencing the TSA Beneficial Rate

I believe a few factors might influence the TSA beneficial rating, such as participants’ demography, evaluation time and order, participants’ previous knowledge and experiences. First, the diverse make-up of focus group members may have caused the rating differences. Except for the Norman focus group, professional focus group members are special education teachers, counselors, or service providers. The Norman focus group consisted of seven professionals from diverse backgrounds. Two of the Norman focus group members were doctoral students and research assistants in special education, and one of them is a bilingual teacher. In addition to specifying the wording of each item, the Norman focus group added “frequently” to match the rating scale and modified the domain of limits from “limitations” to “challenges” to make test takers feel better when they responded to the items in this domain. The Norman group members were more critical when modifying and evaluating the TSA items than other focus group meetings. Additionally, TSA evaluations showed that parents and students had higher evaluations scores than professional focus group members.

Second, the evaluation time and order might be another factor to consider. Professionals concentrated on the first 90 minutes more so than the last 30-60 minutes. Since each professional focus group received two TSA versions to evaluate, the TSA professional version and one of two TSA versions, they spent more time and paid more attention to the first evaluation. Some professionals may have been feeling tired as they conducted the second evaluation. This tiredness might have distracted them from the task.

Third and lastly, participants' previous knowledge and experiences may have also influenced the beneficial rating. Special educators, vocational rehabilitation counselors, and other disability service providers had different special education knowledge and experience working with students with disabilities. This background may have impacted their TSA evaluations. Professionals were familiar with students' performance in school, and parents knew their child in family better than professionals did. Since professionals and parents saw their students or their child from different perspectives, they may have different opinions about beneficial TSA items.

The number of modifications did not have a positive relationship to the beneficial rates. Increased changes did not result in lower beneficial percentages. The Pryor professionals who made 17 changes had an average 99% beneficial percentage on the TSA professional items, and parents who made six changes had a 97% beneficial percentage on the TSA family items. However, the Durant professionals who made 37 changes had a 97% beneficial percentage on the TSA professional items, and the Norman professionals who made 33 changes had a 92% beneficial percentage on the TSA professional items.

The Implications of Comments and Feedback

Based on participant's evaluation and results, the focus group members thought that the TSA allowed teachers, students, and parents to focus on transition so they could understand their students better. Focus group members believed that using this assessment instrument would allow special education teachers, counselors, other professionals, students, and their parents to focus more on transition issues, and that the TSA might provide an opportunity for the transition planning team to look at the student's strengths, needs, and goals to make better plans. They also thought that the TSA would provide an opportunity for students to actively participate in and take responsibility in their own transition process.

Group members also expressed concerns about the TSA professional version. Two higher educational professionals thought this assessment would be better for high school students with disabilities than college students. The higher educational professionals argued that this assessment should add "N/A" for not applicable because they were concerned some college students may not be able to answer all TSA items, "I think that is probably a good idea." Some higher educational professionals thought their students would worry about not having enough time to answer the questions. They also thought high school educators would only use these answers to make school plans, regardless how students or parents answered the questions.

TSA's Understanding Rating

The understandable rates of the three TSA versions all exceeded 90%: the TSA professional version scored 94%, the TSA student version achieved 90.25%, and the TSA family version had 90.5%. Five professional focus groups understandable scores TSA

professional ranged from 88% to 97%, four focus groups TSA student understandable rates ranged from 81% to 96%, and four focus groups TSA family understandable rates ranged from 88% to 97%.

The understandable rates of all three TSA instruments did not depict constant improvement over time. Focus groups continually made modifications after each group meeting. I found that the decreasing TSA understanding level did not match the modifications they made during the discussion. The Durant focus group members who made 37 changes on the TSA professional items had an average of 97% understanding percentage. The Higher Education Professional group members who made 35 changes had an average of 88% understanding percentage. Obviously, the number of changes they made during the discussion did not influence the TSA understanding evaluation. That is, no matter how many modifications they made, they still gave TSA items a high understandable score.

The understanding scores may have been influenced by participants' demography, working experience, knowledge, meeting time, and evaluation order as mentioned previously. Compared to the beneficial rates, the understanding rates demonstrated more variability and were less predictable.

Factors Influencing TSA Understandable Rate

The varied and unstable TSA understanding percentage across time may have resulted from several reasons. Some group members rated the understanding level before they made modifications and some rated after. Those members who rated the TSA understanding before the modification had higher scores than those who rated after because they thought the item sounded understandable for them, such as the Durant group

and the Pryor group. Most participants in those two groups checked the understandable box even after they made changes on those TSA items. In contrary, some members who made modifications thought the modifications had increased the understanding, so they had higher understandable scores on those modified items. Although focus groups presented different understandable levels, most participants agreed that the TSA was understandable. Focus group members thought that the TSA was an easy tool to use, and the questions were very straightforward, clear, and understandable.

TSA Reliability Findings

Three hundred and nineteen tests from 201 participants (129 TSA professional versions, 104 TSA student versions, and 35 TSA family versions) had been completed during the first administration. From 319 TSA tests, 225 TSA retests had been completed after four weeks of the first administration (129 TSA professional versions, 87 TSA student versions, and nine TSA family versions). The following sections discuss the results of internal consistency reliability and test-retest reliability results of the three TSA versions.

The TSA Test-Retest Reliability

The test-retest reliability measured 225 completed TSA instruments. Both the TSA professional and family versions demonstrated good test-retest reliability ($r = .80$ and $r = .89$ respectively, $p < .01$), and the TSA student version showed acceptable test-retest reliability ($r = .76$, $p < .01$). Each domain of the three TSA versions had diverse correlation coefficients. For example, the test-retest coefficients of the TSA professional domains ranged from .64 to .80, the TSA student domains ranged from .25 to .76, and .46 to .97 on the TSA family domains.

According to Carmines and Zeller (1979), if a test obtains exactly the same results on the two administrations of the test, the retest reliability coefficients will be 1.00. However, the correlation of measurements will be less than perfect across time. For example, the retest reliability of four weeks will be less perfect than that of two weeks. The longer the interval takes, the less the reliability coefficients would be. This occurred because "the respondent may be temporarily distracted, misunderstand the meaning of an item or feel uncomfortable due to someone else being present" (Bohrnstedt, 1970, p. 85). Since the person's memory could influence the test-retest correlation coefficients between two administrations, the shorter the time interval is, the better the person can remember their first responses. Carmines and Zellers (1979) suggested that one month and above is advisable to complete both tests to determine correlation coefficients. Comparing the retest coefficients of other transition assessment tools, the TSA demonstrated good test-retest, .80 and higher, reliability coefficients with a four-week interval. The Transition Planning Inventory (TPI) reported an average of .86 retest reliability across a seven-to-ten day interval. The ChoiceMaker Self-Determination Assessment achieved a .80 test-retest correlation coefficient with a two-week interval, and the AIR Self-Determination Scale achieved .74 across a three-month interval.

Factors Influencing TSA Test-Retest Reliability

Although the TSA presented good correlation reliability with a four-week interval, some domains had lower correlation coefficients than others, such as the TSA professional domains of desires, limits, persistence, coping skills, making positive choices, transition education involvement, the TSA student domains of desires, strengths, use of effective support systems, coping skills, social skills, and transition education

involvement, and the TSA family domains of use of effective support systems and coping skills. The lower correlation coefficients may be due to two primary reasons. First, the users underlying theoretical concept of each item may have changed between two administrations. Since I could only conduct a one-time measure on the TSA items, their interpretation of each TSA item could be different. For example, the student's opinion in items I1 "Within the last year the student interacted appropriately with other people" and I2 "Within the last year the student had at least one friend" could be very different before and after the initial TSA test ($r = .25$, $p < .01$). The correlation analysis indicated the student's scores of both I1 and I2 improved between the initial and second administrations. Moreover, "appropriately" could be a vague word for students, parents, and professionals. Those students who thought they didn't interact with other people appropriately may have changed their opinion later and think they interacted with other people appropriately at the time when they took the second TSA. The item of I2 also brought confusion for most students. When students answered the question about "had at least one friend," they may have changed their definition about "friend." When they answered I2 on the first TSA administration, they may have thought they had no friends, but later they may have changed their opinion on the second administration about "friend" and stated they always had at least one friend. Some students also mentioned they had difficulties answering this item because it only provided two answers (0= Never and 1= Always), but they would have liked to have had more than two options to choose. Moreover, the longer the time interval between two administrations, the more likely the opinions changed. A similar problem occurred in other TSA domains, such as use of effective support systems and coping skills.

Second, the lower correlation coefficients of the TSA may come from the reactivity the test takers had after the initial TSA administration. Test takers may have changed their transition behaviors and/or attitudes after the initial administration so the retest reliability between two administrations presented lower correlation coefficients. For example, when students answered item H "Within the last year at school the student coped with stress, frustration, or difficulties in a constructive way" at the initial TSA test, they became conscious of those coping skills so they changed their attitudes and behaviors regarding this item. When those students took the second TSA, their scores on item H may have been different. The analysis indicated that students increased the scores on the item H after they took the first TSA test. In this case, the test-retest correlation would be lower than it should be because of the student's reactivity.

The TSA Cronbach's Alpha

A total of 39 TSA items from 201 participants had been examined for internal consistency reliability. The results demonstrated very strong internal consistency reliability on the TSA Professional, Student, and Family Version ($\alpha = 0.95$, $\alpha = 0.93$, and $\alpha = 0.94$ respectively). The analyses indicated the Cronbach's alpha across the TSA professional domains ranged from .68 to .92, on the TSA student version from .52 to .92, and on the TSA family version from .65 to .88.

Carmines and Zeller (1979) believed "the value of alpha depends on the average inter-item correlation and the number of items in the scale" (p. 45). Thus, if the average correlation among items increases and as the number of items increases, the alpha will be increased as well. To support this point, I found the TSA inter-item correlations increased and the value of alpha for the TSA professional items increased. According to the TSA

professional inter-item correlation matrix, items E1 and E2 (domain of disability awareness), G3 and G4, G5 and G6 (domain of use of effective support system), F1 and K1, and F2 and K2 (domains of persistence and making positive choices) had higher inter-item correlations than others (r = .89, r = .87, r = .81, r = .78, r = .79 respectively). Those increased inter-item correlations might be the factor supporting the high alpha value of the TSA professional items.

When I computed each domain's Cronbach's alpha and found that domains with higher inter-item correlation presented higher internal consistency reliability, such as the domain of disability awareness on the TSA professional version ($\alpha = 0.92$) and domains of disability awareness, and use of effective support system ($\alpha = 0.88$) on the TSA family and student versions, respectively. Obviously, items under the domain of disability awareness showed the high internal consistency reliability and inter-item correlation on both the TSA professional and family versions. However, domains of limits and disability awareness on the TSA student version demonstrated low correlation coefficients for the test-retest reliability. The analyses implied that the wording of domains of limits and disability awareness should be modified and improved on the TSA student version to avoid misunderstanding from students and the internal consistency reliability of those domains need to be re-examined in the future.

Some domains also presented low internal consistency reliability, such as desires, persistence, and transition education domains on the TSA professional version (α = .68 respectively), desires, proactive involvement, and making positive choices domains on the TSA student version (α = .55, α = .52, and α = .52 respectively), and proactive involvement and transition education involvement domains (α = .67 and α = .65

respectively). The domains that displayed low internal consistency reliability as previously mentioned did not indicate a lower item-total correlation. The analyses implied that items D3, J1, and K2 of the TSA professional instrument had lower item-total correlation to the other items. Both the TSA student version and the TSA family version had more than five items presenting lower item-total correlations, such as items of A2, A3, J1, J4, and K2 on the TSA student version and items of D1 to D4, E1 to E3, G3, G4, G6, I1, J1, and K1 on the TSA family version. Those items, which presented lower item-total correlations, should be reworded or deleted to increase the internal consistency reliability. The Cronbach's alpha will be improved by deleting those lower item-total correlational items.

The reliability results matched the social validity results. The more focus group meetings modified items, the fewer items had lower item-total correlations. For example, five professional focus groups modified and improved the items of the TSA professional version, and the TSA professional version had few low total correlations items. Four focus groups (two professional focus groups and two student focus groups) evaluated the TSA student version and this assessment had more low correlation items. This result suggests that I need to include more student and family focus groups to improve the wording of the TSA student and family items. In the future study, I will recruit more participants to modify and improve the TSA instruments to ensure that the wording and reliability of all three TSA instruments is adequate and appropriate for them to use.

Recommendations

From the current research results, the following recommendations need to be made for future research. First, another TSA social validity study needs be completed

with more students and parents. Second, another TSA reliability study needs to be done with more participants to ensure the adequate sample size. Third, future studies also need to recruit participants from more diverse cultural backgrounds, and include an equal proportion of males and females. The current study collected data mainly from Caucasian participants, which lacked perspectives and data from other cultural groups. Last, future research should include responses from those who took the TSA instruments (i.e., educators, students, and parents) to provide them an opportunity to verbalize their comments and feedback after they used this assessment.

Conclusions

To date, no evidence-based transition assessment had been developed like the Transition Success Assessment (TSA). Most transition assessment tools such as Transition Planning Inventory (TPI), The ARC's Self-Determination Scale, AAMD Adaptive Behavior Scale (ABS), and Employment Screening Test showed substantial limitation for measuring transition behaviors for students with disabilities. The development of the TSA provides educators, special service providers, professionals, students, and parents another option to measure transition behaviors during the transition process and an opportunity to discuss transition issues together before and during IEP meetings based on the results of the three TSA instruments. The TSA is an ongoing measurement to collect data on students' transition behaviors as they relate to the demands of current and future working, educational, independent living environments. The TSA will also provide a transition education guidance for educators to make more successful transition plans for their students.

The purpose of this research primarily focused on determining the social validity and reliability of the TSA professional, student, and family versions to answer following five research questions. First, how did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) revise each TSA item across three versions (professional version, family version, and student version) to improve TSA's understandability? Second, did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive the TSA as beneficial for secondary students with mild to moderate disabilities? Third, did groups of experts (special education teachers, rehabilitation counselors, higher education disability staff, family members, and students with disabilities) perceive that the TSA is understandable for secondary students with mild to moderate disabilities? Fourth, did the test-retest correlation coefficients of the TSA total and domain scores for the parent, student, and professional versions equal or exceed .75? Fifth, did the Cronbach alpha of the TSA item scores for the parent, student, and professional versions equal or exceed .80?

The Phase I study results answered the research questions one, two, and three. During the Phase I study, eight focus groups with 54 professionals, students, and parents evaluated and modified the three TSA versions based on their experiences and knowledge. The results of focus groups produced draft 50 of the TSA professional, family, and student versions, which contained 41 items across 12 domains. The analyses of modifications indicated that the discussion appeared to be influenced by the characteristic of each group, discussion time, and each member's particular frame of reference.

Additionally, focus group participants found the TSA items understandable and beneficial.

The Phase II study results answered research questions four and five. During the Phase II study, exploratory reliability analysis resulted in support for the modified TSA items. The internal consistency reliability on the TSA professional, student, and family versions ($\alpha = 0.95$, $\alpha = 0.93$, and $\alpha = 0.94$ respectively) demonstrated a high alpha for all items and domain scores. Moreover, the TSA instrument presented an average of .82 test-retest reliability on the total scores for a four-week interval between two administrations (TSA professional version: $r = .80$; TSA student version: $r = .76$; and TSA family version: $r = .89$). The results of the reliability tests for all TSA versions supported the hypothesis (Test-retest reliability > .75; Cronbach's alpha > .80).

Based on the results and analyses, the TSA instrument is a reliable measurement to assess students' transition behaviors during the transition process. To that end, the final chapter provided a thorough discussion of both studies results. Finally, I made several recommendations for future TSA research. Support of both reliability and social validity recommended professionals, students, and parents to use the TSA instruments for measuring students' transition behaviors for both secondary and college students with disabilities. Additionally, it is recommended to use this transition assessment to conduct the follow-up postschool outcomes for students with disabilities. I believed that the collected data from this assessment can provide useful information for all educators, professionals, parents, and students self for improving students' transition behaviors, skills, and knowledge to attain their postschool goals.

REFERENCES

Agran, M., Cavin, M., & Wehmeyer, M. (2006). Participation of students with moderate to severe disabilities in the general curriculum: the effects of the self-determined learning model of instruction. *Research and Practice for Persons with Severe Disabilities, 31,* 230-241.

Algozzine, B., Browder, D., Karvonen, M., Test, D. W., & Wood, W. M. (2001). Effects of interventions to promote self-determination for individuals with disabilities. *Review of Education Research, 71*(2), 219-277.

American Psychological Association. (1985). *Standards for educational and psychological testing.* Washington, DC: Author.

Baller, W. R. (1936). A study of the present social status of a group of adults, who, when they were in elementary schools, were classified as mentally deficient. *Genetic Psychology Monographs, 18*, 165-244.

Benson, J. (1998). Developing a strong program of construct validation: a test anxiety example. *Educational measurement: Issues and Practice, 17,* 10-17, 22.

Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529.

Berdine, W. H., & Meyer, S. A. (1987). *Assessment in special education.* Toronto, Canada: Little, Brown & Company.

Blackorby, J., & Wagner, M. (1996). Longitudinal postschool outcomes of youth with disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children, 62*(5), 399-414.

Bohrnstedt, G. W. (1970). Reliability and validity assessment. In G. F. Summer (ed.), *Attitude measurement.* Chicago: Rand McNally.

Brolin, D. E. (1997). *Life centered career education mild curriculum assessment system.* Arlington, VA: Council for Exceptional Children.

Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment.* Thousand Oaks, CA: SAGE Publications, Inc..

Clark, G. M. (1996). Transition planning assessment for secondary-level students with learning disabilities. *Journal of Learning Disabilities, 29,* 79-92.

Clark, G., & Patton, J. (1998). *Transition planning inventory.* Austin, TX: PRO-ED.

