# A COMPARATIVE POST-SECONDARY FOLLOW-UP STUDY OF STUDENTS SERVED THROUGH GENERAL EDUCATION AND THROUGH SPECIAL EDUCATION

A Dissertation

by

# KENDRA LEA WILLIAMS DIEHM

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

# DOCTOR OF PHILOSOPHY

August 2006

Major Subject: Educational Psychology

# A COMPARATIVE POST-SECONDARY FOLLOW-UP STUDY OF STUDENTS SERVED THROUGH GENERAL EDUCATION

# AND THROUGH SPECIAL EDUCATION

A Dissertation

by

# KENDRA LEA WILLIAMS DIEHM

# Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

# DOCTOR OF PHILOSOPHY

Approved by:

Co-Chairs of Committee,	, Michael R. Benz
	Patricia S. Lynch
Committee Members,	Bruce Thompson
	Dennie L. Smith
Head of Department,	Michael R. Benz

August 2006

Major Subject: Educational Psychology

#### ABSTRACT

A Comparative Post-Secondary Follow-Up Study of Students Served through General Education and through Special Education. (August 2006) Kendra Lea Williams Diehm, B.S., Texas A&M University; M.Ed., Texas A&M University Co-Chairs of Advisory Committee: Dr. Michael R. Benz

Co-Chairs of Advisory Committee: Dr. Michael R. Benz Dr. Patricia S. Lynch

This study examines the preparation during high school and post-secondary outcomes of students with disabilities. High school preparation consists of activities in which students participated during high school. Post-secondary outcomes relate to the current status of students following high school graduation in relation to the four major outcomes areas: (a) post-secondary education, (b) employment, (c) independent living, and (d) recreation and leisure.

The target population included all students graduating from one school district in a mid-sized city in Texas. A stratified random sample of 228 students both with and without disabilities was selected. Post-secondary follow-up surveys, consisting of one survey administered prior to graduation and one survey administered six-months following graduation, were given to the participants. The response rate for the initial exit survey was 82.9% while the response rate for a post-school survey was 61.4%. Differences between groups were analyzed using loglinear analyses based upon educational setting, disability category, gender, ethnicity, and socio-economic status. In addition, a sub-study was completed to determine the level of agreement among students and teachers on a post-secondary readiness skill inventory.

The findings indicated that differences among groups did exist in terms of both high school preparation and post-secondary outcomes. In terms of high school preparation, the participation among various groups produced few results that were significantly different. Statistically significant results occurred only with respect to extracurricular activity participation by educational setting and socio-economic status.

Post-secondary outcome results produced more statistically significant findings than high school preparation. The variable of educational setting produced statistically significant post-secondary outcomes in the three areas of employment, post-secondary education, and recreation and leisure. Ethnicity was the next largest determinant to influence post-secondary outcomes, and statistically significant results were found for both post-secondary education and independent living. Socio-economic status produced statistically significant results for employment outcomes. The variable of gender produced no results that reached statistical significance.

The last findings provided an analysis of the agreement between students and teachers in terms of a post-secondary readiness skill inventory. Overall students and teachers demonstrated a high level of congruency in which similar responses were indicated within 95% of the items.

iv

# DEDICATION

I dedicate this dissertation to my husband, Brian.

"My beloved is mine, and I am his."

#### ACKNOWLEDGMENTS

I am forever grateful to the following individuals who guided me into making this dream a reality. First to Dr. Patricia Lynch, I can honestly say I would not be here if it were not for your continued support of me. You inspired me to pursue secondary special education due to your passion and have given me a wealth of opportunities along the way. Pat, I owe so much to you but I mostly just want to thank you for standing beside me and becoming one of my dearest friends.

Thank you also to Dr. Michael Benz. I feel so fortunate that you came to Texas A&M University and agreed to serve as my chair. You have provided me with excellent mentoring on both a professional and personal level. I look forward to my future accomplishments knowing of the excellent mentorship you have provided. Thank you for your support.

And thank you to the rest of my committee. Dr. Bruce Thompson, you have an amazing ability to motivate your students to achieve more than they believed was possible. I can only hope to become as outstanding of an instructor as you and feel lucky to have studied under you. Dr. Dennie Smith, thank you for agreeing to serve on my committee. I appreciate your insight and knowledge that added to my learning. And finally I wish to thank Dr. Laura Stough. Even though you did not serve on my dissertation committee, your mentoring and support has guided me through the years. I sincerely appreciate everything I have learned from you.

I also want to extend a warm thank you to certain members of the special education faculty and educational psychology staff. You have been my family for so vi

many years and I could not have accomplished this without you. To Glenda Byrns, Connie Fournier, Lakshmi Mahadevan, Kathy May, Linda Parrish, Torey Poteet, Teresa Roberts, Kelly Schmid, Kimber Vannest, Carol Wagner, Cathy Watson, and Angela Welch, I send you my deepest thanks. Your advice and friendship supported me through this.

And last, but certainly not least, to my family. Brian, I am here now because of you. You are the one who held my hand, wiped away my tears, and stood beside me through every step. Words can never repay the sacrifices you have made for this project. I love you. To my parents, who were my first teachers, thank you for loving and supporting me unconditionally. You have shaped me into the woman I have become and my accomplishments are a reflection of you. And finally to Richard, Mary, Brandon, Jamyn, Brandon, and Amy who have so patiently understood the time requirements necessary to complete this project.

# TABLE OF CONTENTS

ABSTRACT		iii
DEDICATIO	N	v
ACKNOWLI	EDGMENTS	vi
TABLE OF C	CONTENTS	viii
LIST OF TAI	BLES	xi
CHAPTER		
Ι	INTRODUCTION	1
	Purpose of Study Current Federal Initiatives Guiding High School Services Post-Secondary Outcomes Follow-up Studies Summary and Research Questions Organization of the Study	1 2 3 6 11 12
II	LITERATURE REVIEW	13
	Introduction High School Preparation for Post-School Life Post-Secondary Outcomes Agreement Studies among Different Respondents Methodology Survey Design Methodological Concerns Summary	13 14 18 30 32 32 36 38
III	METHODOLOGY	39
	Design Procedures Data Analysis Educational Significance	39 46 55 61

CHAPTER
---------

Page
------

IV	RESULTS	62
	Introduction	62
	Question 1: Post-School Preparation Activities	71
	Question 2: Post-Secondary Outcome Expectations	82
	Question 3: Post-Secondary Employment Outcomes	93
	Question 4: Post-Secondary Education Outcomes	97
	Productive Engagement	101
	Question 5: Independent Living Outcomes	105
	Question 6: Recreation and Leisure Outcomes	108
	Question 7: Agreement Study	111
	Summary of Key Findings	115
V	CONCLUSION	116
	Overview of Chapter	116
	Interpretation of Findings	116
	Discussion of Findings	122
	Limitations of the Study	129
	Implications and Recommendations	134
	Final Thoughts	142
REFERENCE	S	144
APPENDIX A	Α	158
APPENDIX B	3	167
APPENDIX C	2	180
APPENDIX D	)	183
APPENDIX E	2	187
APPENDIX F	7	189
APPENDIX C	J	191
APPENDIX H	Ι	193
APPENDIX I		195

APPENDIX J	235
APPENDIX K	256
APPENDIX L	262
APPENDIX M	269
APPENDIX N	275
APPENDIX O	282
APPENDIX P	290
APPENDIX Q	292
VITA	294

# LIST OF TABLES

TABLE		Page
1	Frequency Count of Educational Setting, Gender, Ethnicity, and Socio-Economic Status of Exit Surveys	52
2	Frequency Count of Educational Setting, Gender, Ethnicity, and Socio-Economic Status of Post-School Surveys	54
3	Model Fit Statistics for all Possible Loglinear Models: Education Outcome, Educational Setting and Ethnicity	63
4	Model Fit Statistics for all possible Loglinear Models: Education Outcome, Educational Setting and Gender	65
5	Model Fit Statistics for all possible Loglinear Models: Education Outcome, Educational setting and Socio-Economic Status	66
6	Test of the Effect of Education Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	69
7	Test of the Effect of HS Sponsored Activities and HS Extracurricular Activities by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	72
8	Educational Setting, Ethnicity, Gender and Socio-Economic Status by Participation in HS Extracurricular Activities	73
9	Disability Category by HS Activity Participation Crosstabulation	74
10	Test of the Effect of HS Information and HS Communication by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	75
11	Educational Setting, Ethnicity, Gender, and Socio-Economic Status by HS Communication	76
12	Disability Category by HS Communication Crosstabulation	77
13	Test of the Effect of HS Employment by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	78

# TABLE

14	Disability Category by HS Employment Crosstabulation	79
15	Test of the Effect of HS Preparation by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	80
16	Disability Category by HS Preparation Crosstabulation	81
17	Test of the Effect of Employment Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	83
18	Educational Setting by Employment Expectations	83
19	Disability Category by Employment Expectations Crosstabulation	84
20	Test of the Effect of Education Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	85
21	Disability Category by Education Expectation Crosstabulation	86
22	Test of the Effect of Living Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	87
23	Tests of the Effects of Educational Setting and Ethnicity Controlling for Each Other	87
24	Educational Setting and Ethnicity by Living Expectations	89
25	Disability Category by Living Expectations Crosstabulation	90
26	Test of the Effect of Recreation/Leisure Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	91
27	Disability Category by Recreation/Leisure Expectations Crosstabulation	92
28	Test of the Effect of Employment Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	94

Page

# TABLE

BLE		Page
29	Tests of the Effects of Educational Setting and Socio-Economic Status Controlling for Each Other	94
30	Educational Setting and Socio-Economic Status by Employment Outcome	95
31	Disability Category by Employment Outcome Crosstabulation	96
32	Test of the Effect of Education Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	98
33	Tests of the Effects of Educational Setting and Socio-Economic Status Controlling for Each Other	98
34	Educational Setting and Ethnicity by Education Outcome	100
35	Disability Category by Education Outcome Crosstabulation	101
36	Test of the Effect of Productive Engagement by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	103
37	Educational Setting and Ethnicity by Productive Engagement	104
38	Disability Category by Productive Engagement Crosstabulation	104
39	Test of the Effect of Living Outcome by Educational Setting, Gender, Ethnicity, and Socio-economic Status	106
40	Ethnicity by Independent Living Outcome	106
41	Disability Category by Independent Living Outcome Crosstabulation	107
42	Test of the Effect of Recreation/Leisure Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status	109
43	Educational Setting by Recreation/Leisure Outcome	110
44	Disability Category by Recreation/Leisure Outcome Crosstabulation	111
45	Percentages of Discrepancy Scores between Respondents	112

TABLE		Page
46	Frequency Count of Discrepancy Analysis of Skill Areas between Students and Teachers	114
47	Ethnicity by Different Groupings	133

#### CHAPTER I

#### INTRODUCTION

#### Purpose of Study

Education in the United States of America serves as a fundamental foundation of the country: Every child is entitled to a free, public education. It was the founding fathers of this country who placed the first level of emphasis on education. Thomas Jefferson stated to his nephew Peter Carr, "It is highly interesting to our country, and it is the duty of its functionaries, to provide that every citizen in it should receive an education proportioned to the condition and pursuits of his life" (Jefferson on Education, n.d., ¶19). Albert Einstein claimed "the aim (of education) must be the training of independently acting and thinking individuals who, however, can see in the service to the community their highest life achievement" (Quotes of the Heart, n.d., ¶62). These influential men in U.S. history valued the importance of education and pushed for opportunities for American citizens.