Collet-Klingenberg, L. L. (1998). The reality of best practices in transition: a case study. *The Council for Exceptional Children, 65*, 67-78.

Cox, H. D. (2003). Planning for success! Division of special education & student services. September 1, 2008 Retrieved from http://www.doe.virginia.gov/VDOE/sped/transition/#what

Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* London, New Delhi, Thousand Oaks: Sage Publications.

Cronbach, L. J. (1988). Five perspectives on validity argument. In H. Wainer (Ed.), *Test validity* (pp. 3-17). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc..

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*, 281-301.

Dais, T. A., & Kohler, P. D. (1995). *Review of transition-related assessment instruments.* Champaign, IL: Transition Research Institute University of Illinois at Urbana-Champaign.

Davies, C. A., & Jenkins, R. (1997). 'She has different fits to me': How people with learning difficulties see themselves. *Disability & Society, 12*, 95-109.

deBettencourt, L. U., Zigmond, N., & Thornton, H. (1989). Follow-up of postsecondary-age rural learning disabled graduates and dropouts. *Exceptional Children, 56*, 40-49.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* New York: Plenum.

DeVellis, R. F. (2003). *Scale development: Theory and application* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Devlieger, P. J., & Trach, J. S. (1999). Mediation as a transition process: The impact on postschool employment outcomes. *Exceptional Children, 65,* 507-523.

Dickson, D. L. & Verbeek, R. L. (2002). Wage differentials between college graduates with and without learning disabilities. *Journal of Learning Disabilities, 35*, 175-184.

Dunn, C., & Shumaker, L. (1997). A follow-up study of former special education students from a rural and urban county school system. *Career Development for Exceptional Individuals, 20*, 43-54.

Emerson, E. (1995). *Challenging behavior: analysis and intervention in people with learning disabilities.* Cambridge, NY: Cambridge University Press.

Fabian, E. S. (2007). Urban youth with disabilities: factors affecting transition employment. *Rehabilitation Counseling Bulletin, 50*, 130-138.

Fabian, E. S., Lent, R. W., & Willis, S. P. (1998). Predicting work transition outcomes for students with disabilities: Implications for counselors. *Journal of Counseling & Development, 76,* 311-316.

Fairbank, R. E. (1933). The subnormal child - seventeen years after. *Mental Hygiene, 17*, 177-208.

Field . S., & Hoffman, A. (1994). Development of a model for self-determination. *Career Development for Exceptional Individuals, 17,* 159-169.

Field, S., Martin, J.E., Miller, R., Ward, M. & Wehmeyer, M. (1998). Self-determination for persons with disabilities: A position statement of the division on career development and transition. *Career Development for Exceptional Individuals, 21,* 113-128.

Field, S., Sarver, M. D., & Shaw, S. F. (2003). Self-determination: A key to success in postsecondary education for students with learning disabilities. *Remedial and Special Education, 24,* 339-349.

Flexer, R. W., & Luft, P. (2005). Transition Assessment and postschool outcomes. In R.W. Flexer, T. J. Simmons, P. Luft, & R. M. Baer (Eds.), *Transition planning for secondary students with disabilities* (2nd edition, pp. 117– 140). Columbus: Merrill Prentice Hall.

Flexer, R. W., Simmons, T. J., Luft, P., & Baer, R. M. (2005). *Transition planning for secondary students with disabilities* (2nd edition, pp. 117– 140). Columbus: Merrill Prentice Hall.

Fourqurean, J. M., Meisgeier, C., Swank, P. R., & Williams, R. E. (1991). Correlates of postsecondary employment outcomes for young adults with learning disabilities. *Journal of Learning Disabilities, 24,* 400-405.

Frank, A. R., & Sitlington, P. L. (2000). Young adults with mental disabilities – does transition planning make a difference? *Education and Training in Mental Retardation and Developmental Disabilities, 35*, 119-134.

Gajar, A., Goodman, L., & McAfee, J. (1993). *Secondary schools and beyond: Transition of individuals with mild disabilities.* New York, NY: Macmillan Publishing Company.

Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25,* 475-487.

Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: a comparison of the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291.

Gipps, C. V. (1994). *Beyond testing: Towards a theory of educational assessment.* Washington DC: The Falmer Press.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18,* 222-236.

Greenbaum, B., Graham, S., & Scales, W. (1996). Adults with learning disabilities: occupational and social status after college. *Journal of Learning Disabilities, 29* (2), 167-173.

Gresham, F. M., & Elliott, S. N. (1987). The relationship between adaptive behavior and social skills: issues in definition and assessment. *The Journal of Special Education, 21,* 167-181.

Halpern, A. S., Irvin, L. K., & Landman, J. T. (1979). Alternative approaches to the measurement of adaptive behavior, *American Journal of Mental Deficiency, 84,* 304-310.

Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164.

Harrison, P. (1987). Research with adaptive behavior scales. *The Journal of Special Education, 21,* 37-68.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.

Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "mentally retarded". *Education and Training of the Mentally Retarded, 20*, 222-234.

Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*, 243-255.

Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.

Hoffman, A., Field, S., & Sawilowsky, S. (2004). *Self-determination assessment battery and user's guide.* Detroit, MI: College of Education, Wayne State University.

Individuals With Disabilities Education Act of 2004, Pub. L. No. 108-446, 20 U.S.C. 1462 (a).

Irvin, L. K., Halpern, A. S., & Reynolds, W. M. (1977). Assessing social and prevocational awareness in mildly and moderately retarded individuals. *American Journal of Mental Deficiency, 82,* 266-272.

Johnson, C. E. (1997). A comparative analysis of three basic designs for competency validation. Paper presented at the Annual Meeting of the Georgia Educational Research Association, Atlanta. (ERIC Document Reproduction Service No. ED171729)

Karpinski, M. J., Neubert, D. A., & Graham, S. (1992). A follow-along study of postsecondary outcomes for graduates and dropouts with mild disabilities in a rural setting. *Journal of Learning Disabilities, 25*, 376-385.

Kennedy, C. H. (2005). *Single-case designs for educational research.* Boston, MA: Pearson Education, Inc..

Kohler, P. D. & Field, S. (2003). Transition-focused education: Foundation for the future. *The Journal of Special Education, 37*, 174-183.

Konrad, M., Fowler, C. H., Walker, A. R., Test, D. W., & Wood, W. M. (2007). Effects of self-determination interventions on the academic skills of students with learning disabilities. *Learning Disability Quarterly, 30*(2), 89-113.

Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., et al. (2005). The relationship between quality of life and self-determination: An international study. *Journal of Intellectual Disability Research, 49,* 740-744.

Leake, D., & Boone, R. (2007). Multicultural perspectives on self-determination from youth, parent, and teacher focus groups. *Career Development for Exceptional Individuals, 30,* 104-115.

Leech, N. L., Barrett, K. C., & Morgan, G. A. (2008). *SPSS for intermediate statistics: Use and interpretation* (3rd Edition). NY: Taylor & Francis Group.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional children, 57,* 56-63.

Linden, B. E., & Forness, S. R. (1986). Post-school adjustment of mentally retarded persons with psychiatric disorders: A ten-year follow-up. *Education and Training of the Mentally Retarded, 21*, 157-164.

Lindstrom, L. E. & Benz, M. R. (2002). Phases of career development case studies of young women with learning disabilities. *The Council for Exceptional Children, 69*, 67-83.

Lissitz, R. W., & Green, S. B. (1975). Effect of the number of scale points on reliability: A Monte Carlo approach. *Journal of Applied Psychology*, *60*, 10-13.

Loyd, R. J., & Brolin, D. E. (1997). *Life centered career education moderate curriculum.* Arlington, VA: Council for Exceptional Children.

Madaus, J. W. (2006). Improving the transition to career for college students with learning disabilities: suggestions from graduates. *Journal of Postsecondary Education and Disability, 19*, 85-93.

Martin, J. E., Huber Marshall, L. H., & De Pry, R. L. (2005). Participatory decision making innovative practices that increase student self-determination. In R. W. Flexer, T. J. Simmons, P. Luft, & R. M. Baer (Eds), *Transition planning for secondary students with disabilities* (2nd Edition). Columbus, OH: Upper Saddle River New Jersey.

Martin, J. E., & Marshall, I. H. (1996). *The ChoiceMaker self-determination assessment.* Longmont, CO: Sopris West.

Martin, J. E., Mithaug. D. E., Cox, P., Peterson, L. Y., Van Dycke, J. L., & Cash, M. E. (2003). Increasing self-determination: Teaching students to plan, work, evaluate, and adjust. *Exceptional Children*, *69*, 431-446.

Martin, J. E., Mithaug, D. E., Oliphint, J. H., Husch, J. V. & Frazier, E. S. (2002). *Self-directed employment: A handbook for transition teachers and employment specialists.* Baltimore: Brookes Publishing.

Masten, A. S., Burt, K. B., Roisman, G. I., Obradovic, U., Long, J. D., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology, 16*, 1071-1094.

McCarver, R. B., & Campbell, V. A. (1987). Future developments in the concept and application of adaptive behavior. *The Journal of Special Education, 21,* 197-207.

McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381.

Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integration diversity with quantitative, qualitative, and mixed methods* (2nd Edition). CA: Sage Publications.

Messick, S. (1993). Validity. In R. L. Linn (Ed.), *Educational Measurement* (pp. 13-103). Phoenix, AZ: Oryx Press.

Miller, R. J., Lombard, R. C., & Corbey, S. A. (2007). *Transition assessment: planning transition and IEP development for youth with mild to moderate disabilities.* Boston, MA: Pearson Education, Inc..

Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *The Council for Exceptional Children,* 51, 397-404.

Mithaug, D. E., Martin, J. E., & Agran, M. (1987). Adaptability instruction: The goal of transitional programming. *Exceptional Children, 53*, 500-505.

Mithaug, D. E., Mithaug, D., Agran, M., Martin, J. E., & Wehmeyer, M. (2007). *Self-instruction pedagogy: How to teach self-determined learning.* Springfield, Il: Charles Thomas.

National Post-school Outcomes Center. (2008). National center on secondary, transition and post-secondary school outcomes for students with disabilities. Retrieved October 20, 2008, from http://psocenter.org/

Neubert, D. A. (2003). The role of assessment in the transition to adult life process for students with disabilities. *Exceptionality, 11* (2), 63-75.

Nirje, B. (1972). The right to self-determination. In W. Wolfensberger (ed.), *The principle of normalization in human services* (pp. 176-193). Toronto: National Institute on Mental Retardation.

Nitko, A. J. (1993). Designing tests that are integrated with instruction. In R. L. Linn (Ed.), *Educational Measurement* (pp. 447-474). Phoenix, AZ: Oryx Press.

Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.

Patton, M. (1980). *Qualitative evaluation methods.* Beverly Hills, CA: Sage.

Peterson, C., & Seligman, M. F. (1984). Causal explanations as a risk factor for depression: Theory and evidence. *Psychological Review, 91*, 347-374.

Pierangelo, R., & Giuliani, G. A. (2002). *Assessment in special education: a practical approach.* Boston, MA: A Pearson Education Company.

Price, L. A., Wolensky, D., & Mulligan, R. (2002). Self-determination in action in the classroom. *Remedial and Special Education, 23*, 109-115.

Ramasamy, R. (1996). Post-high school employment: A follow-up of Apache Native American youth. *Journal of Learning Disabilities, 29*, 174-179.

Rabren, K., Dunn, C., & Chambers, D. (2002). Predictors of post-high school employment among young adults with disabilities. *Career Development for Exceptional Individuals, 25*, 25-40.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14,* 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned form a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Reschly, D. J. (1982). Assessing mild metal retardation: The influence of adaptive behavior, socioeconomic status, and prospects for nonbiased assessment. In C. R. Reynolds & T. B. Gutkin (Eds.), *The handbook of school psychology* (pp. 209-250). NJ: Wiley-Interscience.

Rojewski, J. W. (1999). Occupational and educational aspirations and attainment of young adults with and without LD 2 years after high school completion. *Journal of Learning Disabilities, 32*, 533-552.

Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey.* New York, NY: John Wiley & Sons.

Salvia, J., & Ysseldyke, J. E. (1995). *Assessment* (6th ed.). Boston, MA: Houghton Mifflin Company.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Sax, C. L., & Thoma, C. A. (2002). *Transition Assessment: wise practices for quality lives.* Baltimore, MD: Paul H. Brookes Publishing Co..

Schwartz, I. S., & Baer, D. M. (1991). Social validity assessment: Is current practice state or the art? *Journal of Applied Behavior Analysis, 24*(2), 189-204.

Scuccimarra, D. J., & Speece, D. L. (1990). Employment outcomes and social integration of students with mild handicaps: The quality of life two years after high school. *Journal of Learning Disabilities, 23,* 213-219.

Shapiro, E. S., & Lentz, Jr., F. E. (1991). Vocational-technical programs: Follow-up of students with learning disabilities. *Exceptional Children, 58,* 47-59.

Shepard, L. A. (1993). Evaluating test validity. In L. Darling-Hammond (Ed.), *Review of research in education* (pp. 405-440). Washington, DC: American Educational Research Association.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N., et al. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

Siegle, D. (2007). *The reliability and validity methods.* Retrieved October 22, 2007, from http://www.gifted.uconn.edu/siegle/research/Instrument%20Reliability%20and%20Validity/rel_val_concept.htm

Sitlington, P. L., Neubert, D. A., & Leconte, P. J. (1997). Transition assessment: The position of the division on career development and transition. *Career Development for Exceptional Individuals, 20,* 69-79.

Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.

Sparrow, S., Balla, D., & Cicchetti, D. (1984). *Vineland Adaptive Behavior Scales.* Circle Pines, MN: American Guidance Service.

Stephens, D. L., Collins, M. D., & Dodder, R. A. (2005). A longitudinal study of employment and skill acquisition among individuals with developmental disabilities. *Research in Developmental Disabilities, 26,* 469-486.

Test, D. W., Aspel, N. P., & Everson, J. M. (2006). *Transition methods for youth with disabilities.* Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

The National Secondary Transition Technical Assistance Center (NSTTAC). Retrieved Octorber 18, 2008, from http://www.nsttac.org/products_and_resources/tag.aspx

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Thoma, C. A., & Rogan, P. (2001). Student involvement in transition planning: Unheard voices. *Education and Training in Mental Retardation and Developmental Disabilities, 36*(1), 16-29.

Trainor, A. A. (2007). Perceptions of adolescent girls with LD regarding self-determination and postsecondary transition planning. *Learning Disabilities Quarterly, 30,* 31-45.

Trainor, A., Lindstrom, L., Simmons-Burrough, M., Martin, J. E., & Sorrels, A. (2008). From marginalized to maximized opportunities for diverse youths with disabilities. *The Career Development for Exceptional Individuals,* 31, 56-64.

U.S. Department of Education. (2008).Retrieved October10, 2008, from http://nces.ed.gov/QuickTables/result.asp?SrchKeyword=employment+rate&topic=All

Wagner, M. M. (1995). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. *The Future of Children, 5*(2), 90-112.

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf

Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2).Retrieved October 10, 2008, from www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf.

Wagner, M., Newman, L., Cameto, R., Levine, P, & Garza, N. (2006). An Overview of Findings from Wave 2 of the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International. Retrieved October 10, 2008, from www.nlts2.org/reports/2006_08/nlts2_report_2006_08_complete.pdf

Wehman, P., Kregel, J., & Seyfarth, J. (1985). Transition from school to work for individuals with severe handicaps: A follow-up study. *The Association for Persons with Severe Handicaps, 10*, 132-136.

Wehmeyer, M. L. (1992). Self-determination and the education of students with mental retardation. *Education and Training in Mental Retardation, 27,* 302-314.

Wehmeyer, M. L. (1999). Assistive technology and students with mental retardation: Utilitzatiion and barriers. *Journal of Special Education Technology, 14,* 48-58.

Wehmeyer, M. L., & Kelchner, K. (1995). *The Arc's self-determination scale.* Arlington, TX: The Arc.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.

Wehmeyer, M. L., Palmer, S. B., Agran, M., Mithaug, D. E., & Martin, J. E. (2000). Promoting casual agency: The self-determined learning model of instruction. *Exceptional Children, 66,* 439-443.

Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: predicting involvement. *Exceptionality, 15*, 31-44.

Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63,* 244-255.

Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want": Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389.

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11*(2), 203-214.

Wolman, J. M., Campeau, P. I., DuBois, P. A., Mithaug, D. E., & Stolarski, V. S. (1994). *Air self-determination scale and user guide.* Palo Alto, CA: AIR Institute for Research. Retrieved August 16, 2007 from http://www.ou.edu/zarrow/sdetermination.html

Zhang, D., & Benz, M. R. (2006). Enhancing self-determination of culturally diverse students with disabilities: Current status and future directions. *Focus on Exceptional Children, 38*, 1-12.

APPENDIX A

Sources for TSA Items

TSA Domain		Citations
A. Desires		
A1.	Within the last year the student communicated wanting to do well in school.	Rojewski, J. W. (1999). Occupational and educational aspirations and attainment of young adults with and without LD 2 years after high school completion. *Journal of Learning Disabilities, 32*, 533-552.
A2.	Within the last year the student communicated wanting a job.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487. Rojewski, J. W. (1999). Occupational and educational aspirations and attainment of young adults with and without LD 2 years after high school completion. *Journal of Learning Disabilities, 32*, 533-552.
A3.	Within the last year the student communicated wanting to live on his/her own with or without support.	Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404.
B. Goals		
B1.	Within the last year the student communicated an academic goal.	Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529. Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*, 243-255.

Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "mentally retarded." *Education and Training of the Mentally Retarded, 20*, 222-234.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57*, 56-63.

Martin, J. E., Mithaug, D. E., Oliphint, J. H., Husch, J. V. & Frazier, E. S. (2002). *Self-directed employment: A handbook for transition teachers and employment specialists*. Baltimore: Brookes Publishing.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities

three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.

Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *Exceptionality, 15*, 31-44.

Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.

B2. Within the last year the student communicated an employment goal.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., et al. (2005). The relationship between quality of life and self-determination: An international study. *Journal of Intellectual Disability Research, 49*, 740-744.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57*, 56-63.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination

of students with disabilities. *Exceptional Children, 73*, 488-509.

Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.

Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *Exceptionality, 15*, 31-44.

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf

Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.

Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want": Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67,* 375-389.

B3. Within the last year the student communicated a goal about where he/she would

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57*, 56-63.

	like to live after graduation.	Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208. Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144. Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *Exceptionality, 15*, 31-44. Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.
B4.	Within the last year the student used problem solving skills to attain academic, vocational, and/or independent living goals.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487. Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional children, 57*, 56-63. Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities*. Unpublished doctoral dissertation, University of Florida, Gainesville. Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.

Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *Exceptionality, 15*, 31-44.

Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.

Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want:" Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389.

C. Strengths

C1. Within the last year the student communicated academic strengths.

Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.

Madaus, J. W. (2006). Improving the transition to career for college students with learning disabilities: suggestions from graduates. *Journal of Postsecondary Education and Disability, 19*, 85-93.

Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to

		students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.
		Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.
		Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.
C2.	Within the last year the student communicated employment strengths.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.
		Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*, 243-255.
		Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "mentally retarded." *Education and Training of the Mentally Retarded, 20*, 222-234.
		Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.
		Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404.
		Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.
		Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.

C3.	Within the last year the student communicated independent living strengths, such as banking, cooking, and housekeeping skills.	Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208. Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144. Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.
C4.	When the student set postschool goals, he/she considered his/her strengths.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487. Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18. McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic,*

37(4), 201-208.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

D. Limits

D1. Within the last year the student communicated academic limits related to his/her disability.

Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Madaus, J. W. (2006). Improving the transition to career for college students with learning disabilities: suggestions from graduates. *Journal of Postsecondary Education and Disability, 19*, 85-93.

McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37(4)*, 201-208.

Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.

D2.	Within the last year the student communicated employment limits related to his/her disability.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487. Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*, 243-255. Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "mentally retarded." *Education and Training of the Mentally Retarded, 20*, 222-234. Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469. Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144. Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.
D3.	Within the last year the student communicated independent living limits related to his/her disability.	Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18. Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to

		students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208. Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144. Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.
D4.	When the student set postschool goals, he/she considered the limits related to his/her disability.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487. Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.
E. Disability Awareness		
E1.	Within the last year the student talked about his/her disability.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: A comparison of the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.

McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in*

		Developmental Disabilities, 38, 131-144.
		Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Garner, N. W., & Lawrence, M. (2007). Self-determination and student transition planning knowledge and skills: Predicting involvement. *Exceptionality, 15*, 31-44.
		Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.
E2.	Within the last year the student described his/her disability.	Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.
		Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.
		McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381.
		Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.
		Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.
		Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.
		Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.
E3.	Within the last	Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: A comparison of

	year the student appropriately communicated supports or accommodations matched to disability needs.	the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291. Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18. McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208. Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509. Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104. Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want": Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389.
F. Persistence		
F1.	Within the last year the student	Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study.

	pursued academic goals.	*Learning Disabilities Research & Practice, 18*, 222-236. McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208. Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.
F2.	Within the last year the student pursued employment goals.	Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487. Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.
F3.	Within the last year the student pursued independent	Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

	living goals, such as banking, cooking, and housekeeping skills	Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37(4)*, 201-208.

G. Use of Effective Support System

G1.	Within the last year the student requested support from a teacher or a counselor.	Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529. Frank, A. R., & Sitlington, P. L. (2000). Young adults with mental disabilities – does transition planning make a difference? *Education and Training in Mental Retardation and Developmental Disabilities, 35*, 119-134. Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164. Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18. Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63. Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404. (Special education teachers only) Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and

predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

G2. Within the last year the student accepted support from a teacher or a counselor.

Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529.

Frank, A. R., & Sitlington, P. L. (2000). Young adults with mental disabilities – does transition planning make a difference? *Education and Training in Mental Retardation and Developmental Disabilities, 35*, 119-134.

Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164.

Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63.

Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404. (Special education teachers only)

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

G3. Within the last year the student requested support from classmates or friends.

Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: A comparison of the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want:" Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389.

G4. Within the last year the student accepted support from classmates or friends

Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: A comparison of the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in

individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about:" What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want:" Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389

G5. Within the last year the student requested support from

Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

family members.

Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: A comparison of the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about": What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf

Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want:" Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389.

G6. Within the last year the student accepted support from family members.

Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

Gerber, P. J., Price, L. A., Mulligan, R., & Shessel, I. (2004). Beyond transition: A comparison of the employment experiences of American and Canadian adults with LD. *Journal of Learning Disabilities, 37*, 283-291.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Skinner, M. E. (2004). College students with learning disabilities speak out: what it takes to be

successful in postsecondary education. *The Journal of Postsecondary Education and Disability, 17*, 91-104.

Thoma, C. A., & Getzel, E. (2005). "Self-determination is what it's all about": What postsecondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40,* 234-242.

Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International. Available at www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf

Whitney-Thomas, J., & Moloney, M. (2001). "Who I am and what I want:" Adolescents' self-definition and struggles. *The Council for Exceptional Children, 67*, 375-389.

H. Coping Skills

H1. Within the last year at school the student coped with stress, frustration, or difficulties in a constructive way.

Higgins, E. L., Raskind, M. H., Goldberg, R. J., & Kenneth, L. H. (2002). Stages of acceptance of a learning disability: The impact of labeling. *Learning Disability Quarterly, 25*, 3-18.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

		Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.
I. Social Skills		
I1.	Within the last year the student interacted appropriately with other people.	Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164. Masten, A. S., Burt, K. B., Roisman, G. I., Obradovic, U., Long, J. D., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology, 16*, 1071-1094. Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children, 51*, 397-404. Wagner, M. M. (1995). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. *The Future of Children, 5* (2), 90-112. Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf. Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf.
I2.	Within the last year the student had at least one friend.	Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164. Masten, A. S., Burt, K. B., Roisman, G. I., Obradovic, U., Long, J. D., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development*

and Psychopathology, 16, 1071-1094.

Wagner, M. M. (1995). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. *The Future of Children, 5*(2), 90-112.

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After High School: A First Look at the Postschool Experiences of Youth with Disabilities. A Report from the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_04/nlts2_report_2005_04_complete.pdf

Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf

J. Proactivity Involvement

J1. Within the last year the student participated in school organizations.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

		Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf
J2.	Within the last year the student volunteered with community organizations.	Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37(4)*, 201-208. Wagner, M., Newman, L., Cameto, R., & Levine, P. (2005). Changes Over Time in the Early Postschool Outcomes of Youth with Disabilities. A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2). Retrieved October 10, 2008, from www.nlts2.org/reports/2005_06/nlts2_report_2005_06_complete.pdf
J3.	Within the last year the student played a positive role in the family.	Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49.

		Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37*(4), 201-208.
J4.	Within the last year the student played a positive role with friends.	Goldberg, R. J., Higgins, E. L., Raskind, M. H., & Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*, 222-236. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research & Practice, 14*, 35-49. Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (2002). Teaching "life success" to students with LD: Lessons learned from a 20-year study. *Intervention in School and Clinic, 37(4)*, 201-208.
J5.	Within the last year the student had a paid job.	Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529. Dickson, D. L. & Verbeek, R. L. (2002). Wage differentials between college graduates with and without learning disabilities. *Journal of Learning Disabilities, 35*, 175-184. Dunn, C., & Shumaker, L. (1997). A follow-up study of former special education students from a rural and urban county school system. *Career Development for Exceptional Individuals, 20*, 43-54. Fabian, E. S. (2007). Urban youth with disabilities: factors affecting transition employment. *Rehabilitation Counseling Bulletin, 50*, 130-138. Fabian, E. S., Lent, R. W., & Willis, S. P. (1998). Predicting work transition outcomes for students with disabilities: Implications for counselors. *Journal of Counseling & Development, 76*, 311-316. Fourqurean, J. M., Meisgeier, C., Swank, P. R., & Williams, R. E. (1991). Correlates of

postsecondary employment outcomes for young adults with learning disabilities. *Journal of Learning Disabilities, 24*, 400-405.

Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*, 243-255.

Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "mentally retarded." *Education and Training of the Mentally Retarded, 20*, 222-234.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469.

Rabren, K., Dunn, C., & Chambers, D. (2002). Predictors of post-high school employment among young adults with disabilities. *Career Development for Exceptional Individuals, 25*, 25-40.

K. Making Positive Choices

K1. Within the last year the student made positive academic choices and acted on them.

Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., et al. (2005). The relationship between quality of life and self-determination: An international study. *Journal of Intellectual Disability Research, 49*, 740-744.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63.

McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities, 36*, 363-381.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors bearing on self-determination and the academic success of university students with learning disabilities.* Unpublished doctoral dissertation, University of Florida, Gainesville.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities

three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.

Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.

K2. Within the last year the student made positive employment choices and acted on them.

Gerber, P. J., Ginsberg, R., & Reiff, H. B. (1992). Identifying alterable patterns in employment success for highly successful adults with learning disabilities. *Journal of Learning Disabilities, 25*, 475-487.

Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., et al. (2005). The relationship between quality of life and self-determination: An international study. *Journal of Intellectual Disability Research, 49*, 740-744.

Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63.

Lindstrom, L. E. & Benz, M. R. (2002). Phases of career development case studies of young women with learning disabilities. *The Council for Exceptional Children, 69*, 67-83.

Martin, J. E., Mithaug, D. E., Oliphint, J. H., Husch, J. V. & Frazier, E. S. (2002). *Self-directed employment: A handbook for transition teachers and employment specialists*. Baltimore: Brookes Publishing.

Rojewski, J. W. (1999). Occupational and educational aspirations and attainment of young adults with and without LD 2 years after high school completion. *Journal of Learning Disabilities, 32*, 533-552.

Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.

Wehmeyer, M. L. & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144.

		Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.
K3.	Within the last year the student made independent living choices and acted on them.	Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., et al. (2005). The relationship between quality of life and self-determination: An international study. *Journal of Intellectual Disability Research, 49*, 740-744. Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63. Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509. Wehmeyer, M. L., & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144. Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.

L. Transition Education Involvement

L1.	Within the last year the student actively participated in educational planning meetings to discuss issues	Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529. Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164. Rabren, K., Dunn, C., & Chambers, D. (2002). Predictors of post-high school employment among young adults with disabilities. *Career Development for Exceptional Individuals, 25*, 25-40.

	such as goals, accommodations, supports, or his/her plans of study.	Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509.
L2.	At the last IEP meeting, the student discussed transition assessment results.	Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children, 66*, 509-529. Collet-Klingenberg, L. L. (1998). The reality of best practices in transition: a case study. *The Council for Exceptional Children, 65*, 67-78. Halpern, A. S., Yovanoff, P., Doren, B., & Benz, M. R. (1995). Predicting participation in postsecondary education for school leavers with disabilities. *Exceptional Children, 62*, 151-164. Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. *Journal of Special Education, 23*, 243-255. Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled, "mentally retarded." *Education and Training of the Mentally Retarded, 20*, 222-234. Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children, 51*, 455-469. Liebert, D., Lutsky, L., & Gottlieb, A. (1990). Postsecondary experiences of young adults with severe physical disabilities. *Exceptional Children, 57,* 56-63. Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. *The Council for Exceptional Children, 51*, 397-404. Rabren, K., Dunn, C., & Chambers, D. (2002). Predictors of post-high school employment among young adults with disabilities. *Career Development for Exceptional Individuals, 25*, 25-40.

		Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., Little, T. D., Garner, N. & Lawrence, M. (2007). Examining individual and ecological predictors of the self-determination of students with disabilities. *Exceptional Children, 73*, 488-509. Wagner, M. M. (1995). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. *The Future of Children, 5* (2), 90-112. Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.
L3.	Within the last year, the student arranged transportation to job sites, educational settings, or social events.	Fabian, E. S., Lent, R. W., & Willis, S. P. (1998). Predicting work transition outcomes for students with disabilities: Implications for counselors. *Journal of Counseling & Development, 76*, 311-316. Wehman, P., Kregel, J., & Seyfarth, J. (1985). Transition from school to work for individuals with severe handicaps: A follow-up study. *The Association for Persons with Severe Handicaps, 10*, 132-136.

APPENDIX B

Support Letters

Paul H Brookes Publishing Co , Inc
Post Office Box 10624, Baltimore, Maryland 21285-0624

October 25, 2007

James E Martin, Ph .D
Zarrow Endowed Chair and Professor Special Education Director, Zarrow Center for Learning Enrichment 840 Asp Avenue, Room 111
Norman, Oklahoma 73019-4090

Dear Dr Martin:

I would like to thank you for sharing with Brookes Publishing the exciting work you are doing to support students and young adults with disabilities. I am writing to express our interest in continuing conversations with you about possible commercial publication of your assessment entitled "Transition Success Assessment " I understand that you are responding to an REP through the National Center for Special Education Research at the Institute of Educational Sciences and that you intend to continue work on your project by gathering data on the validity and reliability of the program Brookes Publishing would be interested in collaborating with you to explore how to best publish and take to market an appropriate product once evidence of effectiveness has been established.

A product based on your research would fit well within our current publishing program With a focus on increasing post-school success for students with disabilities, this program would complement several other products already on our list.. We understand the importance of this topic and agree that there is a need and a ready audience for additional resources Indeed, our customers look to Brookes for practical, professional resources with a strong research base to support those who work with people with disabilities.

As the premier publisher in the market of disabilities, Brookes continues to produce professional references and electronic products for academics, researchers, professionals, and parents concerned with issues related to the inclusion of young adults with intellectual, developmental, and learning disabilities in the school, workplace, post-secondary education, and community.. To support a new product designed to guide and support students as they transition out of high school, is consistent with Brookes's vision and mission. We are prepared across our business's departments—from editorial, production, and graphic arts to marketing, web, customer service, and fulfillment—to handle the commercialization demands of a product in this area.

We wish you all the best in your next steps with the project and look forward to being in touch as it progresses.

Sincerely,

Rebecca W Lazo
Senior Acquisitions Editor
rlazo@brookespublishing.com

410-337-9580 FAX 443-279-0976 www brookespublishing corn

"Opening Doors To Opportunity"
DRS
www.okrehab.org
Oklahoma Department of Rehabilitation Services
DIVISION OF VOCATIONAL REHABILITATION

Director
Linda Parker
Commissioners
Ray Kirk
Steve Shelton
Ben C. White

October 26, 2007

Professor Jim Martin
Zarrow Chair and Director
Zarrow Center
University of Oklahoma Carpenter Hall, Room 111 840 Asp Avenue
Norman, OK 73019

RE: Transition Success Assessment proposal and our support for this project
Dear Jim,

On behalf of Oklahoma's Division of Rehabilitation Services and our counselors involved with the Oklahoma's Transition Council teams, I am writing to pledge our involvement in the *Transition Success Assessment* project. Oklahoma Vocational Rehabilitation Services has been an integral part of the Oklahoma Transition Council since its inception Our rehabilitation counselors are members and often facilitators or co-facilitators of each of the 26 local transition teams. You have already worked with a couple of our offices, their clients, and involved educators in the early development phase of the Transition Success Assessment, We offer our support for the completion of this tool and look forward to its use across Oklahoma.

I understand that this project will validate the Transition Success Assessment, its factors, parallel structures for professional, parent, and student versions, will conduct reliability studies, and will undertake school and post school follow-up studies to determine the usefulness of the TSA Vocational rehabilitation counselors will cooperate with educators, family members, and their students from across the 26 Transition Teams to help complete this project.

As a Vocational Rehabilitation Counselor involved in transition planning and support, and supervision of counselors, I realize fast hand the importance of useful transition assessment information to guide goal setting. We currently do not have a transition assessment that uses post school success predictors to assess transition behaviors and competencies for students with an IEP. This tool when fully developed will help vocational rehabilitation counselors and educators to provide improved transition education and services.

We are engaged in a unique collaborative statewide initiative to improve transition education and services at the local school level.. We became involved in the Oklahoma Transition Council and the local Transition Teams because we saw this as an excellent means to improve post school employment and educational outcomes. The local teams consist of parents, educators, administrators, community agency staff, students, and vocational rehabilitation counselors. The teams meet during to year to develop transition improvement plans, implement the plans, and then begin the process all over again for other areas in need of improvement.. By their very nature the local Transition Teams are diverse, decentralized, and model collaborative transition practice. The Transition Council remains the sole contact with all the teams throughout the state,. As such, the Transition Council and its teams represent an ideal fusion of resources that can come together to assist with the successful completion of this project. The decentralized nature of each team makes it hard for anyone other than the Transition Council to offer a letter of support for this project.

As co-chair of the Oklahoma Transition Council and DRS vocational counselors across the state who participate on the local teams, we fully support the implementation of this proposal to develop, validate, and demonstrate the usefulness of the Transition Success Assessment.. We know first-hand how much a tool like this is need and look forward to its completion.

Respectfully,

David Couch, CRC
Vocational Rehabilitation Counselor Division of Vocational Rehabilitation

2227 *W* Lindsey, Suite 1200 • Norman, Oklahoma 73069 • Voice/TTY: (405) 447-0295 Fax: (405) 447.5326

"Opening Doors To Opportunity"
DRS
www.okrehab.org
Oklahoma Department of Rehabilitation Services
DIVISION OF VOCATIONAL REHABILITATION

Director
Linda Parker
Commissioners
Ray Kirk
Steve Shelton
Ben C. White

October 26, 2007

Professor .Jim Martin
Zarrow Chair and Director
Zarrow Center
University of Oklahoma Carpenter Hall, Room 111 840 Asp Avenue
Norman, OK 73019

RE: Transition Success Assessment proposal and our support for this project

Dear Jim,

On behalf of Oklahoma's Division of Rehabilitation Services and our counselors involved with the Oklahoma's Transition Council teams, I am writing to pledge our involvement in the *Transition Success Assessment* project, Oklahoma Vocational Rehabilitation Services has been an integral part of the Oklahoma Transition Council since its inception. Our rehabilitation counselors are members and often facilitators or co-facilitators of each of the 26 local transition teams.. You have already worked with a couple of our offices, their clients, and involved educators in the early development phase of the Transition Success Assessment.. We offer our support for the completion of this tool and look forward to its use across Oklahoma

I understand that this project will validate the Transition Success Assessment, its factors, parallel structures for professional, parent, and student versions, will conduct reliability studies, and will undertake school and post school follow-up studies to determine the usefulness of the ISA. Vocational rehabilitation counselors will cooperate with educators, family members, and their students from across the 26 Transition Teams to help complete this project.