However, despite the basis upon which public education was founded, an underlying question continues to arise. Do all students receive a public education that prepares them to be productive, contributing members of their communities? This question has received even more attention in recent years with the inclusion of children with disabilities in public education. Regardless of the presence or absence of a disability, graduating from high school and transitioning to an adult lifestyle poses

This dissertation follows the style of *Exceptional Children*.

challenges. High schools across the United States struggle with ensuring that all students are prepared for this transition. However, for students with disabilities, this transition can be even more difficult. This study identifies differences in high school preparation and in post-school outcomes for high school graduates with and without disabilities.

The remainder of this chapter contains four sections regarding the proposed study. The first section presents a brief review of transition related literature and federal initiatives that guide high school practices. The second section provides a brief literature review of key post-secondary outcomes for students with disabilities. The third section describes three eras of follow-up research. The final section frames the study and supplies the broad research questions that guide this study.

### Current Federal Initiatives Guiding High School Services

High school services for students with disabilities are guided by two current federal initiatives: The Individuals with Disabilities Education Act (IDEA) Amendments of 1997 and 2004 and The No Child Left Behind (NCLB) Act of 2001. The Individuals with Disabilities Education Act (IDEA) of 1997 mandates the provision of transition planning to all students receiving special education services beginning when students are 16 years of age. Transition services are defined as

a coordinated set of activities for a child with a disability that
(A) is designed to be a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation;
(B) is based on the individual child's needs, taking into account the child's strengths, preferences, and interests. (Individuals with Disabilities Education Act Amendments of 1997, § 602 (30), 1997)

In addition, transition planning is intended to link students with adult service providers in order to ensure smooth connections for the student either prior to graduation or upon exiting from the public school setting. Transition services are a central component of special education at the secondary level and, arguably the central component of public education in that the primary purpose of IDEA is "to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for employment and independent living" (Individuals with Disabilities Education Act Amendments of 1997, § 601 (d)(1)(a), 1997).

High school students with disabilities receive instruction within the larger context of high school services for all students. No Child Left Behind (NCLB), the 2001 reauthorization to the Elementary and Secondary Education Act, requires all students to achieve at high standards and to pass high school level academic assessments. High schools and school districts in general are held accountable for the "adequate yearly progress" of all students, including students with disabilities. As a result, school personnel focus extensive energy helping students with disabilities prepare for and pass state standardized tests in core academic subjects, leaving little time for transition instruction and services.

#### Post-Secondary Outcomes

Research and legislation in special education consistently identifies four areas as the cornerstone of post-secondary success for students with disabilities: employment, post-secondary education, independent living, and recreation and leisure (National Transition Network, 1997; Wagner et al., 1991). Employment involves the ability of the individual to gain and maintain satisfying, paid work within the community where one resides. Employment is a fundamental part of being a contributing member of society. Current literature shows that school leavers with disabilities are not employed at the same rate as their non-disabled peers and in addition earn less income. Blackorby and Wagner (1996) demonstrated this trend by determining that two years following high school, students with disabilities are employed at a rate of 46% compared to 59% of youth in the general population. Three to five years after high school the percentage of youth showing employment increased, but this trend occurred for the general population of youth as well (57% vs. 69%, respectively). However, promising results have been seen in recent studies where up to 60% of parents report their children who received special education services have employment (Cameto, Marder, Wagner, & Cardoso, 2003).

In addition to gaining meaningful employment, access to post-secondary education has emerged as a major component of adult success. In the decade from 1985 to 1995, the number of students with disabilities attending post-secondary education doubled from 15% to 32% (Barr, Harttnan & Spillane, 1995). By 1998 roughly 9% of full-time freshman self-reported having a disability (LD Online, 2005). Even though advances have been made, students with disabilities still access post-secondary education at a lower rate than their peers without disabilities. Two years after high school, only 19% of students with disabilities accessed post-secondary education compared to 56% of students without disabilities (Blackorby & Wagner, 1996). Independent living is an important part of adult life. The concept of independent living involves more than having one's own address, it is a philosophy enveloped in selfadvocacy and self-determination (National Center on Secondary Education and Transition, 2002). Rates of independent living vary considerably for students with disabilities. One year out of high school, students with learning disabilities live separately from their families at rates comparable to those of their peers without disabilities (17% vs. 24%, respectively) (New York State Education Department, 1999). However, a national study determined that two years after leaving high school, students with all types of disabilities lived outside of their parents' homes at a rate of 17%, compared to 36% of youth from the general population (Newman, 1991a).

Finally, an important component to anyone's life is that of recreation and leisure and what adults do in their spare time. This can include recreation and leisure activities that are performed alone, with family, or with friends. Students with disabilities participate in leisure activities at high rates (Texas Effectiveness Study, 1997). Unfortunately, not all students with disabilities experience the same rates of leisure time and social interaction. The percentage of students with mild disabilities who reported regular interaction with friends (75%) was lower than those students without disabilities (85%). Students with disabilities consisting of visual, health, and multiple impairments experience peer interaction at an even lower rate. For example, 14.1% of students with visual disabilities reported interacting with friends less than once per week (Wagner, 1992).

#### Follow-up Studies

Follow-up studies for students with disabilities have been conducted for over 50 years, but the process became formalized during the 1980s. Follow-up studies have been used to collect post-school outcome information on students with disabilities. This information has been used to examine the effectiveness of secondary and transition services. This section describes key trends that occurred during three post-secondary follow-up study time periods regarding students with disabilities.

#### Individual Grants for Transition Research and Practice

In 1984 the groundwork for the stage of transition legislation was established. It was during this year that the Office of Special Education and Rehabilitative Services (OSERS) placed transition as a major federal priority in regards to special education (Will, 1984). Much of the need for research in this area was addressed through grants funded from Section 626 of P.L. 98-199, titled "Secondary Education and Transitional Services for Handicapped Youth." The primary purpose of Section 626 was "to stimulate the improvement and development of programs for secondary special education and to strengthen and coordinate education, training, and related services to assist in the transition process" (Rusch & Phelps, 1987, p. 489). Grant monies came in the form of model demonstrations grants, planning and developing transition services, and post-secondary education demonstrations. Unfortunately the outcomes discovered under these projects were not always favorable to students receiving special education services.

non-disabled peers (Hasazi, Gordon, and Roe, 1985; Mithaug, Horiuchi, and Fanning, 1985).

Through the grants funded by OSERS during the 1980s, many of the best practices in transition and secondary special education developed. It is important to remember that during this time, transition planning was not required for students with disabilities. Prior to this time the transition practices being implemented did not have a research base for support (Peter & Heron, 1993). Kohler (1993), after reviewing the reports from model program developers, determined that vocational training, interagency collaboration, and parent involvement comprised the effective transition practices necessary to ensure successful outcomes for students with disabilities. Other components of best practice included paid work experience, individualized transition planning, and social skill development (Kohler, 1993).

## National and State Grants

The creation of the National Longitudinal Transition Study (NLTS) in 1987 and the passage of IDEA in 1990 marked a new period in follow-up studies. Although information found during the 1980s provided insight into the outcomes of students with disabilities, the majority of the research included small sampling plans. This research consisted of state, district, and regional information acquired from funded projects through the grant competitions of Section 626. Unfortunately, information from a national sample did not exist, thus prompting the creation of the NLTS.

The NLTS was funded through the U.S. Office of Special Education Programs (OSEP) and further contracted through SRI International. A total of 8,000 youth

representing the national population in all 11 federal special education disability categories were included. The two categories of autism and traumatic brain injury were not included in the study as these conditions were added during the 1990 IDEA authorization. The reports generated from the NLTS provided the first national perspective into transition outcomes for students with disabilities.

The other fundamental change marking a new phase in follow-up studies occurred with the passage of IDEA and new transition requirements. The new governmental guidelines institutionalized the requirements and practices used in transition services, thus impacting post-secondary outcomes for students with disabilities. With this legislation school districts were mandated to provide individual transition plans for all students receiving special education services. Soon after, IDEA began a new grant program funded through OSERS titled the State Systems for Transition Service for Youth with Disabilities Initiative. The designated federal monies under section 626(e) of IDEA (Furney, Hasazi, & Destefano, 1997) provided system change initiative grants focused on developing individualized education programs (IEP/transition planning), assessment, student empowerment, parent and family involvement, curriculum and instructional change, and school-community coordination (Rusch, Kohler, & Hughes, 1992).

#### State Institutionalization of Outcome Data

Following the information collected during the NLTS, relatively few follow-up studies were conducted. The few studies completed included the impact of specific curricula or of self-determination skills on the post-secondary outcomes of students with disabilities (Wehmeyer & Schwartz, 1997). Also, the impact of IDEA was not previously reflected through follow-up studies and new data was needed, thus marking the beginning of a new era in follow-up research. In 1997, the U.S. Department of Education funded a second National Longitudinal Transition Study known as NLTS2. The study began in the year 2000 following 12,000 students ages 13-16 from across the country for 10 years with the hopes to "provide a national picture of the experiences and achievements of young people as they transition into early adulthood (National Longitudinal Transition Survey - 2, n.d., ¶1). Similar to the previous NLTS study, all federally recognized disability categories were included in the study to reflect the national population.

Another fundamental movement through this era included the two reauthorizations of IDEA, the Amendments of 1997 (Public Law 107-17) and of 2004 (Public Law 108-446). Through the latest IDEA reauthorization, each state must develop a State Performance Plan to submit to the Office of Special Education Programs (OSEP) by December 2005 documenting the state's status on several indicators within special education. Indicator 14 of the State Performance Plan on Effective Transition requires states to collect post-school outcome data to determine the "percent of youth who had Individual Education Plans, are no longer in secondary school and who have been competitively employed, enrolled in some type of post-secondary school, or both, within one year of leaving high school" (Post-School Outcomes Center, 2005). The First Annual Performance Report (APR) demonstrating progress on all special education indicators is due by February 1, 2007 to OSEP. Therefore, states are required to begin collecting outcome data on high school leavers during the spring of 2006.

### Texas Effectiveness Study

The state of Texas, as with all states, was influenced by both policy implemented by the federal government and by research findings on transition and follow-up studies. As mentioned previously, when IDEA mandated transition planning for all students with disabilities the Texas Education Agency (TEA) created the Texas Effectiveness Study (TES) to oversee transition outcomes for the state. Originally overseen directly by TEA, in 1996 the TES was decentralized to Education Service Center XI located in Fort Worth, Texas through Rider 44 of Article III of the General Appropriations Act. Currently, the TES provides post-school outcome information regarding students with disabilities across the state. The information resulting from the TES studies was intended to influence decision-making at both the state and local level (Texas Effectiveness Study, 1997).