As a Vocational Rehabilitation Counselor involved in transition planning and support, and supervision of counselors, I realize first hand the importance of useful transition assessment information to guide goal setting.. We currently do not have a transition assessment that uses post school success predictors to assess transition behaviors and competencies for students with an IEP This tool when fully developed will help vocational rehabilitation counselors and educators to provide improved transition education and services.

We are engaged in a unique collaborative statewide initiative to improve transition education and services at the local school level. We became involved in the Oklahoma Transition Council and the local Transition Teams because we saw this as an excellent means to improve post school employment and educational outcomes, The local teams consist of parents, educators, administrators, community agency staff, students, and vocational rehabilitation counselors. The teams meet during to year to develop transition improvement plans, implement the plans, and then begin the process all over again for other areas in need of improvement By their very nature the local Transition Teams are diverse, decentralized, and model collaborative transition practice. The Transition Council remains the sole contact with all the teams throughout the state As such, the Transition Council and its teams represent an ideal fusion of resources that can come together to assist with the successful completion of' this project. The decentralized nature of each team makes it hard for anyone other than the Transition Council to offer a letter of support for this project
As co-chair of the Oklahoma Transition Council and DRS vocational counselors across the state who participate on the local teams, we fully support the implementation of this proposal to develop, validate, and demonstrate the usefulness of the Transition Success Assessment We know first-hand how much a tool like this is need and look forward to its completion.

Respectfully,

Marla Baker

Marla Baker
Programs Manager
Division of Vocational Rehabilitation

2227 *W* Lindsey, Suite 1200 • Norman, Oklahoma 73069 • Voice/TTY: (405) 447-0295 Fax: (405)

SANDY GARRETT
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
STATE OF OKLAHOMA

October 29, 2007

James E. Martin, Ph D.

Zarrow Professor of Special Education
Zarrow Center for Learning Enrichment
University of Oklahoma
840 Asp Avenue, Room 111
Norman, OK 73019

RE: Letter of support for the Transition Success Assessment proposal

Dear Dr.. Martin,

I am very pleased to offer my support for this proposal entitled *Transition Success Assessment* This project will validate the Transition Success Assessment (ISA), its factors, parallel structures for professional, parent, and student Transition Success Assessment versions, conduct reliability studies, and will conduct school and post-school follow-up studies to determine the usefulness of the ISA As Chair of the Oklahoma Transition Council, I am in the perfect position to contact the regional transition teams across Oklahoma to voluntarily participate in this project No other entity in the State acts as the sole contact point for the Oklahoma Transition Council's Transition Teams.. Allow me to explain about what we have done in Oklahoma and tell you why the Chair of the Transition Council is the best person to offer her support for this proposed project

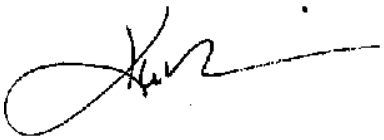
The Transition Success Assessment project will utilize a network of 26 transition teams across the state.. Each team includes educators, rehabilitation counselors, parents, directors, and community agency staff from numerous school districts and communities Teams meet regularly to develop a transition plan for their region, attend an annual transition institute, and also attend regional transition meetings. The teams report their progress in improving transition education and services back to the Oklahoma Transition Council.. The Oklahoma Transition Council organized these teams a few years ago as the means to impact transition educational practices and services at the local level Because the team membership derives from many diverse sources, no one school, agency, or other entity can speak for this group better than the Oklahoma Transition Council. Representatives from vocational rehabilitation, higher education, social service agencies, local educational agencies, parent groups, students, and other organizations belong to the Oklahoma Transition Council The Council sponsors yearly Transition Institutes where the local teams come together to obtain content knowledge and develop a systems change plan. During the year, several regional meetings occur where representatives from the teams discuss their progress and share ideas to overcome barriers.. The teams reconvene at another Transition Institute a year later and the process repeats itself:. The Oklahoma Transition Council coordinates team contacts, organizes the Institute and regional meetings, and evaluates team progress,

OKLAHOMA STATE DEPARTMENT OF EDUCATION
2500 NORTH LINCOLN BOULEVARD, OKLAHOMA CITY, OK 73105-4599
(405) 521-3301, FAX: (405) 521-6205
http://sde.state.ok.us
FIRST IN THE TWENTY-FIRST

SANDY GARRETT
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
STATE OF OKLAHOMA

The Oklahoma Transition Council fully supports the effort of Dr. Martin and his colleagues as they develop and validate the Transition Success Assessment. I realize the need for a transition assessment based upon demonstrated student competencies, and commit the involvement of the Transition Council and its teams to this project. I am excited about the possibilities that this project implies for professionals, parents, and students with an individualized education program (IEP) I am very pleased to support your endeavors now and look forward to the opportunity to participate in this four-year project

Sincerely,



Kim Nickerson
Special Education Services

OKLAHOMA STATE DEPARTMENT OF EDUCATION
2500 NORTH LINCOLN BOULEVARD, OKLAHOMA CITY, OK 73105-4599
(405) 521-3301, FAX: (405) 521-6205
http://sde.state.ok.us
FIRST IN THE TWENTY-FIRST

APPENDIX C

OU-IRB Phase I Study Approval

The University of Oklahoma

OFFICE FOR HUMAN RESEARCH PARTICIPANT PROTECTION

IRB Number: 11794
Approval Date: August 13, 2007

August 13, 2007
James Martin, Ph.D.
Zarrow Center
840 Asp Avenue, CH 111
Norman, OK 73019

RE: Social Validation of the Transition Success Assessment: Phase 1

Dear Dr Martin:

On behalf of the Institutional Review Board (IRB), I have reviewed and granted expedited approval of the above-referenced research study. This study meets the criteria for expedited approval category 6, 7. It is my judgment as Chairperson of the IRB that the rights and welfare of individuals who may be asked to participate in this study will be respected; that the proposed research, including the process of obtaining informed consent, will be conducted in a manner consistent with the requirements of 45 CFR 46 as amended; and that the research involves no more than minimal risk to participants.

This letter documents approval to conduct the research as described:
Consent form - Subject Dated: August 13, 2007 Revised
IRB Application Dated: August 13, 2007 Revised
Letter Dated: August 06, 2007 Recruitment Letter
Survey Instrument Dated: August 06, 2007 Student Social Validity Focus Grp Evaluation Survey Instrument Dated: August 06, 2007 Parent Social Validity Focus Grp Evaluation Survey Instrument Dated: August 06, 2007 Professional Social Validity Focus Grp Evaluation Other Dated: August 06, 2007 2nd Annual OK Transition Inst. - 2007 Team Contact Protocol Dated: August 06, 2007

As principal investigator of this protocol, it is your responsibility to make sure that this study is conducted as approved. Any modifications to the protocol or consent form, initiated by you or by the sponsor, will require prior approval, which you may request by completing a protocol modification form. All study records, including copies of signed consent forms, must be retained for three (3) years after termination of the study.

The approval granted expires on August 12, 2008. Should you wish to maintain this protocol in an active status beyond that date, you will need to provide the IRB with an IRB Application for Continuing Review (Progress Report) summarizing study results to date. The IRB will request an IRB Application for Continuing Review from you approximately two months before the anniversary date of your current approval.

If you have questions about these procedures, or need any additional assistance from the IRB, please call the IRB office at (405) 325-8110 or send an email to irb©ou.edu.

Cordially,

Chair, Institutional Review Board
Lynn Devenport, Ph.D.

660 Parrington Oval Suite 316, Norman, Oklahoma 73019-3085 PHONE: (405) 325-8110 FAX: (405) 325-2373

APPENDIX D

A Sample Evaluation Form of the TSA Professional Version

A. Desire	Understandable?	Beneficial?	Comments
A1. Within the last year, the student expressed wanting to do well academically or behaviorally.	Yes No	Yes No	
A2. Within the last year, the student expressed wanting a job.	Yes No	Yes No	
A3 Within the last year, the student expressed wanting to live on their own with or without support.	Yes No	Yes No	

B. Goals	Understandable?	Beneficial?	Comments
B1. At the last IEP meeting, the student expressed an employment goal.	Yes No	Yes No	
B2. At the last IEP meeting, the student expressed an academic goal.	Yes No	Yes No	
B3. At the last IEP meeting, the student expressed an adult living goal.	Yes No	Yes No	
B4. Within the last year, the student exhibited problem solving skills to attain academic, vocational, and personal goals.	Yes No	Yes No	

C. Strengths	Understandable?	Beneficial?	Comments
C1. At the last IEP meeting, the student expressed academic strengths.	Yes No	Yes No	
C2. At the last IEP meeting, the student expressed employment strengths.	Yes No	Yes No	
C3. At the last IEP meeting, the student expressed adult living strengths.	Yes No	Yes No	
C4. At the last IEP meeting, the student matched strengths to postschool goal.	Yes No	Yes No	

D. Limitations	Understandable?	Beneficial?	Comments
D1. At the last IEP meeting, the student expressed academic limitations.	Yes No	Yes No	
D2. At the last IEP meeting, the student expressed employment limitations.	Yes No	Yes No	
D3. At the last IEP meeting, the student expressed adult living limitations.	Yes No	Yes No	
D4. At the last IEP meeting, the student acknowledged limitations associated with postschool goals.	Yes No	Yes No	

E. Disability Awareness		Understandable?	Beneficial?	Comments
E1.	At the last IEP meeting, the student described his/her disability.	Yes No	Yes No	
E2.	At the last IEP meeting, the student described his/her disability in a positive manner.	Yes No	Yes No	
E3.	At the last IEP meeting, the student expressed needed supports or accommodations.	Yes No	Yes No	

F. Persistence		Understandable?	Beneficial?	Comments
F1.	Within the last year, the student continually pursued academic goals.	Yes No	Yes No	
F2.	Within the last year, the student continually pursued employment goals.	Yes No	Yes No	
F3.	Within the last year, the student continually pursued adult living goals.	Yes No	Yes No	
F4	Within the last year, the student continually pursued annual IEP goals.	Yes No	Yes No	

G. Use of Effective Support Systems		Understandable?	Beneficial?	Comments
G1.	Within the last year, the student requested and used school staff for support.	Yes No	Yes No	
G2.	Within the last year, the student requested and used classmates or friends for support.	Yes No	Yes No	
G3.	Within the last year, the student requested and used family members for support.	Yes No	Yes No	

H. Emotional Stability		Understandable?	Beneficial?	Comments
H1.	Within the last year, the student coped with stress or frustration in a positive way.	Yes No	Yes No	
H2.	Within the last year, the student coped with difficulties in a positive way.	Yes No	Yes No	
H1.	Within the last year, the student coped with stress or frustration in a positive way.	Yes No	Yes No	

I. Social Skills		Understandable?	Beneficial?	Comments
I1.	The student gets along with adults.	Yes No	Yes No	
I2.	The student gets along with classmates.	Yes No	Yes No	
I3.	The student has at least one	Yes No	Yes No	

J. Proactivity		Understandable?	Beneficial?	Comments
J1.	Within the last year, the student became involved with school or community organizations.	Yes No	Yes No	
J2.	Within the last year, the student expressed playing a positive role in the family.	Yes No	Yes No	
J3.	Within the last year, the student played a positive role with friends.	Yes No	Yes No	

K. Making Choices		Understandable?	Beneficial?	Comments
K1.	Within the last year, the student made academic choices and act	Yes No	Yes No	
K2.	Within the last year, the student made employment choices and act on them.	Yes No	Yes No	
K3.	Within the last year, the student made adult living choices and act on them.	Yes No	Yes No	

L. Job Experience		Understandable?	Beneficial?	Comments
L1.	Within the last year, the student had a paying job.	Yes No	Yes No	

	M. Family Involvement	Understandable?	Beneficial?	Comments
M1.	At the last IEP meeting, at least one family member attended.	Yes No	Yes No	
M2.	At the last IEP meeting, at least one family member provided input.	Yes No	Yes No	
M3.	In the last year, did family members discuss concerns about their child's education outside IEP meetings with me or with the student?	Yes No	Yes No	

	N. Transition Education	Understandable?	Beneficial?	Comments
N1.	Educators taught the student to participate and speak in IEP meeting and transition	Yes No	Yes No	
N2.	Educators taught the student self-determination skills such as goal-setting and goal-	Yes No	Yes No	
N3.	Educators taught the student disability awareness and identification of strengths and limitations.	Yes No	Yes No	
N4.	At the last IEP meeting, the student discussed the results of transition assessments about	Yes No	Yes No	
N5.	Within the last year, the student arranged transportation to job sites, educational settings, or	Yes No	Yes No	

Summary Questions

1. Overall, are the TSA understandable?

2. Overall, are the TSA questions beneficial?

3. Did the TSA cover all the important transition areas? Yes No

   If not, what did TSA leave out?

4. Was the TSA easy to use? Yes No, Why?

5. Will using the TSA enable educators to better understand the scope of crucial transition education behaviors?

6. What did you learn about your student by completing the TSA?

7. Will you use the TSA with your students? Why or why not?

8. What additional questions need to be added?

9. When should teachers start using the TSA with students and families?

10. Once you become familiar with the TSA, how long would it take to complete it?

11. What are your concerns about using the TSA?

APPENDIX E

OU-IRB Phase II Study Approval

The University of Oklahoma
OFFICE FOR HUMAN RESEARCH PARTICIPANT PROTECTION

IRB Number: 11979
Amendment Approval Date: April 03, 2008

April 04, 2008

Chen-Ya Juan, M. Ed
Educational Psychology
820 Van Fleet Oval, ECH Rm. 111
Norman, OK 73019

RE: **IRB No. 11979: Reliability of the Transition Success Assessment: Phase II**

Dear Ms Juan:

On behalf of the Institutional Review Board (IRB), I have reviewed your protocol modification form. It is my judgement that this modification allows for the rights and welfare of the research subjects to be respected Further, it has been determined that the study will continue to be conducted in a manner consistent with the requirements of 45 CFR 46 as amended; and that the potential benefits to subjects and others warrant the risks subjects may choose to incur

This letter documents approval to conduct the research as described in:

Amend Form Dated: April 01, 2008
Survey Instrument Dated: April 01, 2008 Transition Success Instrument - Student - Revised Survey Instrument Dated: April 01, 2008 Transition Success Instrument- Professional - Rev Survey Instrument Dated: April 01, 2008 Transition Success Instrument - Family - Revised Survey Instrument Dated: April 01, 2008 Transition Success Assessment Goal ID Matrix Protocol Dated: April 02, 2008 Revised

Amendment Summary:
1) Revised Instruments - Revised Professional, Family and Student versions of the Transition Success Instrument.
2) Addition of an Instrument - Add the Transition Success Assessment (TSA) Goal Identification Matrix 3) Revised protocol to incorporate the use of the new instrument

This letter covers only the approval of the above referenced modification. All other conditions, including the original expiration date, from the approval granted March 24, 2008 are still effective
If consent form revisions are a part of this modification, you will be provided with a new stamped copy of your consent form. Please use this stamped copy for all future consent documentation. Please discontinue use of all outdated versions of this consent form.
If you have any questions about these procedures or need additional assistance, please do not hesitate to call the IRB office at (405) 325-8110 or send an email to irb@ou.edu

Cordially,
Lynn Devenport, Ph.D.
Chair, Institutional Review Board

Ur Amend Final Appv *Exp*

APPENDIX F

TSA Professional, Student, and Family Versions

TSA Professional Version

A. Desires	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
A1. Within the last year the student communicated wanting to do well in school.					
A2. Within the last year the student communicated wanting a job.					
A3. Within the last year the student communicated wanting to live on his/her own with or without support.					

TSA Desire Total: Items A1+ A2 + A3 _____

B. Goals	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
B1. Within the last year the student communicated an academic goal.					
B2. Within the last year the student communicated an employment goal.					
B3. Within the last year the student communicated a goal about where he/she would like to live after graduation.					
B4. Within the last year the student used problem solving skills to attain academic, vocational, and/or independent living goals.					

TSA Total: Items B1 + B2 + B3 + B4 _____

C. Strengths	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
C1. Within the last year the student communicated academic strengths.					
C2. Within the last year the student communicated employment strengths.					
C3. Within the last year the student communicated independent living strengths, such as banking, cooking, and housekeeping skills.					
C4. When the student set postschool goals, he/she considered his/her strengths.					

TSA Total: Items C1 + C2 + C3 + C4 _____

D. Limits	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
D1. Within the last year the student communicated academic limits related to his/her disability.					
D2. Within the last year the student communicated employment limits related to his/her disability.					
D3. Within the last year the student communicated independent living limits related to his/her disability.					
D4. When the student set postschool goals, he/she considered the limits related to his/her disability.					

TSA Total: Items D1+ D2 + D3 + D4 _____

E. Disability Awareness	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
E1. Within the last year the student talked about his/her disability.					
E2. Within the last year the student described his/her disability.					
E3. Within the last year the student appropriately communicated supports or accommodations matched to disability needs.					

TSA Total: Items E1 + E2 + E3 _____

F. Persistence	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
F1. Within the last year the student pursued academic goals.					
F2. Within the last year the student pursued employment goals.					
F3. Within the last year the student pursued independent living goals, such as banking, cooking, and housekeeping skills.					