In the spring of 2005, the TES, in conjuncture with TEA, offered grant monies to districts to participate in the pilot study of the state endorsed exit and post-school survey to be used in future TES data collections. In addition, the survey was intended to satisfy the state's new responsibility of providing outcome data on recent high school leavers under Indicator 14 of the State Performance Plan. The pilot study expanded to include

both special and general education samples to provide a comparison group within the research design. The grant provided school districts with funding to administer an exit survey during May 2005, with a six-month post-school survey to occur during October/November 2005.

### Summary and Research Questions

The history of transition practices and follow-up study eras paints a picture of the guidelines that affect post-secondary outcomes of students with disabilities. Despite the literature base, the outcomes for students with disabilities after completing high school still have missing pieces, such as quality of life and independence (Levine & Nourse, 1998). There are still many questions left to answer. The following study was based on the pilot study of the TES exit and post-school surveys. Bryan Independent School District (Bryan ISD) competed for and participated in the grant competition at the exit of the 2005 school year. The broad research questions examined in this study include

- 1. What activities in high school in which students with disabilities participate reflect post-secondary outcomes?
- 2. What post-secondary outcomes do students with disabilities achieve after leaving high school?
- 3. How do high school activities and post-secondary outcome differences differ between students with and without disabilities?

A detailed list of research questions is provided in Chapter III.

### Organization of the Study

Chapter I introduces the study. Key information regarding the foundation and pivotal eras of follow-up studies is provided along with a background of the completed study.

Chapter II consists of a comprehensive literature review of the current research for the follow-up study. Three main sections of literature are provided including (a) high school preparation for post-school life, (b) post-secondary adult outcomes and (c) methodological concerns of surveys pertaining to follow-up research.

Chapter III details the setting of the study including the population being studied, as well as the methodological design of the data collection and analysis procedures.

Chapter IV presents the results of the study by means of statistical analyses for each individual research question described in Chapter III. Differences between hypotheses and results are highlighted

Chapter V provides the conclusion to the study. This includes additional interpretations and discussions to the findings, limitations of the study, and implications to both practitioners and future researchers.

#### CHAPTER II

#### LITERATURE REVIEW

#### Introduction

#### Purpose of Study/Literature Review

The literature reviewed in this chapter provides both the background information and the theoretical framework related to this study. The review is divided into four main sections: (a) high school preparation for post-school life, (b) current status of students on key adult outcomes, (c) agreement on items among different respondents, and (d) a review of methodological concerns related to survey and post-secondary follow-up studies. When possible, the literature review provides information on the five main predictor variables used in the study of educational setting (general education vs. special education), disability category, gender, ethnicity, and socio-economic status.

Transition planning and ensuring successful post-school outcomes for students with disabilities remains a relatively new field in terms of education. In 1984, Madeline Will wrote a ground breaking paper entitled "Bridges from School to Working Life." This article orchestrated not only the beginning of transition as a part of special education but also the importance of following students with disabilities after high school to ensure successful outcomes are accomplished.

With the passage of the Individuals with Disabilities Education Act in 1990, transition and post-secondary outcomes gained importance. Transition services are defined as

a coordinated set of activities designed with in an outcome oriented process, that promotes movement from school to post-school activities including post-

secondary education, vocational training, integrated employment (including supported employment) continuing and adult education, adult services, independent living or community participation. (National Transition Network, 1997, p. 3)

This wording stressed the importance of transition services within high school preparation and to the actual adult outcomes that follow graduation.

### High School Preparation for Post-School Life

Consideration of a great many factors is encompassed in the current programs used in high schools. Not only are students being prepared academically for graduation, but they are being provided opportunities to grow in independence. The following section includes information regarding the preparation high schools provide to graduating students that directly relates to post-school outcomes.

### Academic Program

Beginning in the 1980s, school reform led to numerous changes in the high school curriculum, often adding credits and making the achievement requirements of a high school diploma more rigorous (Catterall, 1989). The intense academic preparation received allowed more students to be prepared for post-secondary education. However, for many students with disabilities, the academic nature of high school courses bore no relation to post-secondary goals, and students dropped-out of high school at high rates (Rusch & Chadsey, 1998). Following are three areas of high school programming and preparation which were examined to determine outcomes for students with disabilities.

*Time in general education.* The amount of time special education students spend in general education helps create successful outcomes. However, the theme of inclusion has been widely debated through both special and general education (Skrtic, 1991) regardless of the fact that studies show that youth with disabilities spend the majority of the school day (75%) in general education settings (Wagner, 1993). Not all students with disabilities experience the same levels of inclusion within general education. Students with visual impairments participate in general education courses full-time at a rate of 51% compared with only 20% of students with learning disabilities and 6% of students with mental retardation (Wagner, Blackorby, Cameto, & Newman, 1993). Research suggests that youth who spend all day in the general education setting are more likely to attend post-secondary education and achieve competitive employment (Wagner et al., 1993).

Current research shows that the instructional time students with disabilities experience in the general education setting is stable (Wagner, 2003). However, changes have occurred based on the types of special and general education classes in which students were enrolled. For example, a 9% increase occurred for students with disabilities who enrolled in academic general education courses while a 27% increase occurred for students with disabilities taking a non-academic course in a special education setting (Wagner, 2003).

*Vocational education.* Vocational education has served as a long-time partner with special education in ensuring that students receive adequate skills to obtain employment. Almost all students with disabilities receive some form of a vocational experience during high school (Blackorby, 1993) yet only 60% of students enroll in a vocational course (Wagner et al., 1993). Meanwhile, 97% of the general population of students completes a vocational course (Levesque, Lauen, Teitelbaum, Alt & Librera, 2000), indicating that students with disabilities may not be participating in all possible vocational opportunities.

*Diploma type*. The type of diploma received by students is directly related to the type of courses in which they are enrolled. This is a difficult topic to explore since different states provide various types of diplomas ranging from an academic diploma to a technical/vocational diploma, to even a certificate of attendance. The state of Texas provides one standard diploma through three graduation tracks. The tracks consist of the minimum, the recommended and the distinguished diploma options. The literature demonstrates that students who enroll in more academic courses achieve higher levels of adult success than students in less rigorous programs (Wagner et al., 1993).

## Participation through Activities

Key components to both preparing students and to predicting future outcomes are participation in school activities and futures planning with school staff. These allow students to become more connected with the school and in return receive more postschool guidance.

*Extracurricular activities*. Not all instruction occurs within the classroom, and extracurricular activities provide opportunities for the development of students. Participation in extracurricular activities has been "related to desirable outcomes" (Newman, 1991b, p. 20) and almost half (41%) of students with disabilities report belonging to a group (Newman, 1991b). In addition, correlations exist among extracurricular participation, higher academic performance, and a decreased drop-out rate (Camp, 1990; Mahoney & Cairns, 1997). Another study reported that 76% of

students with disabilities participate in an extracurricular activities compared to 82% of the general population. Although some differences exist for different disability categories in terms of extracurricular participation, students in all categories excluding multiple disabilities participate at a rate of 70% or higher (Cadwallader, Wagner, & Garza, 2003).

*Meetings to discuss transition/graduation.* The IDEA amendments of 1997 required that all students must participate in transition planning beginning at age 16 (Individuals with Disabilities Education Act Amendments of 1997, § 1499 (d) (1) (A)). Theoretically, during this time students should discuss with school staff individual expectations for post-school outcomes and ensure proper preparations are made prior to graduation. School counselors following best-practice research also interact with students regarding post-secondary goals (Stanard, 2003). Therefore, all students graduating from high school should develop plans, whether written or verbal, to finish high school and to outline post-secondary goals.

## **Employment Prior to Graduation**

Although not directly related to the preparation received in high school, having paid employment experiences prior to graduation is the number one indicator of employment after graduation (Rusch & Chadsey, 1998). Early studies of youth with disabilities which examined employment prior to graduation denoted that only 14% of students had paid or work-study jobs. However prior to graduating from high school, 56% of youth with disabilities had demonstrated some paid work experience, formal or informal (D'Amico, 1991). Variance exists in the work experience of students according to disability category. Students who are Deaf, who have mental retardation or who have multiple disabilities are more likely to experience work-study employment (27% vs. 25% vs. 24%, respectively) than students with mild disabilities. This often results from the amount of community-based instruction provided to students with moderate to severe disabilities. Students with learning disabilities or emotional disturbance experience all employment options at the highest rates (63% vs. 64%, respectively) (D'Amico, 1991). The types of employment experiences to which the above study refers included all forms of employment, from a regular hourly job to payment for neighborhood type chores.

### Post-Secondary Outcomes

High school preparation strives to provide students with the skills necessary to be successful contributing members of society. The literature provides four broad outcomes areas that are critical to the successful transition of students with disabilities. These outcome areas include employment, post-secondary education, independent living, and community integration (National Transition Network, 1997; Wagner et al., 1991). The following sections provide a review of the outcomes in regards to the different classification variables of educational setting, disability category, gender, ethnicity, and socio-economic status. However, in general, students with disabilities achieve post-school outcomes at a much lower rate than do their non-disabled peers (Mithaug, Horiuchi, & Fanning, 1985).

18

#### Post-Secondary Education

Society as a whole places increasing importance on all students attending postsecondary education. Also, attending post-secondary education provides clear economic benefits over simply attaining a high school diploma. Unfortunately, only 41% of all students entering post-secondary education complete a degree (National Commission on the High School Senior Year, 2001).

*Outcomes based upon general education vs. special education.* Students with disabilities access post-secondary education at a lower rate than students without disabilities. The National Longitudinal Transition Study (NLTS) concluded that only 22.5% of students with disabilities access post-secondary education compared with 56% of the general population. Major differences exist between general and special education students related to the type of post-secondary education accessed. College campuses enroll only 13% of students with disabilities compared to 50% of the general population. However, when comparing vocational and trade school, the attendance rate was comparable with 8% of students with disabilities and 11% of the general population attending (Wagner et al., 1991).

With the passage of recent legislation and initiatives, the enrollment of students with disabilities in post-secondary education has increased (Barr, Harttnan, & Spillane, 1995). The National Longitudinal Transition Survey 2 (NLTS2) highlights many of these improvements. New information shows that within two years of leaving high school students enrolled in some form of post-secondary education at a rate of 31%. The most common placement for enrollment was a two-year community college where

students with disabilities were enrolled at a rate of 10%. This rate is comparable to the 12% enrollment of students without disabilities. Unfortunately a large gap exists between students with and without disabilities enrolling in a 4-year university (6% vs. 28%, respectively) (Newman, 2005).

Although both of the previously mentioned studies involved large national samples, research of smaller geographic areas demonstrates similar results of students with disabilities attending post-secondary education at a lower rate than students without disabilities. In a follow-up study of graduates in Minnesota only 19% of students with disabilities were enrolled in post-secondary education (Thompson, Lin, Halpern, & Johnson. 1994). In a study in urban areas of New York, special education students enrolled in post-secondary education at a rate of 27% compared to 56% of a general education reference group (New York State Education Department, 1999).

*Outcomes based upon categories of disabilities.* The type and severity of the disability impact student enrollment in post-secondary education. The rates of attendance in post-secondary education of students with speech (48%), visual (68%), and hearing impairments (51%) were not significantly different from that of the general population (56%). However for students with learning disabilities (23%), emotional disturbance (18%), and mental retardation (8%) the attendance rate was significantly lower (Wagner et al., 1991).

More recent research (Newman, 2005) indicates that students with speech, visual, and hearing impairments were still the most likely disability categories to access postsecondary education. However, enrollment rates increased for students with learning disabilities (33%), students with emotional disturbance (20.8%), and students with mental retardation (15%). In terms of severe disabilities, Johnson, McGrew, Bloomberg, Bruininks and Lin (1997) discovered that only 10% of students classified as having severe disabilities accessed post-secondary education.

*Outcomes based upon gender*. In studies during the late 1980s, research indicated that males and females receiving special education accessed post-secondary education at approximately the same rate, with males having only a slightly higher rate (Wagner et al., 1991). This trend reversed itself after the year 2000 when females with disabilities accessed post-secondary education at a slightly higher rate (Newman, 2005). The same trends exist in the general population with females now attending post-secondary education at a higher rate than males (56% vs. 44%, respectively) (National Center for Education Statistics, 2004). However, even though females attend post-secondary education at a higher rate, variance exists among different ethnicities in terms of gender (Shin, 2005).

*Outcomes based upon ethnicity*. The National Center for Education Statistics (2005) reported that 70% of individuals earning college degrees come from Anglo, non-Hispanic ethnic backgrounds. The percentage decreases sharply to only 9% for African-Americans and to 6% for Hispanics. Transition follow-up literature found the same trend in that students of color access post-secondary education at a much lower rate. Only 7% of African-American and Hispanic students with disabilities access post-secondary education compared with an overall rate of 30% for Anglo youth with disabilities (Newman, 2005).

Outcomes based upon socio-economic status. As with disability categories, the socio-economic status of students affects the transition outcomes experienced. Socioeconomic status has been linked to academic achievement. When compared to other indicators contributing to post-secondary success, socio-economic status affects academic performance significantly (Fowler & Walberg, 1991). Students coming from a lower socio-economic background are over-represented in special education (Baca & Cervantes, 2004). The National Center for Education Statistics (NCES) found family income to be a strong indication of student enrollment in two and four year colleges (National Center for Education Statistics, 2005). Only 49% of students from low income families attended college compared to 63% of middle-income families and 78% of highincome families (Choy, 1999). Similar trends were found for students receiving special education in relation to accessing post-secondary education when considering family income. Only 9% of students from families earning under \$12,000 per year accessed post-secondary education compared with 21% of students with disabilities from families earning over \$25,000 per year (Wagner et al., 1991).

### Employment

Along with post-secondary education, employment receives the most attention as a post-secondary outcome. The importance of employment as an outcome for students with disabilities was first recognized by Will in 1984. A U.S. Department of Labor report stated

Many of America's young people leave school unequipped with skills they need to perform the jobs of a modern competitive world economy. They often flounder in the labor market, wasting a decade or more in intermittent, low paying jobs. (National School-to-Work Office, 1996, p. 1)

This suggests that both students receiving special education services and students served in general education struggle to find employment.

*Outcomes based upon general education vs. special education.* Early research findings clearly demonstrated that individuals with disabilities were employed at a lower rate and for lower wages than those without disabilities. Mithaug, Horiuchi, and Fanning (1985) completed a follow-up study of students with disabilities in Colorado and found that only 32% of students were working full-time. In addition 43% of those students working reported earning less than \$3.00 per hour when the federal minimum wage for the year 1985 was \$3.35 (U.S. Department of Labor, 2005). A similar study conducted in Vermont found more favorable results in that 55% of the sample reported working (Hasazi, Gordon, & Roe, 1985).

The original NLTS research conducted in the late 1980s to early 1990s concluded that students with disabilities were employed at a lower rate with only 46% of students with disabilities employed compared to 59% of the general population (D'Amico & Blackorby, 1992). Over ten years later in results from NLTS-2, similar employment discrepancies were found with 40% of graduates with disabilities obtaining employment the semester following graduation (Cameto, 2005) compared to 55% of the general population (Bureau of Labor Statistics, 2004).

*Outcomes based upon categories of disabilities*. Large discrepancies exist among the different disability categories in terms of employment. Within two years of high school graduation, 25% of youth with disabilities obtained employment on a full-time status compared with 30% of the general population (D'Amico & Blackorby, 1992). However, students with learning disabilities showed an employment rate of 36%, students with emotional disturbance of 14.5%, and students with mental retardation of 12.3%. The employment rate for students with disabilities out of high school for three to five years increased to 43% for all disabilities, with the category of learning disabilities being the highest category at 57% (D'Amico & Blackorby, 1992).

In the time period from the early 1990s to 2005, the disability categories of speech and language impairments, hearing impairments and autism demonstrated a higher employment rate than learning disabilities. The two categories demonstrating the lowest employment rate consisted of visual and orthopedic impairment (Cameto, 2005).

*Outcomes based upon gender*. Recent research indicated that upon initial high school graduation, gender differences for employment are minimal (Wagner, Newman, Cameto, Garza, & Levine, 2005). However, this is a contrast to previous post-secondary follow-up studies that demonstrated that males were employed at a higher rate than females. Sittlington and Frank (1990) concluded that males with learning disabilities obtained employment at a higher rate, worked more hours and earned higher wages than females with learning disabilities. The original NLTS study found discrepancies between employment rates of males and females with 53% of males and 30% of females with disabilities showing employment compared to rates of 68% for males and 54% for females in the general population (Wagner et al., 1991). According to the 2000 Census there are equal number of males and females ages 18-24 showing employment, but males are in the workforce full-time at a greater rate than females (59% vs. 41%, respectively) (Spraggins, 2003).

*Outcomes based upon ethnicity*. Discrepancies exist among students with and without disabilities in terms of employment and ethnicity. In general, individuals of color demonstrate employment at a lower rate than their Anglo peers. D'Amico and Blackorby (1992) reported that 53% of Anglo students with disabilities demonstrated full-time employment compared with 49% of Hispanics and 25% of African-American students. The employment rate of students of color increased in later studies to 31% for African-American and 30% for Hispanic students (Cameto, 2005). However, these rates are low when compared to the national statistics for all working adults, as adults of all three ethnicities show employment rates over 60% (Bureau of Labor Statistics, 2004).

*Outcomes based upon socio-economic status*. Little is known relative to the socio-economic level of students and obtaining employment. However, it is known that students who come from high socio-economic status families earn more income through employment than do students from low socio-economic families (Huang, Pergamit, & Shkolnik, 2001). Because of the overrepresentation of students from low-income families in special education (Baca & Cervantes, 2004), the assumption is made that students from higher socio-economic backgrounds achieve greater employment success. *Independent Living* 

An important component of independence is determined through living arrangements. Prior to the 1960s, high school graduates quickly moved from parents' homes and began living independently. However in 1989, 52% of individuals between 18-24 years continued to live in their parents' homes (U.S. Bureau of the Census, 1991). Students with disabilities live with parents at equally high, if not higher, rates (Levine & Wagner, 2005).

*Outcomes based upon general education vs. special education.* Mithaug, Horiuchi, and Fanning (1985) found 64% of respondents residing with their parents roughly five to six years following high school graduation. The original NLTS discovered that only 13% of youth with disabilities lived separately from parents within two years of completing high school compared to 33% of the general population (Newman, 1991a). Roughly 10 years later, Arnett (2000) concluded that only 25% of all youth leave their parents' homes immediately following high school. Levine and Wagner (2005) reported that 82% of youth with disabilities still reside with family two years after leaving high school compared to 78% of youth in general education.

*Outcomes based upon categories of disabilities*. As with other post-secondary indicators, students in the different disability categories experience success at varying levels. Early indications showed that students with visual impairments, hearing impairments and learning disabilities experienced the greatest levels of independent living. However, it is important to note that all categories of disabilities reported less than 20% of the students living independently (Newman, 1991a). Although rates of independent living for students from the different disability categories are similar immediately following high school, the trends change three to five years following graduation. Over 70% of students with other health impairments still reside with parents, compared to 52% of students with learning disabilities and 45% of students with emotional disturbance (Levine & Wagner, 2005). Students with severe disabilities

exhibit another trend. Many students with this eligibility reside in residential placements and group homes (50-70%), while the remainder resides with parents (30-45%) (Johnson et al., 1997).

*Outcomes based upon gender*. Interestingly, the percentage of youth who live independently following high school is higher for females than males, although the difference is not statistically significant (55% vs. 45%, respectively). The general population comparison for independent living based upon gender is 84% (Wagner et al., 1991). Later studies report that males and females experience similar post-school living arrangements (Levine & Wagner, 2005).

*Outcomes based upon ethnicity*. Noteworthy trends exist in independent living based upon ethnicity. Out of the 33% of the general population of students living independently, Anglo students comprise 27% of this group compared to 13% for African-American and 36% for Hispanic students. The remaining 23% is composed of all other ethnicities (Newman, 1991a). However, when looking only at students served through special education, Anglo students are much more likely to live independently (20%) than African-American (8%) and Hispanic (6%) students (Levine & Wagner, 2005).

*Outcomes based upon socio-economic status*. The overall household income of the families with students with disabilities increased between 1987 and 2001, largely because the unemployment rate decreased in the United States (Levine & Wagner, 2005). However follow-up studies report no difference in the rate of students living independently based upon household income (Newman, 1991).

27

### Recreation/Leisure

The final broad outcome area discussed consists of recreation and leisure, and how students spend free and social time. Important factors in the independence of individuals are the social interactions and networks of family and friends upon which an individual has to draw (Halpern, 1985). The social network plays particular importance during the transition years following high school, because during this time students receive feedback and guidance while experiencing adult roles (Wagner, 1992). In addition, interactions experienced by students change after graduation since students are no longer exposed to school-oriented groups, and the amount of time given to social participation may decrease due to employment (Newman, 1991b).

*Outcomes based upon general education vs. special education.* Secondary students in the general population continue to experience social activities at a higher rate when compared to students with disabilities. For example in 2001, 94% of high school seniors participated in watching television on a regular basis (National Center for Education Statistics, 2005) compared to 50% of youth with disabilities (Cadwallader & Wagner, 2003). Another comparison showed that 86% of youth from the general population reported spending time with friends (National Center for Education Statistics, 2005) compared to only 62% of youth with disabilities (Newman, 1991b).

*Outcomes based upon categories of disabilities*. As with other outcomes, specific disability categories continue to be a major factor in successful outcomes of students with disabilities. Less than two years out of high school, 10% of youth with disabilities reported feeling social isolation. This report of social isolation ranged from 5% of youth

with learning disabilities to 50% of youth with deaf/blindness (Newman, 1991b). On the single comparison of spending time socially with friends, students with learning disabilities appeared to experience the highest level of social integration, with 33% frequently visiting friends. However, only 6% of students with autism frequently visited friends (Cadwallader & Wagner, 2003).

*Outcomes based upon gender*. Females tend to participate in extracurricular activities at a higher rate than male peers (Newman, 1991b). Some research indicates that group participation in high school serves as a predictor to social involvement after high school (Otto & Allwin, 1977). However, females have expressed feeling more social isolation than males after high school (Newman, 1991b) even though both males and females experience social events at the same rate (Cadwallader & Wagner, 2003). However, males indicated spending more time with friends in person, while females indicated spending more time on the telephone.