TSA Total: Items F1 + F2 + F3 _____

G. Use of Effective Support Systems	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always (when appro-priate)* 4
G1. Within the last year the student requested support from a teacher or a counselor.					
G2. Within the last year the student accepted support from a teacher or a counselor.					
G3. Within the last year the student requested support from classmates or friends.					
G4. Within the last year the student accepted support from classmates or friends.					
G5. Within the last year the student requested support from family members.					
G6. Within the last year the student accepted support from family members.					

TSA Total: Items G1 + G2 + G3 + G4 + G5 + G6 _____

H. Coping Skills	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
H1. Within the last year at school the student coped with stress, frustration, or difficulties in a constructive way.					

TSA Total: Item H1 _____

I. Social Skills	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
I1. Within the last year the student interacted appropriately with other people.					
I2. Within the last year the student had at least one friend.					

TSA Total: Items I1 + I2 _____

J. Proactive Involvement	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
J1. Within the last year the student participated in school organizations.					
J2. Within the last year the student volunteered with community organizations.					
J3. Within the last year the student played a positive role in the family.					
J4. Within the last year the student played a positive role with friends.					
J5. Within the last year the student had a paid job.					

TSA Total: Items J1 + J2 + J3 + J4 + J5 _____

K. Making Positive Choices	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
K1. Within the last year the student made positive academic choices and acted on them.					
K2. Within the last year the student made positive employment choices and acted on them.					
K3. Within the last year the student made independent living choices and acted on them.					

TSA Total: Items K1 + K2 + K3 _____

L. Transition Education Involvement		*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
L1.	Within the last year the student actively participated in educational planning meetings to discuss issues such as goals, accommodations, supports, or his/her plans of study.					
L2.	Within the last year the student discussed transition assessment results.					
L3.	Within the last year the student arranged transportation to job sites, educational settings, or social events.					

TSA Total: Items L1 + L2 + L3 _____

TSA Student Version

A. Desires	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
A1. I want to do well in school.					
A2. I want a job.					
A3. I want to live independently with or without help.					

TSA Desire Total: Items A1+ A2 + A3 _____

B. Goals	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
B1. Within the last year I set a class goal.					
B2. Within the last year I set a job goal.					
B3. Within the last year I thought about where I want to live after leaving school.					
B4. Within the last year I used problem solving skills to make school, job, and independent living goals happen.					

TSA Total: Items B1 + B2 + B3 + B4 _____

C. Strengths	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
C1. Within the last year I knew my school strengths.					
C2. Within the last year I knew my job strengths.					
C3. Within the last year I knew my strengths for living on my own after graduation, such as banking, cooking, and housekeeping skills.					
C4. When I set my postschool goals, I considered my strengths.					

TSA Total: Items C1 + C2 + C3 + C4 _____

D. Limits	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
D1. Within the last year I knew how my disability affected me at school.					
D2. Within the last year I knew how my disability affected me at work.					
D3. Within the last year I knew how my disability affected me living on my own.					
D4. When I set my postschool goals, I considered how my disability affected the goals.					

TSA Total: Items D1+ D2 + D3 + D4 _____

E. Disability Awareness	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
E1. I understand my disability.					
E2. Within the last year I have explained my disability.					
E3. Within the last year I asked for support or help matched to disability needs.					

TSA Total: Items E1 + E2 + E3 _____

F. Persistence	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
F1. Within the last year I kept working to achieve my educational goals.					
F2. Within the last year I kept working to achieve job goals.					
F3. Within the last year I kept working on goals to live on my own.					

TSA Total: Items F1 + F2 + F3 _____

G. Use of Effective Support Systems	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always (when appro-priate)* 4
G1. Within the last year I asked a teacher or a counselor for help.					
G2. I took the advice or help my teacher or counselor gave me.					
G3. Within the last year I asked friends for help.					
G4. I took the advice or help my friends gave me.					
G5. Within the last year I asked family for help.					
G6. I took the advice or help my family gave me.					

TSA Total: Items G1 + G2 + G3 + G4 + G5 + G6 _____

H. Coping Skills	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
H1. Within the last year at school I handled stress, frustration, or difficulties.					

TSA Total: Item H1 _____

I. Social Skills	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
I1. Within the last year I got along with other people.					
I2. Within the last year I maintained a friendship.					

TSA Total: Items I1 + I2 _____

J. Proactive Involvement	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
J1. Within the last year I participated in school organizations.					
J2. Within the last year I volunteered with community organizations.					
J3. Within the last year I was important to my family.					
J4. Within the last year I was important to my friends.					
J5. Within the last year I had a paid job.					

TSA Total: Items J1 + J2 + J3 + J4 + J5 _____

K. Making Positive Choices	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
K1. Within the last year I made good choices in school and acted on them.					
K2. Within the last year I made good job choices and acted on them.					
K3. Within the last year I made independent living choices and acted on them.					

TSA Total: Items K1 + K2 + K3 _____

L. Transition Education Involvement	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
L1. Within the last year I actively took part in educational planning meetings to discuss issues such as goals, accommodations, supports, or plans of study.					
L2. I talked about transition assessment results.					
L3. Within the last year I arranged travel to job sites, school, or social events.					

TSA Total: Items L1 + L2 + L3 _____

TSA Family Version

A. Desires	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
A1. Within the last year my child has talked about wanting to do well in school.					
A2. Within the last year my child has talked about wanting a job.					
A3. Within the last year my child has talked about wanting to live on his/her own with or without help.					

TSA Desire Total: Items A1+ A2 + A3 _____

B. Goals	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
B1. Within the last year my child talked about an academic goal.					
B2. Within the last year my child talked about an employment goal.					
B3. Within the last year my child talked about a goal about where he/she would like to live after graduation.					
B4. Within the last year my child solved problems to attain school, employment, and/or independent living goals.					

TSA Total: Items B1 + B2 + B3 + B4 _____

C. Strengths	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
C1. Within the last year my child talked about academic strengths.					
C2. Within the last year my child talked about employment strengths.					
C3. Within the last year my child talked about independent living strengths, such as banking, cooking, and housekeeping skills.					
C4. When my child set postschool goals, he/she considered his/her strengths.					

TSA Total: Items C1 + C2 + C3 + C4 _____

D. Limits	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
D1. Within the last year my child talked about academic limits related to his/her disability.					
D2. Within the last year my child talked about employment limits related to his/her disability.					
D3. Within the last year my child talked about independent living limits related to his/her disability.					
D4. When my child set postschool goals, he/she considered the limits related to his/her disability.					

TSA Total: Items D1+ D2 + D3 + D4 _____

E. Disability Awareness	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
E1. Within the last year my child talked about his/her disability.					
E2. Within the last year my child described his/her disability.					
E3. Within the last year my child talked about needed help or services matched to disability needs.					

TSA Total: Items E1 + E2 + E3 _____

F. Persistence	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
F1. Within the last year my child worked on academic goals.					
F2. Within the last year my child worked on employment goals.					
F3. Within the last year my child worked on independent living goals, such as banking, cooking, and housekeeping skills.					

TSA Total: Items F1 + F2 + F3 _____

G. Use of Effective Support Systems	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always (when appro-priate)* 4
G1. Within the last year my child asked help from a teacher or a counselor.					
G2. Within the last year my child accepted advice or help from a teacher or a counselor.					
G3. Within the last year my child asked for help from peers or friends.					
G4. Within the last year my child accepted advice or help from peers or friends.					
G5. Within the last year my child asked a family member for help.					
G6. Within the last year my child accepted advice or help from a family member.					

TSA Total: Items G1 + G2 + G3 + G4 + G5 + G6 _____

H. Coping Skills	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
H1. Within the last year at school my child coped with stress, frustration, or difficulties in a constructive way.					

TSA Total: Item H1 _____

I. Social Skills	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Alwa ys* 4
I1. Within the last year my child got along with other people.					
I2. Within the last year my child had at least one friend.					

TSA Total: Items I1 + I2 _____

J. Proactive Involvement	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
J1. Within the last year my child participated in school organizations.					
J2. Within the last year my child volunteered with community organizations.					
J3. Within the last year my child played a positive role in the family.					
J4. Within the last year my child played a positive role with friends.					
J5. Within the last year my child had a paid job.					

TSA Total: Items J1 + J2 + J3 + J4 + J5 _____

K. Making Positive Choices	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
K1. Within the last year my child made positive academic choices and acted on them.					
K2. Within the last year my child made positive employment choices and acted on them.					
K3. Within the last year my child made independent living choices and acted on them.					

TSA Total: Items K1 + K2 + K3 _____

L. Transition Education Involvement	*Never* 0	*Rarely* 1	*Some-times* 2	*Often* 3	*Always* 4
L1. Within the last year my child actively participated in educational planning meetings to discuss issues, such as goals, accommodations, supports, or his/her plans of study.					
L2. Within the last year my child discussed transition assessment results.					
L3. Within the last year my child arranged transportation to job sites, educational settings, or social events.					

TSA Total: Items L1 + L2 + L3 _____

APPENDIX G

Cover Letters

DATE: September 1, 2008

TO: Teachers and Vocational Rehabilitation Counselors at 2007 Summer OTI

FROM: Chen-Ya Juan

SUBJECT: A Professional Recruitment Letter for Phase II Study: Reliability of the Transition Success Assessment

It was my pleasure to meet all of you at the 2007 Summer OTI. In order to assist high school students with disabilities to be successful in transition, Dr. Martin and I developed a new transition assessment tool, Transition Success Assessment (TSA), to measure the transition success for high school students with disabilities. We are inviting you to participate in this study to determine the reliability of the TSA instrument because of your expertise and experience in special education. If the reliability of the instrument is low, it will not be used. We need you to complete two administrations of the professional version of the Transition Success Assessment instrument four weeks apart and to nominate students and family members who may want to participant in this study. Upon successful completion of this study, the Transition Success Assessment will be submitted for publication to national or international publishers. The research details and a consent letter are attached. We strongly encourage you to participate in this study to increase the likelihood of being utilized in the Transition Success Assessment testing by special education teachers, parents, and students.

Regards,

Chen-Ya Juan
Graduate Research Assistant
Zarrow Center for Learning Enrichment
College of Education
The University of Oklahoma
840 Asp Ave., Carpenter Hall Room #111
Norman, OK 73072
c.juan@ou.edu
405-325-8951

Dr. James Martin
Director of Zarrow Center for Learning Enrichment
College of Education
The University of Oklahoma
840 Asp Ave., Carpenter Hall Room #111
Norman, OK 73072
jemartin@ou.edu
405-325-8951

DATE: September 15, 2008

TO: Family Members

FROM: Chen-Ya Juan

SUBJECT: A Parent Recruitment Letter for Phase II Study: Reliability of the Transition Success Assessment

Dear Family Member(s):

My name is Chen-Ya Juan. I am currently pursuing a Ph.D. degree in special education at the University of Oklahoma. To complete my dissertation research, it is my pleasure to invite you to participate in this study. Dr. Martin and I developed a new transition assessment, Transition Success Assessment (TSA) to assist high school students with an IEP to be successful after graduating high school. The purpose of this study is to determine the reliability of the TSA instrument. You were selected as a participant because you are parenting a high school or college student with special needs and/or experience with high school special education for students with disabilities. We need you to complete the family version of the Transition Success Assessment twice four weeks apart. After completing this study, the Transition Success Assessment will be submitted to a publisher for publication. A demographic information sheet and a Family Member Consent letter are attached. We strongly encourage you to participate in this study to determine if this new test tool is beneficial for students with disabilities or not. If the reliability of this instrument is low, it will not be used.

Regards,

Chen-Ya Juan
Graduate Research Assistant
Zarrow Center for Learning Enrichment
College of Education
The University of Oklahoma
840 Asp Ave., Carpenter Hall Room #111
Norman, OK 73072
c.juan@ou.edu
405-325-8951

Dr. James Martin
Director of Zarrow Center for Learning Enrichment
College of Education
The University of Oklahoma
840 Asp Ave., Carpenter Hall Room #111
Norman, OK 73072
jemartin@ou.edu
405-325-8951

DATE: September 15, 2008

TO: Young adults with disabilities

FROM: Chen-Ya Juan

SUBJECT: An Adult Recruitment Letter for Phase II Study: Reliability of the Transition Success Assessment

My name is Chen-ya Juan, and I am currently pursuing Ph.D. degree of special education at the University of Oklahoma. In order to assist high school students and young adults with disabilities to be successful in transition, Dr. Martin and I developed a new transition assessment tool, Transition Success Assessment (TSA), to measure the transition success for high school students with disabilities. The purpose of this study is to determine the reliability of this test. We are inviting you to participate in this study because of your personal experience in special education. If the reliability of the test is low, it will not be used. We need you to complete two times of the student version of the Transition Success Assessment instrument four weeks apart. Upon successful completion of this study, the Transition Success Assessment will be submitted for publication to national or international publishers. The research details and a consent letter are attached. We strongly encourage you to participate in this study to increase the likelihood of being utilized in the Transition Success Assessment testing by special education teachers, parents, and students.

Regards,

Chen-Ya Juan
Graduate Research Assistant
Zarrow Center for Learning Enrichment
College of Education
The University of Oklahoma
840 Asp Ave., Carpenter Hall Room #111
Norman, OK 73072
c.juan@ou.edu
405-325-8951

Dr. James Martin
Director of Zarrow Center for Learning Enrichment
College of Education
The University of Oklahoma
840 Asp Ave., Carpenter Hall Room #111
Norman, OK 73072
jemartin@ou.edu
405-325-8951

APPENDIX H

A Demographic Information Sheet

Professional Demographics

Name (Please use the same pseudonyms on TSAs):
School:
Position:

Please complete each of the following by marking what most closely describes you.

1. Gender	1. Male	2. Female	
2, Age	1. Under 15 3. 21-25 5. 31-35 7. 41-45 9. 51-55 11. 61-65	2. 15-20 4. 26-30 6. 36-40 8. 46-50 10. 56-60	
3. Ethnicity *(check as many as needed)*	1. African American 4. Hispanic	2. American Indian 5. White	3. Asian 6. Other
4. Degree	1. High School 4. Masters	2. GED 5. Ph.D.	3. Bachelor 6. Post Graduate
5. Amount of college coursework in transition *(check one)*	1. None 3. 4-6 hours	2. 1-3 hours 4. More than 6 hours	
6. Amount of time in working with students with disabilities per week *(check one)*	1. Less than 5 hrs 3. 11-25 hours	2. 5-10 hours 4. More than 25 hours	
7. Grade level in which you	8th grade	13th grade (Freshman)	

are currently teaching/working *(check one)*	9th grade	14th grade (Sophomore)
	10th grade	15th grade (Junior)
	11th grade	16th grade (Senior)
	12th grade	17th grade and higher (graduate student)
	Other: _____	

8. How many years have you been working with students with disabilities?	1. Less than 3 years 2. 3-5 years 3. 6-10 years 4. More than 10 years 5. More than 20 years

9. Certification area in which you are currently teaching/working if applicable. *(check one)*	1. Early Childhood	2. Elementary Education	3. Special Education
	4. Business	5. Career & Tech	6. Computer Science
	7. English	8. Fine Arts	9. Foreign Language
	10. Journalism	11. PE/Athletics/ Health	12. Reading
	13. Science	14. Social Studies/ Government	15. Speech
	16. Other (specify):		

10 Disability categories in which you are currently working *(check one or more)*	1. Autism	2. Emotional Disturbance	3. Visual Impairment/ Blindness
	4. Hearing Impairment/ Deafness	5. Mental Retardation	6. Multiple Disabilities
	7. Orthopedic Impairment	8. Other Health Impairment	9. Specific Learning Disability
	10. Speech/ Language Impairment	11. Traumatic Brain Injury	12. Developmental Delay
	13. Other _____		

Student Demographics

Name (Please use the same pseudonyms on TSAs): **Age:**

Please complete each of the following by marking the answer item that most closely describes you.

1. Gender	1. Male	2. Female		
2. Ethnicity	1. African American	2. American Indian	3. Asian	
	4. Hispanic	5. White	6. Other	
3. Grade level *(if applicable)*	9th grade	13th grade (Freshman)		
	10th grade	14th grade (Sophomore)		
	11th grade	15th grade (Junior)		
	12th grade	16th grade (Senior)		
	Other _____	17th grade and higher (graduate student)		
4. My disability categories *(check one or more)*	1. Autism	2. Emotional Disturbance	3. Visual Impairment/ Blindness	
	4. Hearing Impairment/ Deafness	5. Mental Retardation	6. Multiple Disabilities	
	7. Orthopedic Impairment	8. Other Health Impairment	9. Specific Learning Disability	
	10. Speech/Language Impairment	11. Traumatic Brain Injury	12. Developmental Delay	
	13. Other _____			
5. My disability is documented as …	1. Mild	2. Moderate		

Family Demographics

Name (Please use the same pseudonyms on TSAs):

Occupation:

Did you receive a free/reduced lunch? Yes No

Please complete each of the following by marking the answer item that most closely describes you.