*Outcomes based upon ethnicity*. Anglo students visited friends at a higher rate (45%) than did African-American (39%) or Hispanic (23%) students (Wagner et al., 1991). The method in which students access friends has changed according to the results between the NLTS and NLTS-2 studies in terms of communication advances with Anglo and African-American students visiting friends more, but in different ways. Anglo students were more likely to use internet resources, while African-American students continued to use the telephone and in-person visitation. Hispanic students continued to visit friends at a lower rate (Cadwallader & Wagner, 2003).

29

*Outcomes based upon socio-economic status*. Early follow-up literature reported that students from households which earned less than \$12,000 per year visited friends at a higher rate than students from higher socio-economic backgrounds. However, students from low socio-economic backgrounds were much less likely to participate in group activities, such as league sports and organizations (Newman, 1991b). Later research found that family income showed a direct relation to the amount of social interactions a student received. In fact, the study suggested that financial well-being provided social opportunities (Cadwallader & Wagner, 2003).

### Agreement Studies among Different Respondents

Often in transition related research only one data source provides the information regarding the goals and outcomes of students with disabilities (Bullis, Bull, Johnson & Peters, 1994). The most common respondents in follow-up studies include (a) only a parent or guardian, (b) individuals with disabilities, (c) a combination of parents and individuals with disabilities and (d) another individual who is easy to contact (Bullis et al., 1994). Levine and Edgar (1994) provide insight as to why parents and students are utilized in different studies. Often students provide the most accurate information but may be difficult to locate. Parents/guardians on the other hand are less transient and easier to locate but may not have knowledge on the most accurate post-school information. However, the accuracy of the data provided by participants other than the students is greatly unknown. Bruininks, Wolman, and Thurlow (1990) believe that the issue of different respondents and the resulting agreement needs further research. If it is

determined that all groups provide the same responses to survey questions, research designs may have more degrees of freedom when selecting which group to survey. *Literature review* 

Few studies have examined the agreement among various types of respondents on similar questions. In fact Bullis et al. (1994) claimed to have produced the first literature in regard to agreement between groups in response to a transition related survey. Past studies examined agreement between students with behavior problems with parents and teacher responses. It was concluded that that students remained the best choice for providing accurate information (Janes, Hesselbrock, Myers, & Penniman, 1979).

Bullis et al. (1994) conducted an agreement study between Deaf youth and their parents in terms of the transition outcomes of post-secondary education, employment, independent living and socialization. It was determined through the study that although consistent answers were provided between students and parents; perfect agreement never occurred. The authors recommended that researchers practice extreme caution when using data collection instruments that include a mixed design of parents and student respondents due to the variance found in agreement between variables (Bullis et al., 1994).

Following the research described earlier, Levine and Edgar (1994) conducted an agreement related study on extant data from two previously conducted follow-up studies. The results reported that some variables contained a high-agreement between responses while others contained a low-agreement between responses. For example, broad simple

31

questions consisting of employment, post-secondary attendance, residence and marital status produced very high agreement. However questions regarding salary and the amount of time spent working produced poor agreement. Thus the researchers concluded that parents are not always a reliable source of information regarding students' post-secondary outcomes (Levine & Edgar, 1994).

Because of the limited research in agreement studies, the authors from both studies (Bullis et al., 1994; Levine & Edgar, 1994) recommended further research to determine agreement among respondents. A substantial database of literature does not currently exist to provide definitive guidance on the use of multiple sources to collect accurate follow-up data.

# Methodology

The previous literature review has related to high school preparation, postsecondary outcomes of youth and agreement that occurs among respondents. However a critical component of all research rests in the appropriateness of the methodology utilized. The remainder of the chapter focuses on methodological issues and concerns surrounding this study.

# Survey Design

Besides the actual data collection procedures, the actual survey design is critical. In fact good data are impossible to achieve without a good instrument that collects the data. It is imperative to keep both the wording of individual questions and the questionnaire format simple in order to achieve the best results (Dillman, 2000).

### Survey Design Construction

Considerable research exists related to the components of creating a good survey instrument in order to provide good results. As with any form being completed, whether through pencil and paper, internet, or other avenue, surveys must flow in a logical progression and the order in which questions are asked must be carefully constructed (Dillman, 2000). Two important concepts related to survey design include the notion that questions should be eliminated if the data desired are accessible through other means and sensitive items should be placed toward the end of a questionnaire (McNamara, in press a).

Self-administered surveys also require the careful consideration of the survey format. Dillman (2000) explains that all surveys are composed of two languages including the verbal language formulating the questions and the visual language of the appearance of the questionnaire. Researchers often spend ample time on question development but limited time on the visual layout of the survey. In reality this visual language can impact survey results if respondents are unable to navigate the survey quickly and correctly (Dillman, 2000).

Researchers must also realize that survey construction of self-administered surveys and telephone surveys must be composed differently. Stated another way, a good self-administered survey does not make a good telephone survey and vice-versa. Respondents typically provide more accurate answers to self-administered surveys and can process more information within each question (Dillman, 2000). A respondent may be able to visualize a likert-scale item on a self-administered survey more easily than through a telephone survey. Questions that involve ranking also pose difficulty over the telephone if participants are expected to remember lists of items (McNamara, in press b). However, telephone surveys produce a higher response rate than do self-administered surveys (Dillman, 2000).

### Validity and Reliability within Survey Design

Because a survey is intended to collect data, the instrument must be reliable and valid (McNamara, 2004). Reliability is defined as the "matter of whether a particular technique, applied repeatedly to the same object, would yield the same result each time" (Babbie, 1990, p. 132). Reliability is achieved in survey research when all respondents read and interpret survey questions in the same manner. Research cannot have validity until reliability is obtained. Dillman (2000) explains achieving reliability by ensuring that the questions are written in a way that all respondents interpret the questions the same, respondents know the accurate response to the question, and finally that respondents are willing to answer the question correctly. Babbie (1990) provides further guidance on reliability by noting that researchers should state questions clearly and should only ask questions respondents can answer.

Validity refers "to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration" (Babbie, 1990, p. 133) and is achieved when the question provides accurate responses (McNamara, 2004). Three types of validity become increasingly critical to examining survey research. Population validity encompasses the idea that the sample used in the survey is truly reflective of the population to which the results are generalized. Measurement validity is composed of three concepts related to the questionnaire design. It ensures that respondents understand the questions and answer appropriately and that the questionnaire asks the items necessary to answer research questions. The final validity, conclusion, is achieved when the correct statistical analysis is applied to the data (McNamara, 2003).

### Errors in Survey Design

Errors in research compromise both the data collected and the results achieved through analyses used on the data. Therefore, to protect the accuracy of research findings, researchers must strive to eliminate errors.

*Coverage error*. Coverage errors occur when the list from which the sample is derived does not contain all possible members of the population being studied. Therefore, because the list is incomplete, all members of the population do not have an equal opportunity for selection to participate in the study (McNamara, 2003). Not only does a population list need to include all members of a group, but it is imperative to ensure the list only includes those members of interest. Many times lists are composed of populations larger than needed (Dillman, 2000).

Sampling error. All research involves sampling error; however, the objective revolves around trying to eliminate sampling error. Sampling error is the difference between the actual population parameter and the statistic found in the sample (McNamara, 2003). To help correct for sampling error, researchers need to ensure that a large enough sample size is used during the study (Dillman, 2000).

*Measurement error*. Measurement error occurs when a respondent answers a question inaccurately or useful comparisons cannot be made among the respondents'

answers (Dillman, 2000). To correct for measurement error, questions must be clearly worded in a way that respondents not only understand the information being asked but also are willing to provide the correct response.

*Non-response and attrition.* The non-response rate refers to the percentage of respondents within a sample that for all reasons do not participate in the study. Non-response error occurs when a significant number of respondents do not participate in the study and it is known that their responses differ from those on the returned surveys (McNamara, 2003). Babbie (1990) provides some insight on acceptable return rates during survey research. He states

A response rate of at least 50 percent is generally considered adequate for analysis and reporting. A response rate of at least 60 percent is considered good, and a response rate of 70 percent or more is very good. (Babbie, 1990, p. 183)

Attrition occurs in follow-up study research when participants fail to respond in the subsequent survey administrations. The declining number of participants causes sampling error to increase in the results of the study.

# Methodological Concerns

As in survey design, there are methodological concerns related to specific types of data collection. The following section outlines the concerns associated with the two types of data collection, follow-up and agreement studies, used in this research design.

*Methodological concerns of follow-up studies.* Despite the overall usefulness of follow-up studies, several methodological concerns exist. However, through analyzing the results of past research, recommendations are provided to ensure quality results are obtained. Halpern (1990) completed a review of past follow-up studies and comprised

suggestions for future researchers. One suggestion is to use follow-along survey designs as opposed to follow-up. This provides both baseline data and data over time. Sampling concerns are also important. Halpern (1990) suggested ensuring that the sample is representative of the population when descriptive statistics are utilized. Since nonresponse error and attrition are a concern of follow-up studies, mailed surveys are not recommended and personal or telephone interviews are preferred (Halpern, 1990). Finally, he recommended that surveys acknowledge all areas of post-school adjustment including "employment, community integration, education, and social adjustment" (Halpern, 1990, p.19).

Attrition and low response rates have plagued follow-up studies since their conception. The NLTS reported a 51.9% return rate during the first round of surveys collected (Javitz & Wagner, 1990). In order to help with attrition during NLTS2 "aggressive tracking mechanisms" were developed in which contact information was collected on multiple individuals to provide information in regards to the participants of the study (SRI International, 2000, p. 19).

Other follow-up studies show similar trends with low response rates. One of the first follow-up studies conducted (Mithaug, Horiuchi, & Fanning, 1985) achieved a 65% return rate of students within the state of Colorado. A separate study conducted in Minnesota received a 58% response rate (Thompson et al., 1994) and Hasazi, Gordon, and Roe (1985) surveyed parents in a follow-up study and still only received a 73% return rate.

37

*Methodology concerns with agreement studies.* The statistic of Cohen's Kappa was used in both studies regarding agreement among respondents. The benefit of using this statistic over simply reporting agreement is that a correction for chance is applied in the results (Levine & Edgar, 1994). However, the analysis only determines agreement on a yes/no scale and does not take into account more detailed scale measurements.

# Summary

This chapter provided a literature review of the transition and methodology literature relevant to this study. Literature was provided relevant to the preparation high school students receive that corresponds with post-school life. However, the bulk of the chapter was dedicated to a comprehensive review of the outcomes associated with follow-up studies in terms of post-secondary education, employment, independent living, and recreation and leisure activities. The current knowledge on agreement studies relating to transition research followed. The final section reviewed research related to methodological concerns surrounding survey research and suggestions were given for ensuring that results achieved both validity and reliability. The following chapter describes the methodology related to the study in more detail providing information on both the study design and the statistical analyses used in interpreting the results from the study.

#### CHAPTER III

### METHODOLOGY

### Design

Many high schools traditionally measure success almost exclusively on the percentages of students pursuing post-secondary education. However, as demonstrated earlier, post-school success comes in other forms of adult outcomes such as employment, independent living and recreation and leisure participation. This study examined post-school outcomes for students receiving special education compared to students from the general education population. More specifically, this study examined the differences in post-secondary outcomes students obtain in terms of employment, post-secondary education, independent living, and recreation/leisure based upon educational setting, disability category, gender, ethnicity and socio-economic status. This chapter outlines how research questions were investigated, how data were collected, and how the results were analyzed.

# Research Questions and Hypotheses

The following section states the research questions, followed by the hypotheses that the researcher investigated. Each research question and corresponding set of hypotheses is followed by the specific survey items that were used in the analysis of the question. The five independent variables of educational setting, disability category, ethnicity, gender, and socio-economic status are used throughout the hypotheses. Educational setting refers to students educated in special education compared to students educated completely in general education. Disability category refers to the categories identified by the Individuals with Disabilities Education Act (IDEA). Ethnicity refers to the three categories of African-American, Anglo, and Hispanic. Socio-economic status divides students into two categories of receiving a free and reduced lunch during high school or not receiving a free and reduced lunch. Gender is a dichotomous variable of male and female.

The following six dichotomous variables were used to investigate Question 1: (a) participating in school sponsored activities (b) participating in extra curricular activities, (c) obtaining information on graduation issues, (d) communicating with school staff about graduation and post-secondary plans, (e) demonstrating employment prior to graduation and (f) overall high school preparation for post-school life.

- How does participation in post-school preparation activities during high school differ for students based upon educational setting, disability category, gender, ethnicity, and socio-economic status?
  - a. Students served exclusively through general education will participate in more post-school preparation activities during high school than students served within special education.
  - b. Students with mild disabilities will participate in more post-school preparation activities during high school than students with moderate to severe disabilities.
  - c. Males and females will participate in post-school preparation activities during high school at an equal rate.

- d. Anglo students will participate in more post-school preparation activities during high school than students of color.
- e. Students from a higher socio-economic background will participate in more post-school preparation activities during high school than students from a lower socio-economic background.

The four categorically scaled variables of (a) post-secondary expectations of employment, (b) post-secondary expectations of education, (c) post-secondary living expectations, and (d) post-secondary expectations in recreation/leisure and community participation were used in the analysis of Question 2.

- 2. How do post-secondary outcome expectations differ for students based upon educational setting, disability category, gender, ethnicity, and socio-economic status?
  - a. Students served exclusively through general education will express higher post-secondary outcome expectations than students served within special education.
  - b. Students with mild disabilities will express higher post-secondary outcome expectations than students with moderate to severe disabilities.
  - c. Males and females will express post-secondary outcome expectations at an equal rate.
  - d. Anglo students will express higher post-secondary outcome expectations than students of color.

e. Students from a higher socio-economic background will express higher post-secondary outcome expectations than students from a lower socio-economic background.

The single variable of current employment status was used in the analysis of Question 3.

- 3. How do post-secondary outcomes in terms of employment differ for students based upon educational setting, disability category, gender, ethnicity, and socio-economic status?
  - a. Students served exclusively through general education will demonstrate a higher rate of employment than students served within special education.
  - b. Students with mild disabilities will demonstrate a higher rate of employment than students with moderate to severe disabilities.
  - c. Males and females will demonstrate employment at an equal rate.
  - d. Anglo students will demonstrate a higher rate of employment than students of color.
  - e. Students from a higher socio-economic background will demonstrate a higher rate of employment than students from a lower socioeconomic background.

The categorical variable used in the analysis for post-secondary

education/training (Question 4) was the access of and type of education/training.

Additional descriptive statistics were assessed for the variable full-time versus part-time student enrollment status.

- 4. How do post-secondary outcomes in terms of post-secondary education/training differ for students based upon educational setting, disability category, gender, ethnicity, and socio-economic status?
  - Students served exclusively through general education will attend post-secondary education at a higher rate than students served within special education.
  - b. Students with mild disabilities will attend post-secondary education at a higher rate than students with moderate to severe disabilities.
  - c. Males and females will attend post-secondary education at an equal rate.
  - d. Anglo students will attend post-secondary education at a higher rate than students of color.
  - e. Students from a higher socio-economic background will attend postsecondary education at a higher rate than students from a lower socioeconomic background.

Question 5 examines independent living and used the variable of current living status in the analysis. Descriptive statistics were provided concerning the variable that asked respondents if the current living status was the same as while in high school.

- 5. How do post-secondary outcomes in terms of independent living differ for students based upon educational setting, disability category, gender, ethnicity, and socio-economic status?
  - a. Students served exclusively through general education will achieve independent living at a higher rate than students served within special education.
  - b. Students with mild disabilities will achieve independent living at a higher rate than students with moderate to severe disabilities.
  - c. Males and females will achieve independent living at an equal rate.
  - d. Students of all ethnicities will achieve independent living at an equal rate.
  - e. Students from a higher socio-economic background will achieve independent living at a higher rate than students from a lower socio-economic background.

Three variables were used in the analysis of recreation/leisure to answer Question 6. Descriptive statistics were reported for (a) with whom the student preferred to spend free time and (b) whether or not the student participated in social activities on a weekly basis. The main analysis examined the number of activities in which the student participated on a monthly basis.

6. How do post-secondary outcomes in terms of recreation/leisure activities differ for students based upon educational setting, disability category, gender, ethnicity, and socio-economic status?

- a. Students served exclusively through general education will access recreation/leisure activities at a higher rate than students served within special education.
- b. Students with mild disabilities will access recreation/leisure activities at a higher rate than students with moderate to severe disabilities.
- c. Males and females will access recreation/leisure activities at an equal rate.
- d. Anglo students will access recreation/leisure activities at a higher rate than students of color.
- e. Students from a higher socio-economic background will access recreation/leisure activities at a higher rate than students from a lower socio-economic background.

The final question utilized a list of 25 post-secondary areas in which students with disabilities and teachers completed in regard to the students' ability. The results between respondents were compared for congruency.

- 7. Do students served by special education demonstrate congruency with high school teachers on ratings of students on post-secondary skill areas?
  - a. Students with mild disabilities will demonstrate more congruency with teachers than students with moderate to severe disabilities.

#### Procedures

#### Population and Sample

Bryan Independent School District was selected for the study. Bryan, Texas is a mid-sized city in Texas surrounded by predominantly rural land. The three large cities of Houston, Austin and Dallas are within a 180 mile radius. During the 2004-2005 school year, the school district served 14,377 students. Roughly 50% of the district's student population was served through elementary schools. Ten elementary schools and one early childhood education center comprised the elementary schools. The remaining student population received services through three middle schools and one large traditional high school. In addition, the district had three alternative high school programs including: (a) the Alternative Choice for Education (ACE) which provided students a regular high school diploma through other means of instruction, (b) the Special Opportunity School (SOS) which assisted students with making correct choices, and (c) the charter school project GRAD which allowed high school students a credit recovery program (Bryan Independent School District, 2005).

The population of interest included the 2005 graduating students from Bryan Independent School District (Bryan ISD). This population included students who graduated from all high school diploma option programs which included Bryan High School (Bryan HS) and ACE. Both programs offered a traditional high school diploma. Therefore, students who received a GED were not included in the study. The sample involved both students served by special education and those served by general education. Due to the small number of graduating students served through special education, the entire population of students receiving these services was included in the study. According to school records 76 students receiving special education services graduated in May 2005 from Bryan ISD programs. A stratified random sample of 152 general education students were selected to mimic and double the special education graduating population based upon gender and ethnicity. Therefore the total sample consisted of 228 students. The larger general education population provided additional power during statistical analyses and helped correct for sampling error (Hinkle, Wiersma, & Jurs, 2003).

### Method

*Instrument design*. The Texas Effectiveness Study (TES) designed both survey instruments, the exit survey (Appendix A) and the post-school survey (Appendix B). School districts from across the state of Texas then competed in a mini-grant application process to participate in the pilot study for the TES. Therefore, no pilot testing was performed on the instruments. In order to obtain the grant for administration, school districts agreed to administer the survey in full. However, additional questions could be added to the survey instrument if desired.

Through the combined effort of the Texas Education Agency (TEA) and the TES, the final survey versions of the exit survey and post-school survey were created. Originally, Dr. Richard Zeller of The University of Oregon and the Western Regional Resource Center was contracted to provide consulting services for the creation of the TES survey. Through these services the TES decided to conduct follow-up data using cohorts representing students in both special education and general education.

Educational specialists from the Region XI Educational Service Center collaborated on the final survey questions because Region XI serves as the decentralized leadership function of transition services for the state. The other change in regard to how the TES collected post-school outcomes was establishing the initial contact prior to graduation. Previously within the TES, students were not contacted until after graduation and the response rate was extremely low. In addition, the TES experienced a great deal of attrition over time. Therefore, Dr. Zeller suggested including students in general education and establishing contact prior to graduation, to help correct for non-response and attrition errors expressed through TES (D. Norris, personal communication, March 11, 2005).

*Data collection and procedures.* The May 2005 graduating students from Bryan ISD were sampled for the purpose of collecting post-secondary preparation and outcome data. The two surveys utilized in the study were the TES exit and post-school surveys. The exit survey (Appendix A) was administered to students prior to graduation during May 2005. This survey provided baseline data and contact information for students following graduation. In addition, this survey provided high school preparation information and insight regarding the initial plans of students following graduation. This survey was administered at the campus where students received their primary instruction, Bryan HS or ACE. The students were surveyed during a study hall or elective period. This surveying method ensured that students were not removed from core academic subjects. Students receiving special education were surveyed in a small group (less than ten students) or an individual setting based upon the needs of the student. Special education administrators and teachers provided information to determine which method of survey administration most appropriately met students' individual needs.

Students educated in all general education settings were surveyed in a large group (more than ten students) format. The initial survey required 30 to 40 minutes to complete. During this administration, students received a business card with a time and date to return to Bryan HS to complete the post-school survey in October 2005. Following the first round of data collection, a random drawing of door prizes was held. Prizes totaled \$200 and consisted of compact disc players and gift cards/certificates to local establishments.

During September 2005, Bryan ISD mailed postcards to remind students to return to Bryan HS to complete the post-school survey (Appendix B). Students were invited to Bryan HS to complete the survey and receive a pizza dinner. During the second survey administration adults assisted students as needed, because special education and general education cohorts were administered the survey simultaneously. For students not returning to Bryan HS, surveys were mailed to the addresses provided on the exit survey. Phone calls and emails were utilized for non-respondents in a final attempt to contact participants. The post-school survey took 20 to 30 minutes to complete. In addition to contact information and questions asked during the initial exit survey, the post-school survey sought information regarding the students' activities since high school graduation. Surveys were coded with an identification number for each respondent. Only the principal investigator had information to match individual students with identification numbers. Students maintained the same identification number throughout the study. In addition, students signed consent forms (Appendix C) agreeing to the conditions of the survey. Students under the age of majority signed assent forms and consent forms were mailed to the students' parents/guardians (Appendix C). Appendix D contains letters used in all mailed correspondence to the students and parents/guardians.