1. Gender	1. Male	2. Female	
2. Age	1. Under 15 3. 21-25 5. 31-35 7. 41-45 9. 51-55 11. 61-65	2. 15-20 4. 26-30 6. 36-40 8. 46-50 10. 56-60	
3. Marital Status	1. Married 4. Separated	2. Single 5. Widowed	3. Divorced 6. Other _____
4. Ethnicity	1. African American 4. Hispanic	2. American Indian 5. White	3. Asian 6. Other
5. Level of education completed	1. High School 4. Masters	2. GED 5. Ph.D.	3. Bachelor 6. Post Graduate
6. Grade level in which your child is currently attending *(check one)*	1. 9th grade 2. 10th grade 3. 11th grade 4. 12th grade 5. Other_____	13th grade (Freshman) 14th grade (Sophomore) 15th grade (Junior) 16th grade (Senior) 17th grade and higher (graduate student)	
7. Amount of weekly time your child is receiving special education? *(check one)*	1. None 3. 1-6 hours	2. 7-15 hours 4. More than 16 hours	
8. Disability categories in which your child is currently recognized (check one or more)	1. Autism	2. Emotional Disturbance	3. Visual Impairment/ Blindness

	4. Hearing Impairment/ Deafness	5. Mental Retardation	6. Multiple Disabilities
	7. Orthopedic Impairment	8. Other Health Impairment	9. Specific Learning Disability
	10. Speech/ Language Impairment	11. Traumatic Brain Injury	12. Developmental Delay
	13. Other _____		
9. Your child's disability is documented as …	1. Mild	2. Moderate	
	3. Severe/Profound		

APPENDIX I

Modifications of the TSA Professional version from five focus groups

Modifications of the TSA Professional version from Durant Focus Group Meeting

Item	TSA Professional Version
A1.	In the last year, has the student expressed ~~wanting~~ **desire** to do well in school?
A2.	In the last year, has the student expressed ~~wanting~~ **desire** a job?
A3.	In the last year, has the student expressed ~~wanting~~ **desire** to live independently **with or without support**?
B1.	Did the student express an employment goal at the last IEP meeting?
B2.	Did the student express an academic goal at the last IEP meeting?
B3.	Did the student express ~~an adult~~ **a housing** living goal at the last IEP meeting?
B4.	During the last year did the student ~~use~~ **exhibit** problem solving skills to attain goals?
C1.	Did the student ~~express~~ **demonstrate** academic strengths ~~at the last IEP meeting~~?
C2.	Did the student express employment strengths ~~at the last IEP meeting~~?
C3.	Did the student express ~~adult~~ **independent** living strengths ~~at the last IEP meeting~~?
C4.	Did the student match strengths to postschool goals at the last IEP meeting?
D1.	Did the student express academic limits at the last IEP meeting?
D2.	Did the student express employment limits at the last IEP meeting?
D3.	Did the student express ~~adult~~ **independent** living limits at the last IEP meeting?
D4.	Did the student ~~match~~ **acknowledge** limits **associate with** ~~to~~ postschool **goals** ~~and annual goals~~ at the last IEP meeting?
E1.	Did the student describe his/her disability at the last IEP meeting?
E2.	Did the student describe his/her disability in a positive manner at the last IEP meeting?

E3.	Did the student express needed supports **and accommodations** at the last IEP meeting?
E4.	~~Did the student express needed accommodations at the last IEP meeting?~~
F1.	In the last year, has the student kept pursuing academic goals?
F2.	**Within** ~~In~~ the last year, has the student ~~kept~~ **continues to** pursu~~ing~~ employment goals?
F3.	**Within** ~~In~~ the last year, has the student ~~kept~~ **continues to** pursu~~ing~~ ~~adult~~ **independent** living goals?
F4.	**Within** ~~In~~ the last year, has the student ~~kept~~ **continues to** pursu~~ing~~ annual IEP goals?
G1.	**Within** ~~In~~ the last year, has the student used school staff for support?
G2.	**Within** ~~In~~ the last year, has the student used peers or friends for support?
G3.	**Within** ~~In~~ the last year, has the student used family members for support?
H1.	~~In the last year, has~~ **Does** the student cope~~d~~ with stress **or frustration** in a positive way?
H2.	~~In the last year, has~~ **Does** the student cope~~d~~ with difficulties in a positive way?
H3.	~~In the last year, has **Does** the student coped with frustration in a positive way?~~
I1.	~~In the last year, has~~ **Does** the student been getting along with ~~others~~ **adults?**
I2.	**Does the student get along with peers?**
I3.	~~In the last year, has~~ **Does** the student had a close and warm relationship with an adult other than family members?
J1.	**Within** ~~In~~ the last year, has the student become involved with school or community organizations?
J2.	**Within** ~~In~~ the last year, has the student played a~~n active and~~ positive role in the family?
J3.	**Within** ~~In~~ the last year, has the student played a~~n active and~~ positive role in friendship groups?
K1.	**Within** ~~In~~ the last year, has the student expressed academic interests **and acted on them**?

K2.	**Within** ~~In~~ the last year, has the student expressed employment interests **and acted on them**?
K3.	**Within** ~~In~~ the last year, has the student expressed adult living interests **and acted on them**?
L1.	**Within** ~~In~~ the last year, has the student had a ~~paid~~ **paying** job?
M1.	Did family members attend the last IEP meeting?
M2.	Did family members express ~~the~~ **their** concerns at the last IEP meeting?
M3.	**Within** ~~In~~ the last year, did family members discuss concerns about their child's education outside IEP meetings with educators?
N1.	**Within** ~~I~~n the last year, has the student been taught how to actively participate ~~in his/her IEP meeting~~ transition planning discussion **at IEP meeting**?
N2.	**Within** ~~In~~ the last year, has the student been taught self-determination skills such as goal-setting and goal attainment?
N3.	**Within** ~~In~~ the last year, has the student been taught to understand his/her disability and identify his/her strengths and limits?
N4.	At the last IEP meeting, did the student explain transition assessment results?
N5.	~~In the last year~~, has the student been successful in arranging transportation to job sites ~~or~~ **,** educational settings**, social events**?

Modifications of the TSA Professional Version from Tulsa Focus Group Meeting

Item	TSA Professional Version
A1.	Within the last year, has the student expressed wanting to do well **with grades and behaviors** in school?
A2.	In the last year, has the student expressed wanting a job?
A3.	In the last year, has the student expressed wanting to live on their own with or without support?
B1.	Did the student express an employment goal at the last IEP meeting?
B2.	Did the student express and academic goal at the last IEP meeting?
B3.	Did the student express a housing goal at the last IEP meeting?
B4.	During the last year, did the student exhibit problem solving skills to attain **academic, vocational, or personal** goals?
C1.	**In the last year,** ~~Did~~ has the student **expressed or exhibited** ~~demonstrate~~ academic strengths ~~at the last IEP meeting~~?
C2.	**In the last year, has** ~~did~~ the student express**ed or exhibited** employment strengths?
C3.	**In the last year, has** ~~did~~ the student express**ed or exhibited** independent living ~~strengths~~ **skills**?
C4.	**In the last year,** did the student match ~~strengths~~ **skills to postschool goals?**
D1.	Did the student express academic ~~limits~~ **limitations** at the last IEP meeting?
D2.	Did the student express employment ~~limits~~ **limitations** at the last IEP meeting?
D3.	Did the student express independent living ~~limits~~ **limitations** at the last IEP meeting?
D4.	Did the student acknowledge ~~limits~~ **limitations** associated with postschool goals at the last IEP meeting?
E1.	Did the student describe his/her disability at the last IEP meeting?
E2.	Did the student describe his/her disability in a positive manner at the last IEP meeting?

E3.	Did the student express needed supports and/or accommodations at the last IEP meeting?
F1.	Within the last year, has the student continued to pursue academic goals?
F2.	Within the last year, has the student continued to pursue employment goals?
F3.	Within the last year, has the student continued to pursue independent living goals?
F4.	Within the last year, has the student continued to pursue annual IEP goals?
G1.	Within the last year, has the student requested and used school staff for ~~supports or~~ **help appropriately**?
G2.	Within the last year, has the student requested and used peers or friends for support **or help appropriately**?
G3.	Within the last year, has the student requested and used family members for support **or help appropriately**?
H1.	**In the past year, did** ~~does~~ the student cope with stress and/**or** frustration in a positive way?
H2.	**In the past year, did** ~~does~~ the student cope with difficulties in a positive way?
~~H3.~~	~~In the past year, does the student cope with frustration in a positive way?~~
I1.	Does the student get along with adults?
I2.	**Does the student get along with peers?**
I3.	Does the student have friends?
J1.	Within the last year, has the student become involved with school or community organizations?
J2.	~~Within the last year, has the student played a positive role in the family?~~
J3.	Within the last year, has the student played a positive role with friends?
K1.	Within the last year, has the student made academic choices and acted on them?
K2.	Within the last year, has the student made employment choices and acted on them?

K3.	Within the last year, has the student made independent living choices and acted on them?
L1.	Within the last year, has the student had a paying job?
M1.	Did family members attend the last IEP meeting?
M2.	Did family members **provide input** ~~express their concerns~~ at their last IEP meeting?
M3.	~~Within the last year~~, **Outside IEP meetings,** did family members discuss ~~concerns about~~ their child's education ~~outside IEP meeting~~?
N1.	Did educators provide the opportunity for my students to speak at the lat IEP meeting?
N2.	Has the student been taught how to actively participate in transition planning discussion**s** at IEP meeting?
N3.	Has the student been taught self-determination skills such as goal-setting and goal-attainment?
N4.	Has the student been taught to understand his/her disability and identify his/her strengths and ~~limits~~ **limitations**?
N5.	At the last IEP meeting, did the student explain ~~transition assessment results~~ **his/her vocational, housing, academic interests**?
N6.	Has the student been successful in arranging transportation to job sites, educational settings, or social events?

Modifications of the TSA Professional Version from Norman Focus Group Meeting

Item	TSA Professional Version
A1.	Within the last year, the student expressed wanting to do well academically ~~or~~ **and/or** behaviorally.
A2.	Within the last year, the student expressed wanting a job.
A3.	Within the last year, the student expressed wanting to live on their own with or without support.
B1.	At the last IEP meeting, the student expressed an employment goal.
B2.	At the last IEP meeting, the student expressed an academic goal.
B3.	At the last IEP meeting, the student expressed an adult living goal.
B4.	Within the last year, the student exhibited problem solving skills to attain academic, vocational, and personal goals.
C1.	~~At the last IEP meeting~~ **Within the last year**, the student **frequently** expressed academic strengths.
C2.	~~At the last IEP meeting~~ **Within the last year**, the student **frequently** expressed employment strengths.
C3.	~~At the last IEP meeting,~~ **Within the last year,** the student **frequently** expressed adult living strengths.
C4.	~~At the last IEP meeting~~ **Within the last year**, the student **frequently** matched strengths to postschool goal.
D1.	~~At the last IEP meeting~~ **Within the last year**, the student **frequently** expressed academic ~~limitations~~ **challenges**.
D2.	~~At the last IEP meeting~~ **Within the last year**, the student **frequently** expressed employment ~~limitations~~ **challenges**.
D3.	~~At the last IEP meeting~~ **Within the last year**, the student **frequently** expressed adult living ~~limitations~~ **challenges**.
D4.	~~At the last IEP meeting~~ **Within the last year**, the student **frequently** acknowledged ~~limitations~~ **challenges** associated with postschool goals.
E1.	~~At the last IEP meeting~~ **Within the last year**, the student described his/her disability.
E2.	~~At the last IEP meting~~ **Within the last year**, the student ~~described~~ **expressed the awareness of** his/her disability ~~in a positive manner~~.

E3.	~~At the last IEP meeting~~ **Within the last year**, the student expressed needed supports or accommodations.
F1.	Within the last year, the student ~~continually~~ ~~pursued~~ **demonstrated continual pursuit of** academic goals.
F2.	Within the last year, the student ~~continually~~ ~~pursued~~ **demonstrated continual pursuit of** employment goals.
F3.	Within the last year, the student ~~continually~~ ~~pursued~~ **demonstrated continual pursuit of** adult living goals.
F4.	Within the last year, the student ~~continually~~ ~~pursued~~ **demonstrated continual pursuit of** annual IEP goals.
G1.	Within the last year, the student requested school staff for support.
G2.	**Within the last year, the student used school staff for support.**
G3.	Within the last year, the student requested classmates or friends for support.
G4.	**Within the last year, the student used classmates or friends for support.**
G5.	Within the last year, the student requested family members for support.
G6.	**Within the last year, the student used family members for support.**
H1.	Within the last year, the student coped with **difficulties,** stress or frustration in a ~~positive~~ **constructive** way.
~~H2.~~	~~Within the last year, the student coped with difficulties in a positive way.~~
I1.	The student gets along with adults.
I2.	The student gets along with classmates.
I3.	The student has at least one friend.
J1.	Within the last year, the student became involved with school or community organizations.
J2.	Within the last year, the student expressed playing an ~~positive~~ **active** role in the family.
J3.	Within the last year, the student played an ~~positive~~ **active** role with ~~friends~~ **peers**.

K1.	Within the last year, the student made academic choices ~~and act on them~~.
K2.	**Within the last year, the student acted on them.**
K3.	Within the last year, the student made employment choices ~~and act on them~~.
K4.	**Within the last year, the student acted on them.**
K5.	Within the last year, the student made adult living choices ~~and act on them~~.
K6.	**Within the last year, the student acted on them.**
L1.	Within the last year, the student had a paying job.
L2.	**Within the last year, the student had a non-paying job.**
M1.	~~At the last IEP meeting~~, At least one family member attended.
M2.	~~At the last IEP meeting~~, At least one family member provided input.
N1.	~~Educators~~ **Within the last year, the student learned** ~~taught the student~~ to participate ~~and speak~~ in IEP meeting and transition discussions.
N2.	Educators taught the student self-determination skills such as goal-setting and goal-attainment.
N3.	**Within the last year, the student learned** ~~Educators taught the student~~ disability awareness ~~and identification of strengths and limitations~~.
N4.	**Within the last year, the student learned identification of strengths and challenges.**
N5.	At the last IEP meeting, the student discussed the results of transition assessments ~~about~~ **regarding** his/her academic, vocational, or adult living interests.
N6.	Within the last year, the student arranged transportation to job sites, educational settings, or social events.

Modifications of the TSA Professional Version from Pryor Focus Group Meeting

Item	TSA Professional Version
A1.	Within the last year the student expressed wanting to do well in school.
A2.	Within the last year the student expressed wanting a job.
A3.	Within the last year the student expressed wanting to live on his/her own with or without support.
B1.	Within the last year the student expressed an employment goal.
B2.	Within the last year the student expressed an academic goal.
B3.	Within the last year the student expressed an adult living goal.
B4.	Within the last year the student exhibited problem solving skills to attain academic, vocational, ~~and~~ **and/or** adult living goals.
C1.	Within the last year the student expressed academic strengths.
C2.	Within the last year the student expressed employment strengths.
C3.	Within the last year the student expressed adult living strengths.
C4.	Within the last year the student matched strengths to postschool goals.
D1.	Within the last year the student expressed academic limitations.
D2.	Within the last year the student expressed employment limitations.
D3.	Within the last year the student expressed adult living limitations.
D4.	Within the last year the student acknowledged limitations associated with postschool goals.
E1.	Within the last year the student expressed awareness of his/her disability.
E2.	Within the last year the student described his/her disability.

E3.	Within the last year the student expressed needed supports or accommodations.
F1.	Within the last year the student frequently pursued academic goals.
F2.	Within the last year the student frequently pursued employment goals.
F3.	Within the last year the student frequently pursued adult living goals.
G1.	Within the last year the student requested school staff for support.
G2.	Within the last year the student used school staff for support.
G3.	Within the last year the student requested classmates or friends for support.
G4.	Within the last year the student used classmates or friends for support.
G5.	Within the last year the student requested family members for support.
G6.	Within the last year the student used family members for support.
H1.	Within the last year the student coped with stress frustration, or difficulties in a constructive way.
I1.	Within the last year the student got along with adults.
I2.	Within the last year the student got along with classmates.
I3.	Within the last year the student had at least one friend.
J1.	Within the lat year the student became involved with school or community organizations.
J2.	Within the last year the student expressed playing an active role in the family.
J3.	Within the lat year the student played an active role with friends.
K1.	Within the last year the student made academic choices.
K2.	Within the last year the student acted on those academic choices.

K3.	Within the last year the student made employment choices.
K4.	Within the last year the student acted on those employment choices.
K5.	Within the last year the student made adult living choices.
K6.	Within the last year the student acted on those adult living choices.
L1.	Within the last year the student had a paying job.
M1.	Within the last year at least one family member attended IEP meetings.
M2.	Within the last year at least one family member provided input for IEP meetings.
N1.	Within the last year the student ~~learned~~ **was taught** to participate and speak during the IEP meeting and transition discussions.
N2.	Within the last year the student actively participated and spoke during IEP meeting and transition discussions.
N3.	Within the last year the student ~~learned~~ **was taught** self-determination skills such as goal-setting and goal-attainment.
N4.	Within the last year the student ~~learned~~ **was taught** to understand his/her disability.
N5.	Within the last year the student ~~learned~~ **was taught** to identify his/her strengths and limitations.
N6.	At the last IEP meeting the student discussed the results of transition assessments regarding his/her academic, vocational, or adult living interests.
N7.	Within the last year the student arranged transportation to job sites, educational settings, or social events.

Modifications of the TSA Professional Version from Higher Education Professional Focus Group Meeting

Item	TSA Professional Version
A1.	Within the last year the student expressed wanting to do well in school.
A2.	Within the last year the student expressed wanting a job.
A3.	Within the last year the student expressed wanting to live on his/her own with or ~~without~~ support.
A4.	**Within the last year the student expressed wanting to live on his/her own ~~with or~~ without support.**
B1.	Within the last year the student ~~expressed~~ **communicated** an academic goal.
B2.	Within the last year the student ~~expressed~~ **communicated** an employment goal.
B3.	Within the last year the student ~~expressed~~ **communicated** a goal about where he/she would like to live after graduation.
B4.	Within the last year the student used problem solving skills to attain academic, vocational, and/or independent living goals.
C1.	Within the last year the student ~~expressed~~ **communicated** academic strengths.
C2.	Within the last year the student ~~expressed~~ **communicated** employment strengths.
C3.	Within the last year the student ~~expressed~~ **communicated** independent living strengths, such as ~~banking~~ **finances**, cooking, housekeeping, hygiene, etc.
C4.	Within the last year the student ~~matched strengths to postschool goals.~~ **communicated about his/her strengths in relation to his/her post graduation goals.**
D1.	Within the last year the student ~~expressed~~ **communicated** academic limitations.
D2.	Within the last year the student ~~expressed~~ **communicated** employment limitations.
D3.	Within the last year the student ~~expressed~~ **communicated** independent living limitations, such as ~~banking~~ **finances**, cooking, housekeeping, hygiene, etc.
D4.	Within the last year the student ~~acknowledged~~ **communicated** limitations ~~associated with~~ **in relation to** postschool goals.