Students who received special education services were included in a sub-study to determine the level of congruency between themselves and teachers in response to post-secondary skill areas. Through the exit survey, students indicated which teacher within Bryan HS/ACE knew the most about the student and this teacher was selected for the survey. The teacher then completed the same set of questions on post-secondary skill areas as completed by the student during the exit survey (Appendix E). The level of agreement between responses of students and teacher was assessed. This provided a more accurate view of the students' true ability on skill area indicators for post-secondary success as well as determining whether respondents other than students could provide useful post-secondary outcome data. The consent forms and letters associated with the post-secondary skill area surveys are found in Appendices F and G, respectively.

*Descriptive statistics from exit survey.* The response rate for the initial survey was 82.9% (n=189). The total sample consisted of 228 students. The response rate for students served through general education was higher (85%, n=129) than for those

students served through special education (79%, n=60). A total of 165 students were surveyed prior to graduation on school campuses. The students who were not surveyed at school (n=49) were mailed surveys to their home addresses provided by Bryan ISD. Follow-up phone calls and survey mailouts to the non-respondents were conducted. The return rate on all additional contact attempts was 49.0% (n=24) and this group consisted of students from ACE and Bryan HS. The frequency counts of students participating in the exit survey are included in Table 1. This table provides frequency by educational setting, gender, ethnicity and socio-economic status.

A total of 39 students contributed to the non-response rate (228 total sample less 189 respondents). During the initial post-secondary exit survey, 14 students educated at Bryan HS (6 students in general education vs. 8 students in special education) declined to participate in the study. The other 25 students were unable to be reached prior to graduation and did not return the mailed surveys. One of the two main reason students were unable to be reached while in school was because many of the students at Bryan HS were only on campus a minimal portion of the day because they were enrolled in courses at other campuses, including community college, or did not need a full course load for graduation. The other reason was because many of the students at ACE were no longer attending school as all degree credits were completed prior to May.

51

Table 1

Frequency Count of Educational Setting, Gender, Ethnicity, and Socio-Economic Status of Exit Surveys

Variable	Frequency	Percent of Sample
Educational Setting		
General education	129	68.3
Special education	60	31.7
Gender		
Female	98	51.9
Male	91	48.1
Ethnicity		
African American	64	33.9
Hispanic	64	33.9
Anglo	61	32.3
Socio-Economic Status		
High SES	87	46.1
Low SES	101	53.4
N. 100		

N=189

*Descriptive statistics from post-school survey.* The response rate for the postschool survey was 61.4% (n=116). The response rate for students served through general education was higher (63.6%, n=82) than for those students served through special education (56.7%, n=34). A total of 16 students came to Bryan HS for the post-school survey and pizza party in October, 2005. Post-school surveys were mailed to the remaining participants (n=173) with a return rate of 10% (n=19). This provided 35 completed post-school surveys. Follow-up phone calls were made to all non-respondents and 81 additional surveys were completed. An effort to provide equal response among groups during the survey administration was given to educational setting, ethnicity and gender. Table 2 provides the frequency response rates based upon educational setting, gender, ethnicity, and socio-economic status for the post-school survey.

The post-school survey had a non-response rate of 73 students. The combined non-response rate due to non-working addresses, telephone numbers and non-participants was 24.9% (n=47). Three students (1 student in general education vs. 2 students in special education) declined to take the survey via the telephone. Two students were currently participating in boot-camp and unable to be reached during the survey administration period. The remaining 21 students were unable to be reached via mailout or telephone. All students were contacted via telephone a minimum of three times.

Table 2

Variable Educational Setting	Frequency	Response Rate based on Exit Survey
General education	82	63.6
Special education	34	56.7
Gender		
Female	62	63.3
Male	54	59.3
Ethnicity		
African American	37	57.8
Hispanic	41	64.0
Anglo	38	62.3
Socio-Economic Status		
High SES	57	65.5
Low SES	58	57.4

Frequency Count of Educational Setting, Gender, Ethnicity, and Socio-Economic Status of Post-School Surveys

N=116

*Descriptive statistics from agreement study*. The post-secondary skill area inventory was administered to all students participating in the exit survey. Therefore, 60 students in special education provided this information along with the name of the teacher at Bryan HS/ACE knowing the student the most. Teacher surveys were administered in February 2006. Surveys were placed in teacher's mail boxes on the campus of employment. Reponses could either be placed in a drop-box located in the school office or mailed to the special education office through intercampus mail. The response rate for the teachers was 75% (N=45) for the survey. The non-response rate was attributed to two teachers no longer having employment in Bryan Independent School District and 13 teachers not responding. Teachers were contacted four times via surveys in mailboxes and email.

## Data Analysis

The survey instruments utilized were comprehensive in that they examined all aspects of post-secondary outcomes. However, only specific survey questions were used to examine the individual research questions. The analysis procedures are divided into the various research questions. The first six questions utilized loglinear analysis. The use of this technique answers questions of differences that exist among various groups (Thompson, 2006). The final question used a descriptive discrepancy analysis to determine the level of agreement between respondents.

### Loglinear Analysis

Nonparametric statistics can be used in situations when data do not meet the more stringent assumptions required by parametric statistics. However, researchers are encouraged to use parametric statistics when applicable because power is greater. Daniel (as cited in Mittag, 1993) gives acceptable uses of non-parametric statistics. Two allowances for the use of nonparametric statistics are (a) when no population parameter exists and (b) when the assumptions of parametric statistics are not met, such as measurement on a weaker scale. For this reason, loglinear analysis is appropriate for this study since both the exit survey and post-school survey collected data on a categorical scale.

The loglinear analysis provides an excellent resource to examine data when all variables are categorical (Thompson, 2006). Rice (1992) described this procedure as a research methodology to use when all variables, the predictor and outcome, are categorical. During the data analysis process the data are divided into cell frequencies which serve as the basis for comparisons (Rice, 1992). One way to help visualize the usefulness of loglinear analysis is to consider the parametric equivalent of analysis of variance (ANOVA). Loglinear analysis is closely related to an ANOVA in that differences among groups are identified and examined. This comparison allows researchers to narrow down the specific relationships among variables. Similar to the classic ANOVA, loglinear analysis checks for a goodness-of-fit and can test all the individual combinations within a data set that can be created (Thompson, 2006).

The popular chi square test of independence tests to see if actual data match what is expected (Sheskin, 2004). Like loglinear analysis, the chi square test is also a nonparametric statistic but only provides an omnibus testing result. The researcher may know that a difference exists among variables but the specific source of the difference in unknown (Thompson, 2006). The loglinear analysis takes the chi square concept into an advanced multivariate form analyzing an infinite number of variables in a single test. Interaction effects are common in social science research, and unlike the chi-square statistic, the loglinear analysis can take into account those interactions, including all main and interaction effects. This analysis provides the researcher a method to pinpoint where differences occur among groups (Thompson, 2006). Another way of visualizing the loglinear analysis is through a cross-tabulation or contingency table that examines the frequencies of various variables (Burnett, 1983).

A key indication for loglinear analysis is that variables are not designated as independent or dependent. Also the null hypothesis in a loglinear analysis states that no relationship is reflected among the variables tested (Thompson, 2006). Therefore, loglinear analysis demonstrates the relationships among the variables. The most appropriate test statistics for the loglinear analysis is the likelihood ratio chi square statistic, denoted as  $L^2$  (Rice, 1992). The degrees of freedom associated with this formula are (r-1) (c-1), which is the same formula associated with the chi square statistic. A final component of loglinear analysis is the use of natural logarithms that invoke iterations to determine the maximum likelihood estimation (Thompson, 2006).

It is critical to remember when using loglinear analysis that the statistic tests a fit to a model and an effect size can also be "conceptualized as quantifying the degree of fit of models to data" (Thompson, 2006, p.1). Therefore models can be visualized as the expected frequencies that would occur. However, it is important to remember the null hypothesis is that the data are compatible with a model, so one is trying to eliminate models that do not provide statistical significance (Thompson, 2006).

*Loglinear limitations*. Some limitations do exist within loglinear analyses. For example the frequency associated with each cell must be greater than one and only 20% of the cells may contain a frequency of less than five. When too small a frequency

occurs, power can be reduced within the results (Tabachnick & Fidell, 1996). Also, the researcher needs to be thoughtful in choosing which variables to consider, as the number of models tested gets large rather quickly. For example, if only two variables are tested, five models exist including the null hypothesis. However, if four variables are used in the analysis, the number of models jumps to over 100 models including the null hypothesis. A simple rule of thumb is to take the number of cells in the contingency table and ensure there are five times more cases. For example, if the contingency table is 2x2x2 (8 cells) the researcher would need a minimum of 40 cases. However, if the contingency table is 3x3x3x3 (81 cells) the research would need 405 cases (Tabachnick & Fidell, 1996).

# Discrepancy Analysis

A simple descriptive discrepancy analysis was used to analyze the results of Question 7. This question examined the agreement and discrepancies that existed in the post-secondary skill areas answered by students and teachers. The first step was to determine the number of items that resulted in agreement compared to all possible chances of agreement within the survey. Secondly, the teacher response was subtracted from the student response, providing the discrepancy. If the discrepancy resulted in zero, both students and teachers indicated the same readiness rating on the post-secondary skill area. Items producing unusually high discrepancies were further analyzed to determine trends between items in which students and teachers answered differently.

#### Addressing Error

Coverage, sampling and measurement errors are three common areas for error in survey research (Dillman, 2000). The processes utilized to minimize these errors are discussed below.

*Coverage error*. Coverage error occurs when all members of a population do not have an equal chance of being selected for the study (Dillman, 2000). A complete list of students receiving special education services and classified as 12<sup>th</sup> grade was obtained from Bryan ISD. The list was then analyzed by the Dean of Special Services at Bryan HS and the principal of ACE to eliminate the names of students not graduating. The same procedure was followed for the general education population using vice-principals and counselors to examine the list.

*Sampling error*. Sampling error is the difference between the parameters of the actual population and the statistics derived from a sample during a study (Dillman, 2000). To help correct for sampling error, all students receiving special education services were included in the study and general education sample was doubled to provide additional respondents.

*Measurement error*. Measurement error refers to the ability of the survey to capture what is being studied (Dillman, 2000). The surveys used in the study were developed by both TEA and the TES. School districts were required to administer surveys in their entirety. Therefore the research design was not able to control for measurement error.

#### Limitations

All research studies have limitations and this study was no exception. The survey instrument, although very comprehensive, was long and somewhat confusing (Appendices A & B). Many questions were worded such that the researcher cannot rely on student responses and must access outside information to code the responses correctly. One item that fell within this situation was the diploma option under which the student graduated. Many students were not well-versed on the differences between minimum, recommended and honors diploma options. Therefore, it was not expected that students would be able to independently answer this item. The survey also had language that was not common to all students. One item asked students to identify adult agencies that the student received assistance under. It was expected that some students would be unfamiliar with the formal names of many adult service providers, even if receiving assistance.

Survey responses have limitations found in all surveys. According to Dillman (2000) individuals are apt to indicate the socially acceptable answer during survey response instead of the truth. This factor may be compounded when surveying high school students, as peer pressure and social norms are of high importance to adolescents. Also, the survey was administered to some students receiving special education in a small group and to others on an individual basis. The bias for socially acceptable answers may be higher in the small group situations.