E1.	Within the last year the student ~~expressed~~ **communicated** awareness about his/her disability.
E2.	Within the last year the student described his/her disability.
E3.	Within the last year the student appropriately ~~expressed~~ **communicated** needed supports or accommodations.
F1.	Within the last year the student pursued academic goals.
F2.	Within the last year the student pursued employment goals.
F3.	Within the last year the student pursued independent living goals, such as ~~banking~~ **finances**, cooking, housekeeping, hygiene, etc.
G1.	Within the last year the student requested support from a teacher or a counselor.
G2.	Within the last year the student ~~used~~ **accepted** support from a teacher or a counselor.
G3.	Within the last year the student requested ~~classmates or friends for support.~~ **Support from classmates or friends.**
G4.	Within the last year the student ~~used~~ **accepted** support from classmates or friends.
G5.	Within the last year the student requested support from family members.
G6.	Within the last year the student ~~used~~ **accepted** support from family members.
H1.	Within the last year the student coped with **academic** stress, frustration, or difficulties in a constructive way.
H2.	**Within the last year the student coped with employment stress, frustration, or difficulties in a constructive way.**
H3.	**Within the last year the student coped with social stress, frustration, or difficulties in a constructive way.**
I1.	Within the last year the student ~~got along~~ **interacted appropriately** with other people.
I2.	Within the last year the student had at least one friend.
J1.	Within the last year the student ~~maintained involvement~~ **was actively involved** with school ~~or community~~ organizations.
J2.	Within the last year the student ~~maintained involvement~~ **volunteered** with ~~school or~~ community organizations.

J3.	Within the last year the student ~~took~~ **played** a positive role in the family.
J4.	Within the last year the student played a positive role with friends.
K1.	Within the last year the student made **positive** academic choices and acted on them.
K2.	Within the last year the student made **positive** employment choices and acted on them.
K3.	Within the last year the student made **positive** independent living choices and acted on them.
L1.	Within the last year the student had a paying job.
M1.	Within the last year a family member attended meetings about supports, accommodations, modifications, transition, or study plans (e.g. IEP meeting, meeting with disability support staff).
M2.	Within the last year at least one family member provided input at meetings.
N1.	Within the last year the student ~~learned~~ **received instruction on how** to participate and speak about transition issues at a meeting that talked about supports, accommodations, transition, or study plans.
N2.	Within the last year the student actively participated and talked about transition during the meeting about supports, accommodations, modifications, transition or study plans.
N3.	Within the last year the student ~~learned~~ **received instruction on** self-determination skills such as goal-setting and goal-attainment.
N4.	Within the last year the student ~~learned~~ **received instruction about** ~~to understand~~ his/her disability.
N5.	Within the last year the student ~~learned~~ **received instruction about** ~~to identify~~ his/her strengths and limitations.
N6.	~~At the last meeting~~ **Within the last year** the student discussed transition assessment results.
N7.	Within the last year the student arranged transportation to job sites, educational settings, or social events.

APPENDIX J

Modifications of the TSA Student version from four focus groups

Modifications of the TSA Student version from Durant Focus Group

Item	TSA Student Version
A1.	~~In the last year, have~~ I ~~talked~~ ~~about wanting~~ **want** to do well in school.
A2.	~~In the last year, have~~ I ~~talked about wanting~~ **want** a job.
A3.	~~In the last year, have~~ I ~~talked about wanting~~ want to live ~~independently~~ **on my own**.
B1.	~~Did~~ I talk about ~~an~~ **my** employment goal at the last IEP meeting.
B2.	~~Did~~ I talk about ~~an~~ **my** academic goal at the last IEP meeting.
B3.	~~Did~~ I talk about ~~an adult living goal~~ **my living on my own** at the last IEP meeting.
B4.	~~During the last year did I use problem solving skills to attain goals?~~ **I know how to solve problems to get what I want.**
C1.	~~Did~~ I talk about **my** academic strengths at the last IEP meeting.
C2.	~~Did~~ I talk about **my** employment strengths at the last IEP meeting.
C3.	~~Did~~ I talk about adult **for my** living **on my own** strengths at the last IEP meeting.
C4.	~~Did~~ my strengths match my goals **after high school.**
D1.	~~Did~~ I talk about academic ~~limits~~ **problems** at my last IEP meeting.
D2.	~~Did~~ I talk about employment ~~limits~~ **problems** at my last IEP meeting.
D3.	~~Did~~ I talk about ~~adult living limits~~ **problems for living on my own** at my last IEP meeting.
D4.	~~Did my limits match my goals at my last IEP meeting?~~ **Knowing my problems will help me set my goals after high school.**
E1.	~~Did~~ I ~~describe~~ **understand** my disability at my last IEP meeting?
E2.	~~Did~~ I **can** describe my disability in a positive manner ~~at my last IEP meeting~~.

E3. ~~Did~~ I **can** talk about supports I need ~~at my last IEP meeting~~.

E4. ~~Did~~ I **can** talk about accommodations I need ~~at my last IEP meeting~~.

F1. ~~In~~ **Within** the last year, ~~have~~ I ~~kept~~ **keep** working on my ~~academic~~ **school** goals.

F2. ~~In~~ **Within** the last year, ~~has~~ I ~~kept~~ **keep** working on ~~employment~~ **job** goals.

F3. ~~In~~ **Within** the last year, ~~has~~ I ~~kept~~ **keep** working on **goals I live on my own.** ~~Adult living goals.~~

F4. ~~In~~ **Within** the last year, ~~has~~ I ~~kept~~ **keep** working on ~~annual~~ IEP goals.

G1. ~~In the last year, have~~ I ~~asked and~~ use~~d~~ school staff for support.

G2. ~~In the last year, have~~ I ~~asked and~~ use~~d~~ ~~peers or~~ friends for support.

G3. ~~In the last year, have~~ I ~~asked and~~ use~~d~~ family ~~members~~ for support.

H1. ~~In the last year, have~~ I ~~coped~~ **deal** with stress **well** in a positive way.

H2. ~~In the last year, have~~ I ~~coped~~ **deal** with difficulties **well** in a positive way.

H3. ~~In the last year, have~~ I ~~coped~~ **deal**-with frustration **well** in a positive way.

I1. ~~In the last year, have~~ I ~~been~~ get~~ting~~ along with ~~others?~~ **Adults.**

I2. I get along with people on my age.

I3. ~~In the last year, do~~ I have ~~close~~ friends.

J1. In the last year, have I become involved with school or community organizations.

J2. ~~In the last year, have~~ I play~~ed an active and~~ **a** positive role in ~~the~~ **my** family.

J3. ~~In the last year, have~~ I play~~ed an active and~~ **a** positive role with **my** friends.

K1. ~~In the last year, have~~ I ~~made~~ **make** academic choices.

K2.	~~In the last year, have~~ I ~~made~~ **make** employment choices.
K3.	~~In the last year, have~~ I ~~made~~ **make** adult living choices.
L1.	~~In the last year, have~~ I had **or I have had** a paid job.
M1.	~~Did~~ my family ~~attend~~ **come to** my last IEP meeting?
M2.	~~Did~~ my family talk about their ~~concerns~~ **worries** at my last IEP meeting?
M3.	~~In the last year, did~~ my family ~~discuss concerns outside IEP meetings with my teachers or me~~? **Has talked with my teacher about me.**
N1.	In the last year, have I been taught how to actively participate in my IEP meeting transition planning discussion?
N2.	In the last year, have I been taught self-determination skills such as goal-setting and goal-attainment?
N3.	~~In the last year, have I been~~ **My teacher** taught **me** to understand my disability and identify my strengths and limits?
N4.	~~At the last IEP meeting, did~~ I explain my transition assessment results?
N5.	~~In the last year, have~~ I been successful in arranging transportation to job sites or educational settings?

Modifications of the TSA Student Version from Pryor Focus Group Meeting

Item	TSA Student Version
A1.	I want to do well in school.
A2.	I want a job.
A3.	I want to live on my own.
B1.	I talked about my ~~employment goal~~ **getting a job/going to work** within the last year.
B2.	I talked about my ~~academic goal~~ **school goals** within the last year.
B3.	I talked about my living on my own within the last year.
B4.	I know how to solve problems to get what I want.
C1.	I talked about my ~~academic~~ **school** strengths within the last year.
C2.	I talked about my ~~employment~~ **job** strengths within the last year.
C3.	I talked about my strengths for living on my own within the last year.
C4.	My strengths match my goals ~~for~~ after high school ~~within the last year~~.
D1.	I talked about my ~~academic~~ **school** problems within the last year.
D2.	I talked about my ~~employment~~ **job** problems within the last year.
D3.	I talked about my problems for living on my own within the last year.
D4.	~~Knowing~~ **Understanding** my problems will help me set my goals after high school.
E1.	I know my disability.
E2.	I can describe my disability.
E3.	I can talk about supports or accommodations I needed.
F1.	I keep working on my school goals.
F2.	I keep working on ~~employment~~ **job** goals.
F3.	I keep working on adult living goals.

G1.	I ask school staff for support**/help.**
G2.	I use school staff for support**/help.**
G3.	I ask peers or friends for support**/help.**
G4.	I use peers or friends for support**/help.**
G5.	I ask family for support**/help.**
G6.	I use family for support**/help.**
H1.	I ~~deal with~~ **handle** stress, frustration, or difficulties.
I1.	I get along with adults.
I2.	I get along with classmates.
I3.	I have friends.
J1.	I am involved in school or community activities.
J2.	I ~~play~~ **take** an active role in my family.
J3.	I ~~play~~ **take** an active role with my friends.
K1.	I make school choices.
K2.	I act on those school choices.
K3.	I make job choices.
K4.	I act on those job choices.
K5.	I make adult living choices.
K6.	I act on those adult living choices.
L1.	I had or have had a paid job.
M1.	My family came to the last IEP meeting.
M2.	My family talked about their ~~worries~~ **worries/concerns** at my last IEP meeting.
N1.	I learned how to take part and talk in my IEP meeting and transition discussion.

N2.	I actively took part and talked in my IEP meeting and transition discussions.
N3.	I learned how to set and reach goals.
N4.	I learned to understand my disability.
N5.	I learned to identify my strengths and limitations.
N6.	At the last IEP meeting, I ~~explained~~ **talked about** transition assessment results about my school, job, or adult living interests.
N7.	Within the last year I arranged transportation to job sites, educational settings, or social activities.

Modifications of the TSA Student version from High School Students Focus Group

Item	TSA Student Version
A1.	I want to do well in school.
A2.	I want a job.
A3.	I want to live ~~on my own~~ **independently**.
B1.	Within the last year I talked about ~~my getting~~ **setting** a job goal.
B2.	Within the last year I talked about my ~~school goals~~ goals in school.
B3.	Within the last year I talked about where I want to live after leaving high school.
B4.	Within the last year I ~~knew~~ **learned** how to solve problems to get what I want.
C1.	Within the last year I talked about my ~~school~~ strengths **in school**.
C2.	Within the last year I talked about my job strengths.
C3.	Within the last year I talked about my strengths for living on my own after leaving high school.
C4.	Within the last year ~~my strengths matched my goals~~ **I matched my strengths for my goals** for after leaving high school.
D1.	Within the lat year I talked about my ~~school~~ problems **in school**.
D2.	Within the lat year I talked about my ~~job~~ problems **at work**.
D3.	Within the last year I talked about my problems for living on my own.
D4.	Within the last year understanding my problems helped me set my goals after high school.
E1.	I know my disability.
E2.	I can describe my disability.
E3.	I can talk about ~~supports or accommodations I need~~ **what I need to support for my disability**.
F1.	I keep working on ~~my school~~ goals **in school**.
F2.	I keep working on ~~employment~~ **career** goals.
F3.	I keep working on the goals about where I want to live after leaving high school.

G1.	I ask school staff for help.
G2.	I ~~use school staff for help~~ **take the advice from school staff gave me**.
G3.	I ask peers or friends for help.
G4.	I ~~use peers or friends for help~~ **take the advice from friends gave me**.
G5.	I ask family for help.
G6.	I ~~use family for help~~ **take the advice from my family gave me**.
H1.	I handle stress, frustration or difficulties well.
I1.	I get along with adults.
I2.	I get along with classmates.
I3.	I have friends.
J1.	I am involved in school or community activities.
J2.	I ~~take~~ **play an important part** ~~an active role~~ in my family.
J3.	I ~~take an active role~~ **play an important part** with my fiends.
K1.	I make ~~school~~ **good** choices **in school**.
K2.	I act on those school choices.
K3.	I make ~~job~~ **good** choices **on the job**.
K4.	I act on those job choices.
K5.	I make adult living choices.
K6.	I act on those adult living choices.
L1.	I have or have had a paid job.
M1.	My family came to the last IEP meeting.
M2.	My family talked about their worries at my last IEP meeting.
N1.	I learned how to take part and talk in my IEP meeting and transition discussions.

N2.	I actively took part and talked in my IEP meeting about transition.
N3.	I learned how to set and reach goals.
N4.	I learned to understand my disability.
N5.	I learned to identify my strengths and limitations.
N6.	At the last IEP meeting, I talked about transition results about my school, job, or adult living interests.
N7.	Within the last year I arranged transportation to job sites, educational settings, or social activities.

Modifications of the TSA Student version from College Students Focus Group

Item	TSA Student Version
A1.	I want to do well in school.
A2.	I want a job.
A3.	I want to live independently with ~~or without~~ help.
A4.	**I want to live independently without help.**
B1.	Within the last year I talked about setting a goal for my ~~classes~~ **education**.
B2.	Within the last year I talked about my setting a ~~job~~ **career** goal..
B3.	Within the last year I talked about where I want to live **in future** after leaving high school.
B4.	Within the last year I ~~solved problems~~ **used problem solving skills** to get what I want.
C1.	Within the last year I talked about my school strengths.
C2.	Within the last year I talked about my job strengths.
C3.	Within the last year I talked about my strengths for living on my own after leaving high school.
C4.	Within the last year I ~~matched~~ **applied** my strengths to my goals after graduation.
D1.	Within the lat year I talked about my problems in school.
D2.	Within the lat year I talked about my problems at work.
D3.	Within the last year I talked about my problems for living on my own.
D4.	Within the last year understanding my problems helped me set my goals after high school.
E1.	I ~~know about~~ **understand** my disability.
E2.	Within the last year I ~~described~~ **have explained** my disability.
E3.	Within the last year I asked for support or help I need.
F1.	Within the last year I kept working to achieve my ~~class~~ **educational** goals.
F2.	Within the last year I keep working on career goals.

F3.	Within the last year I worked on goals to live independently **with help.**
F4.	**Within the last year I worked on goals to live independently without help.**
G1.	Within the last year I asked a teacher or a counselor for help.
G2.	I took the advice my teacher ~~and~~ **or** counselor gave me.
G3.	Within the last year I asked friends for help.
G4.	I took the advice my friends gave me.
G5.	Within the last year I asked family for help.
G6.	I took the advice my family gave me.
H1.	Within the last year I ~~handled~~ **used coping skills to handle** stress, frustration or difficulties well.
I1.	Within the last year I got along with people.
I2.	Within the last year I have ~~had friends~~ **maintained the friendship**.
J1.	Within the last year I was involved in school or community activities.
J2.	Within the last year **I felt** I was ~~an~~ important ~~part in~~ **to** my family.
J3.	Within the last year **I felt** I was important to my friend.
K1.	Within the last year I made good choices in school and acted on them.
K2.	Within the last year I made good ~~job~~ **career** choices and acted on them.
K3.	Within the last year I made independent living choices and acted on them.
L1.	Within the last year I ~~have or have~~ had a paid job.
M1.	Within the last year someone from my family came to my meeting about supports, accommodations, modifications, transition, or study plans (e.g. IEP meeting, meeting with disability support staff).
M2.	Within the last year someone from my family talked about their worries at my ~~last~~ **previous** meeting.
N1.	Within the last year I learned how to take part and talk about transition at my meeting about supports, accommodations, modifications, transition, or study plans.
N2.	Within the last year I actively took part and talked about transition during the meeting about supports, accommodations, modifications, transition, or study

plans.

N3. Within the last year I learned how to set and reach goals.

N4. Within the last year I learned to understand my disability.

N5. Within the last year I learned to identify my strengths and ~~problems~~ **needs**.

N6. I talked about transition assessment results at my ~~last~~ **previous** meeting.

N7. Within the last year I arranged travel to job sites, school, or social events.

APPENDIX K

Modifications of the TSA Family Version from four focus groups

Modifications of the TSA Family Version from Tulsa Focus Group

Item	TSA Family Version
A1.	In the last year, has my child expressed wanting to do ~~well~~ **better with grades and behaviors** in school?
A2.	In the last year, has my child expressed wanting a job?
A3.	In the last year, has my child expressed wanting to live independently?
B1.	Did my child express an employment goal at the last IEP meeting?
B2.	Did my child express an academic goal at the last IEP meeting?
B3.	Did my child express an adult living goal at the last IEP meeting?
B4.	During the last year did my child use problem solving skills to attain **academic, vocational or personal** goals?
C1.	**In the last year,** did my child express academic strengths ~~at the last IEP meeting~~?
C2.	**In the last year,** did my child express employment **skills** ~~strengths at the last IEP meeting~~?
C3.	**In the last year,** did my child express adult living **skills** ~~strengths at the last IEP meeting~~?
C4.	**In the last year,** did my child match **skills** ~~strengths~~ to postschool goals ~~at the last IEP meeting~~?
D1.	Did my child express academic ~~limits~~ **limitations** at the last IEP meting?
D2.	Did my child express employment ~~limits~~ **limitations** at the last IEP meeting?
D3.	Did my child express adult living ~~limits~~ **limitation**s at the last IEP meeting?
D4.	Did my child ~~match limits~~ **acknowledge limitations associated with** ~~to~~ postschool ~~and annua~~l goals at the last IEP meeting?
E1.	Did my child describe his/her disability at the last IEP meeting?
E2.	Did my child describe his/her disability in a positive manner at the last IEP meeting?

E3.	Did my child express needed supports **and accommodations** at the last IEP meeting?
~~E4.~~	~~Did my child express needed accommodations at the last IEP meeting?~~
F1.	In the last year, has my child ~~kept working~~ **continued to wor**k on academic goals?
F2.	In the last year, has my child ~~kept working~~ **continued to work** on employment goals?
F3.	In the last year, has my child ~~kept working~~ **continued to work** on adult living goals?
F4.	In the last year, has my child ~~kept working~~ **continued to work** on annual IEP goals?
G1.	~~In~~ **Within** the last year, has my child ~~requested~~ **asked** ~~and used~~ school staff for support?
G2.	~~In~~ **Within** the last year, has my child ~~requested and used~~ **asked for** peers or friends for support?
G3.	~~In~~ **Within** the last year, has my child ~~requested and used~~ **asked for** family members for support?
H1.	In the last year, has my child coped with stress **and/or frustration** in a positive way?
H2.	In the last year, has my child coped with difficulties in a positive way?
~~H3.~~	~~In the last year, has my child coped with frustration in a positive way?~~
I1.	I~~n the last year~~, has my child been getting along with ~~others~~ **adults**?
I2.	**Does my child get along with peers?**
I3.	~~In the last year~~, does my child have ~~close~~ friends?
J1.	In the last year, has my child become involved with school or community organizations?
J2.	In the last year, has my child played ~~an active and~~ **a** positive role in the family?
J3.	In the last year, has my child played an active and positive role with friends?
K1.	In the last year, has my child made academic choices?

K2.	In the last year, has my child made employment choices?
K3.	In the last year, has my child made adult living choices?
L1.	In the last year, has my child had a ~~paid~~ **paying** job?
M1.	Did I or other family members attend the last IEP meeting?
M2.	Did I or other family members ~~express the concerns~~ **provide input** at the last IEP meeting?
M3.	**Outside the IEP meetings,** ~~In the last year,~~ did I or other family members discuss ~~concerns about~~ my child's education **and future plans** ~~outside IEP meeting with educators or with my child~~?
N1.	**Did I provide my child the opportunity to speak at the lat IEP meeting?**
N2.	In the last year, has my child ~~been taught~~ **learned** how to actively participate in ~~his/her~~ **the** IEP meeting? ~~Transition planning discussion?~~
N3.	In the last year, ~~has~~ my child ~~been taught~~ **has learned** self-determination skills such as goal-setting and goal-attainment?
N4.	In the last year, ~~has~~ my child ~~been taught~~ **has learned** to understand his/her disability and identify his/her strengths and limits?
N5.	At the last IEP meeting, did my child explain ~~transition assessment~~ **his/her vocational, housing, academic interests** results?
N6.	In the last year, has my child been successful in arranging transition to job sites or educational settings **or social events**?

Modifications of the TSA Family version from Norman Focus Group Meeting

Item	TSA Family Version
A1.	~~In~~ **Within** the last year, my child has expressed wanting to do well with their grades and/**or** behavior in school.
A2.	~~In~~ **Within** the last year, my child has expressed wanting a job.
A3.	~~In~~ **Within** the last year, my child has expressed wanting to live ~~independently~~ **on his/her own with or without support**.
B1.	~~At the last IEP meeting~~ **Within the last year**, my child expressed an employment goal.
B2.	~~At the last IEP meeting~~ **Within the last year**, my child expressed an academic goal.
B3.	~~At the last IEP meeting~~ **Within the last year**, my child expressed an adult living goal.
B4.	~~During~~ **Within** the last year, my child used problem solving skills to attain academic, personal, or vocational goals.
C1.	~~At the last IEP meeting~~ **Within the last year**, my child expressed academic strengths.
C2.	~~At the last IEP meeting~~ **Within the last year**, my child expressed employment strengths.
C3.	~~At the last IEP meeting~~ **Within the last year**, my child expressed adult living strengths.
C4.	~~At the last IEP meeting~~ **Within the last year**, my child matched strengths to postschool goals.
D1.	~~At the last IEP meeting~~ **Within the last year**, my child **frequently** expressed academic ~~limitations~~ **challenges**.
D2.	~~At the last IEP meeting~~ **Within the last year**, my child **frequently** expressed employment ~~limitations~~ **challenges**.
D3.	~~At the last IEP meeting~~ **Within the last year**, my child **frequently** expressed adult living ~~limitations~~ **challenges**.
D4.	~~At the last year~~ **Within the last year**, my child **frequently** acknowledged ~~limitations~~ **challenges** to postschool goals.
E1.	~~At the last IEP meeting~~ **within the last year**, my child described his/her disability.
E2.	~~At the last IEP meeting~~ **Within the last year**, my child ~~described~~ **expressed the awareness of** his/her disability ~~in a positive manner~~.

E3.	~~At the last IEP meeting~~ **Within the last year**, my child **frequently** expressed needed supports or accommodations.
F1.	Within the last year, my child ~~continued to~~ **frequently** work**ed** on academic goals.
F2.	Within the last year, my child ~~continued to~~ **frequently** work**ed** on employment goals.
F3.	Within the last year, my child ~~continued to~~ **frequently** work**ed** on adult living goals.
F4.	Within the last year, my child ~~continued to~~ **frequently** work**ed** on annual IEP goals.
G1.	Within the last year, my child asked ~~and used~~ school staff for support.
G2.	**Within the last year, my child used school staff for support.**
G3.	Within the last year, my child asked peers or friends for support.
G4.	**Within the last year, my child used peers or friends for support.**
G5.	Within the last year, my child asked me for support.
G6.	**Within the last year, my child used me for support.**
H1.	Within the last year, ~~did~~ my child cope**d** with **difficulties,** stress or frustration in a ~~positive~~ **constructive** way.
~~H2.~~	~~Within the last year, did my child cope with difficulties in a positive way.~~
I1.	My child gets along with adults.
I2.	My child gets along with classmates.
I3.	My child has at least one friend.
J1.	Within the last year, my child became involved with school or community organizations.
J2.	Within the last year, my child played an ~~positive~~ **active** role in the family.
J3.	Within the last year, my child played an ~~positive~~ **active** role with friends.

K1.	Within the last year, my child made academic choices ~~and act on them~~.
K2.	**Within the last year, my child acted on them.**
K3.	Within the last year, my child made employment choices ~~and act on them~~.
K4.	**Within the last year, my child acted on them.**
K5.	Within the last year, my child made adult living choices ~~and act on them~~.
K6.	**Within the last year, my child acted on them.**
L1.	Within the last year, my child had a paying job.
L2.	**Within the last year, my child had a non-paying job.**
M1.	~~At last IEP meeting~~, ~~any~~ **A** family member attended.
M2.	~~At the last IEP meeting, any~~ **A** family member provided input.
N1.	~~In~~ **Within** the last year, my child ~~has~~ learned how to ~~actively~~ participate ~~and speak~~ in his/her IEP meeting **and transition discussion**.
N2.	~~In~~ **Within** the last year, my child ~~has~~ learned self-determination skills such as goal-setting and goal attainment.
N3.	~~In~~ **Within** the last year, my child ~~has~~ learned to understand his/her disability ~~and identify his/her strengths and limits~~.
N4.	**Within the last year, my child learned to identify his/her strengths and challenges.**
N5.	At the last IEP meeting, my child discussed the results of transition assessments ~~about~~ **regarding** his/her academic, vocational, or adult living interest.
N6.	~~In~~ **Within** the last year, my child ~~has been successful in~~ arrang**ed**~~ing~~ transportation to job sites, educational settings, or social events.

Modifications of the TSA Family version from Family Focus Group Meeting

Item	TSA Family Version
A1.	Within the last year my child has expressed wanting to do well in school.
A2.	Within the last year my child has expressed wanting a job.
A3.	Within the last year my child has expressed wanting to live on his/her own with or without help.
B1.	Within the last year my child expressed an employment goal.
B2.	Within the last year my child expressed an academic goal.
B3.	Within the last year my child expressed a life skill goal.
B4.	Within the last year my child used problem solving skills to attain academic, vocational, and life skill goals.
C1.	Within the last year my child expressed academic strengths.
C2.	Within the last year my child expressed employment strengths.
C3.	Within the last year my child expressed life skill strengths.
C4.	Within the last year my child matched strengths to ~~postschool goals~~ **post graduation goals**.
D1.	Within the last year my child expressed academic limitation.
D2.	Within the last year my child expressed employment limitations.
D3.	Within the last year my child expressed life skill limitations.
D4.	Within the last year my child acknowledged limitations to ~~postschool~~ **post-graduation** goals.
E1.	Within the last year my child expressed awareness of his/her disability.
E2.	Within the last year my child described his/her disability.
E3.	Within the last year my child **appropriately** expressed needed help or accommodations.
F1.	Within the last year my child worked on academic goals.
F2.	Within the last year my child worked on employment goals.
F3.	Within the last year my child worked on life skill goals.

G1.	Within the last year my child asked school staff for help.
G2.	Within the last year my child used school staff for help.
G3.	Within the last year my child asked peers or friends for help.
G4.	Within the last year my child used peers or friends for help.
G5.	Within the last year my child asked me for help.
G6.	Within the last year my child used me for help.
H1.	Within the last year my child coped with stress, frustration or difficulties in a constructive way.
I1.	Within the last year my child got along with adults.
I2.	Within the last year my child got along with classmates.
I3.	Within the last year my child had at least one friend.
J1.	Within the last year my child became involved with school or community organizations.
J2.	Within the last year my child played ~~an active~~ **a positive** role in the family.
J3.	Within the last year my child played ~~an active~~ **a positive** role with friends.
K1.	Within the last year my child made academic choices.
K2.	Within the last year my child acted on those academic choices.
K3.	Within the last year my child made employment choices.
K4.	Within the last year my child acted on those employment choices.
K5.	Within the last year my child made life skill choices.
K6.	Within the last year my child acted on those life skill choices.
L1.	Within the last year my child had a paying job.
M1.	Within the last year a family member attended IEP meetings.
M2.	Within the last year a family member provided input for IEP meetings.
N1.	Within the last year my child learned to participate during an IEP meeting and transition discussions.

N2.	Within the last year my child actively participated and spoke during an IEP meeting and transition discussions.
N3.	Within the lat year my child learned self-determination skills such as goal-setting and goal ~~attainment~~ **achievement**.
N4.	Within the last year my child learned to understand his/her disability.
N5.	Within the last year my child learned to identify his/her strengths and limitations.
N6.	At the last IEP meeting my child discussed the results of transition assessments regarding his/her academic, vocational, or life skill interests.
N7.	Within the last year my child arranged transportation to job sites, educational settings, or social events.

Modifications of the TSA Family Version from Higher Education Professional Focus Group Meeting

Item	TSA Family Version
A1.	Within the last year my child has expressed wanting to do well in school.
A2.	Within the last year my child has expressed wanting a job.
A3.	Within the last year my child has expressed wanting to live on his/her own with ~~or without~~ help.
A4.	**Within the last year my child has expressed wanting to live on his/her own ~~with or~~ without help.**
B1.	Within the last year my child ~~expressed~~ **talked about** an academic goal.
B2.	Within the last year my child ~~expressed~~ **talked about** an employment goal.
B3.	Within the last year my child ~~expressed~~ **talked about** a goal about where he/she would like to live after graduation.
B4.	Within the last year my child ~~used problem solving skills~~ **solved problems** to attain ~~academic~~ **school**, ~~vocational~~ **employment**, and independent living goals.
C1.	Within the last year my child ~~expressed~~ **talked about** academic strengths.
C2.	Within the last year my child ~~expressed~~ **talked about** employment strengths.
C3.	Within the last year my child ~~expressed~~ **talked about** independent living strengths, such as ~~banking~~ **finances**, cooking, housekeeping, hygiene, etc.
C4.	Within the last year my child ~~thought about his or her strengths when he or she identified post graduation goals.~~ **talked about his/her strengths in relation to his/her post graduation goals.**
D1.	Within the last year my child ~~expressed~~ **talked about academic struggles** ~~limitation academically at school~~.
D2.	Within the lat year my child ~~expressed~~ **talked about** limitations obtaining employment.
D3.	Within the last year my child ~~expressed~~ **talked about** independent living limitations, such as banking, cooking, housekeeping, hygiene, etc.
D4.	Within the last year my child ~~acknowledged~~ **discussed his/her** limitations **in relation** to **his/her** post graduation goals.

E1.	Within the last year my child ~~expressed~~ **talked about** awareness about his/her disability.
E2.	Within the last year my child described his/her disability.
E3.	Within the last year my child appropriately ~~expressed~~ **talked about** needed help or ~~accommodations~~ **services**.
F1.	Within the last year my child worked on academic goals.
F2.	Within the last year my child worked on employment goals.
F3.	Within the last year my child worked on independent living goals, such as ~~banking~~ **finances**, cooking, housekeeping, hygiene, etc.
G1.	Within the last year my child asked for help from a teacher or a counselor.
G2.	Within the last year my child ~~used~~ **accepted** help from a teacher **or a counselor**.
G3.	Within the last year my child asked for help from peers or friends.
G4.	Within the last year my child ~~used~~ **accepted** help from peers or friends.
G5.	Within the last year my child asked ~~me~~ **a family member** for help.
G6.	Within the last year my child ~~used~~ **accepted** help from me **or a family member**.
H1.	Within the last year my child coped with **academic** stress, frustration, or difficulties in a constructive way.
H2.	**Within the last year my child coped with employment stress, frustration, or difficulties in a constructive way.**
H3.	**Within the last year my child coped with social stress, frustration, or difficulties in a constructive way.**
I1.	Within the last year my child got along with other people.
I2.	Within the last year my child had at least one friend.
J1.	Within the last year my child ~~maintained current involvement~~ **was actively involved** with school ~~or community~~ organizations.
J2.	Within the last year my child ~~maintained current involvement~~ **volunteered** with ~~school or~~ community organizations.

J3.	Within the last year my child played a positive role in the family.
J4.	Within the last year my child played a positive role with friends.
K1.	Within the last year my child made positive academic choices and acted on them.
K2.	Within the last year my child made **positive** employment choices and acted on them.
K3.	Within the last year my child made **positive** independent living choices and acted on them.
L1.	Within the last year my child had a paying job.
M1.	Within the last year a family member attended meetings about supports, accommodations, modifications, transition, or study plans (e.g. IEP meeting, meeting with disability support staff).
M2.	Within the last year a family member provided input for meetings.
N1.	Within the last year my child ~~learned~~ **received instruction on how** to participate and speak about transition issues at a meeting that talked about supports, accommodations, modifications, transition, or study plans.
N2.	Within the last year my child actively participated and spoke about transition during the meeting about supports, accommodations, modifications, transition, or study plans.
N3.	Within the last year my child ~~learned~~ **received instruction on** self-determination skills such as goal-setting and goal-achievement.
N4.	Within the last year my child ~~learned~~ **received instruction about** ~~to understand~~ his/her disability.
N5.	Within the last year my child ~~learned~~ **received instruction about** ~~to identify~~ his/her strengths and limitations.
N6.	~~At the last meeting~~ **Within the last year** my child discussed transition assessment results.
N7.	Within the last year my child arranged transportation to job sites, educational settings, or social events.

APPENDIX L

The Recruitment Letter of the TSA Reliability Study

Dear Professionals,

My name is Chen-Ya Juan, and I am nearing completion of a Ph.D. degree in Special Education at the University of Oklahoma with a focus on transition education. To finish the degree I am conducting a dissertation research project, and I need your help to complete the research. Dr. James Martin and I have developed and validated a new Transition Assessment tool called the Transition Success Assessment (TSA)- A Transition Behavior Profile for High School and Postsecondary Education Students. Professionals, family members, and students complete the tool to measure student progress across 14 factors that research has found to be associated with transition success. So far I have met with several groups of professionals, parents, and students to socially validate the wording of the Professional, Family Member, and Student versions of the assessment tool. The participants in these group meetings liked the assessment tool and provided great input to improve the wording of each question.

Now, I am undertaking a reliability study of the Transition Success Assessment for my dissertation research project. I need your help to complete this reliability study. The purpose of this current study is to determine whether the scores of this TSA maintain internal consistency across categories and to determine the test-retest reliability.

To help with this study each professional would need to:

- Complete the Transition Success Assessment on three of your students, which would take about 30 minutes of your time and mail the completed assessments back to me in a postage paid envelope.
- Four weeks later I will send you three more assessments to complete once again for the same three students. When completed you would send these completed forms back to me again.

Completion of the Transition Success Assessment will use your knowledge of the student. If you would like to do this, I will send you a package of materials. You would first read the consent form and sign that you agree to participate in this study. Second,

you would complete the TSA Professional version on three of your students. Third, you would complete a brief demographic information sheet on yourself. Last, you would place the completed materials into the provided postage paid envelope and mail it back to me. That's all there is to it. This entire process would take no more than 30 minutes. This process will then be repeated four weeks later.

Please respond to this e-mail as soon as possible with your name, school, telephone number, e-mail, and mailing address, and say "yes" that you would like to participate in this study. If you have colleagues who would like to do this, too, please give their name, home address, and email to me, too.

Sincerely,

Chen-Ya Juan
OU Doctoral Student
Zarrow Center Research Assistant
e-mail: c.juan@ou.edu

cc: Dr. James Martin