Post-secondary follow-up studies also have traditionally shown limitations due to attrition. In order to help adjust for this concern, the follow-up study was administered in

October 2005, six-months following high school graduation. Even though this early post-school survey administration helps to correct for attrition, it provided a short time period between surveys. Students may have experienced little change in their current status within six months. Another limitation was the small number of respondents. The survey was conducted in one school district in Texas and results may not be generalizable to a larger population.

### Educational Significance

School districts are in a constant state of improvement. In order to target specific areas for improvement, it is imperative to first understand the current performance level of students. It has been documented throughout the literature that students with disabilities consistently perform at lower levels and achieve less successful outcomes than peers without disabilities. Therefore, new literature on the post-secondary outcomes of students with disabilities will help the field understand the current conditions of transition outcomes for students. In addition, having a general education sample with which to directly compare results provides a clearer picture of the discrepancies, if any, that exists between the two groups.

#### CHAPTER IV

#### RESULTS

#### Introduction

This chapter includes the results of the analyses used to examine each question and corresponding set of hypotheses. Due to the large number of hypotheses and analyses examined, only a summary of the results are included in this chapter. Appendices I-O contain the complete results from the loglinear analyses and additional descriptive tables for first six proposed questions. Appendix P contains the complete results of the discrepancy analyses used to examine the results of the final question. *Computing Loglinear Results* 

This section aims to guide readers through the analysis and results presented for questions one through six. The results presented in the body of this chapter provide only the p<sub>calculated</sub> statistic for targeted interaction effects. Additional descriptive tables are presented for the independent variables of educational setting, gender, ethnicity, and socio-economic status producing statistically significant results to portray more accurately where the differences occur among groups. SPSS syntax was used to complete all loglinear analyses. An example of this syntax is found in Appendix Q.

For the purpose of an explanation on how loglinear analyses were conducted, the analyses of post-secondary education outcomes (Question 4) were utilized. The reason post-secondary education outcomes were chosen was because this question best illustrates the maximum number of steps involved in the analysis process. The first step involved running three sets of three-variable loglinear analyses consisting of education outcome by educational setting by ethnicity, education outcome by educational setting by gender, and education outcomes by educational setting by socio-economic status. Educational setting was utilized in all analyses because differences between students educated in general and special education were the primary focus of the study. Tables 3, 4, and 5 provide the model fit statistics for all possible loglinear models for the three sets of analyses mentioned above. The results portray the ability of loglinear analysis to test fit models to data. Those models resulting in statistically significant results ( $p_{calculated} \leq$ 0.05) fit the data provided (Thompson, 2006).

Table 3

Model		Statistic		
Model	pcalculated	$L^2$	df	$L^2/df$
Baseline				
Null, equiprobability model	0.000	42.77121	16	2.67320
Single Margins				
ed_outcome	0.001	39.50090	15	2.63339
ed_setting	0.033	27.88567	16	1.74285
ethnicity	0.000	42.67466	15	2.84498
Two Margins				
ed_outcome, ed_setting	0.042	24.32730	14	1.73766
ed_outcome, ethnicity	0.000	39.11630	13	3.00895
ed_setting, ethnicity	0.017	27.50107	14	1.96436
Three Margins				
ed_outcome, ed_setting, ethnicity	0.021	23.94270	12	1.99523
Relationship Between Two Variables				
ed_outcome, ed_setting, ed_outcome by ed_setting	0.331	13.54176	12	1.12848
ed outcome, ethnicity, ed outcome by	0.551	15.54170	12	1.12040
ethnicity	0.001	28.36738	9	3.15193

Model Fit Statistics for all Possible Loglinear Models: Education Outcome, Educational Setting and Ethnicity

Continued

Madal		Statistic		
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
ed_setting, ethnicity, ed_setting by ethnicity	0.007	27.28794	12	2.2740
Relationship and One Omitted Margin				
ed_outcome, ed_setting, ethnicity, ed_outcome by ed_setting ed_outcome, ed_setting, ethnicity,	0.215	13.15717	10	1.3157
ed_outcome, ed_setting, ethnicity, ed_outcome, ed_setting, ethnicity,	0.105	13.19379	8	1.6492
ed_setting by ethnicity Two Relationships Among Predictors	0.008	23.72957	10	2.3729
ed_outcome, ed_setting, ethnicity, ed_outcome by ed_setting, ed_outcome by ethnicity ed_outcome, ed_setting, ethnicity,	0.879	2.40825	6	0.4013
ed_outcome by ed_setting, ed_setting by ethnicity ed_outcome, ed_setting, ethnicity,	0.114	12.94403	8	1.6180
ed_outcome by ethnicity, ed_setting by ethnicity Three Sets of Relationships	0.043	12.98066	6	2.1634
ed_outcome, ed_setting, ethnicity, ed_outcome by ed_setting, ed_outcome by ethnicity, ed_setting by ethnicity Saturated (df=0) Model	0.717	2.10045	4	0.5251
ed_outcome, ed_setting, ethnicity, ed_outcome by ed_setting, ed_outcome by ethnicity, ed_setting by ethnicity, ed_outcome by ed_setting by ethnicity		0.00000	0	-

Model Fit Statistics for all Possible Loglinear Models: Education Outcome, Educational Setting and Gender

Model	Statistic			2
	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.000	64.90135	15	4.3267
Single Margins				
ed_outcome	0.001	32.30998	12	2.6925
ed_setting	0.000	54.13314	14	3.8666
gender	0.000	70.48179	14	5.0344
Two Margins				
ed_outcome, ed_setting	0.160	15.52742	11	1.4115
ed_outcome, gender	0.001	31.78608	11	2.8896
ed_setting, gender	0.000	53.69923	13	4.1307
Three Margins				
ed outcome, ed setting, gender	0.129	15.09352	10	1.5093
Relationship Between Two Variables				
ed outcome, ed setting, ed outcome by	0.817	4.42340	8	0.5529
ed_setting				
ed_outcome, gender, ed_outcome by	0.000	30.24852	8	3.7810
gender	0.000			
ed_setting, gender, ed_setting by gender	0.000	53.67046	12	4.4725
Relationship and One Omitted Margin			_	
ed_outcome, ed_setting, gender,	0.781	3.98949	7	0.5699
ed_outcome by ed_setting ed_outcome, ed_setting, gender,	0.062	13.46596	7	1.9237
ed_outcome by gender	0.002	13.40390	/	1.9237
ed outcome, ed setting, gender,	0.089	15.06475	9	1.6738
ed_setting by gender	01003	10100170		110700
Two Relationships Among Predictors				
ed_outcome, ed_setting, gender,	0.670	2.36194	4	0.5904
ed_outcome by ed_setting, ed_outcome				
by gender				
ed_outcome, ed_setting, gender,	0.682	3.96072	6	0.6601
ed_outcome by ed_setting, ed_setting by				
gender	0.037	13.42719	6	2.2378
ed_outcome, ed_setting, gender, ed_outcome by gender, ed_setting by	0.037	13.42/19	0	2.2318
gender				

Continued		Statistic	;	
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Three Sets of Relationships				
ed_outcome, ed_setting, gender, ed_outcome by ed_setting, ed_outcome by gender, ed_setting by gender Saturated (df=0) Model	0.541	2.15265	3	0.71755
ed_outcome, ed_setting, gender, ed_outcome by ed_setting, ed_outcome by gender, ed_setting by gender, ed_outcome by ed_setting by gender		0.00000	0	

# Table 5

Model Fit Statistics for all Possible Loglinear Models: Education Outcome, Educational Setting and Socio-Economic Status

Model		Statistic	;	
Model	pcalculated	$L^2$	df	$L^2/df$
Baseline				
Null, equiprobability model	0.000	76.38738	15	5.09249
Single Margins				
ed_outcome	0.000	38.89111	12	3.24093
ed_setting	0.000	60.67596	14	4.33400
SES	0.000	76.81758	14	5.48697
Two Margins				
ed_outcome, ed_setting	0.019	22.74948	11	2.06813
ed_outcome, SES	0.000	38.89111	11	3.53556
ed_setting, SES	0.000	60.67596	13	4.66738
Three Margins				
ed_outcome, ed_setting, SES	0.012	22.74948	10	2.27495
Relationship Between Two Variables				
ed_outcome, ed_setting, ed_outcome by ed_setting	0.197	11.07892	8	1.38487
ed_outcome, SES, ed_outcome by SES	0.000	36.18685	8	4.52336
ed_setting, SES, ed_setting by SES	0.000	59.63432	12	4.96953

Table 5

Continued

Nr. 1.1		Statistic	;	
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Relationship and One Omitted Margin				
education, ed_setting, SES, education by ed_setting	0.135	11.07892	7	1.58270
education, ed_setting, SES, education by SES	0.005	20.04523	7	2.86360
education, ed_setting, SES, ed_setting by SES	0.010	21.70785	9	2.41198
Two Relationships Among Predictors				
education, ed_setting, SES, education by ed setting, education by SES	0.079	8.37467	4	2.09367
education, ed_setting, SES, education by ed_setting, ed_setting by SES	0.123	10.03728	6	1.67288
education, ed_setting, SES, education by SES, ed_setting by SES Three Sets of Relationships	0.004	19.00359	6	3.16727
education, ed_setting, SES, education by ed_setting, education by SES, ed_setting by SES	0.046	7.99399	3	2.66466
Saturated (df=0) Model education, ed_setting, SES, education by ed_setting, education by SES, ed_setting by SES, education by ed_setting by SES		0.00000	0	

The fundamental component of the loglinear analysis is the likelihood ratio  $x^2$  test statistic, denoted as  $L^2$ . A valuable feature of this statistic is that for any model which contains a subset of other models, a larger  $L^2$  test statistic occurs (Thompson, 2006). This feature allows for additional analyses to be applied to variables of particular interest. In the case of this study, variables of interest included educational setting, ethnicity, gender, and socio-economic status compared to the outcome variable. Table 6 provides additional test statistics used in answering this question. The results are

obtained by using the L<sup>2</sup> test statistic and degrees of freedom (df) originally found in the model fit statistic results found in Tables 3, 4, and 5. The differences between the L<sup>2</sup> test statistic and degrees of freedom are computed and the CHIDIST excel statistical function is applied to the results. The CHIDIST excel statistical function produces a test to compare predicted and observed values using the one-tailed probability of the chi-squared distribution. This additional analysis allows researchers to isolate effects for statistical significance ( $p_{calculated} \le 0.05$ ) and have comparable results because the degrees of freedom are controlled (Thompson, 2006). The results of the chi-squared distribution based upon Tables 3, 4 and 5 are found in Table 6. The above analysis process and results are provided for questions one through six. However, only the chi-squared distribution results are provided in the body of Chapter IV; the complete results are presented in Appendices I-0.

Test of the Effect of Educational	Outcome by	Educational	Setting,	Gender,	Ethnicity,
and Socio-Economic Status					

Model / Effect	S	tatistic	
	$L^2$	df	pcalculated
Ed_outcome Outcome by Educational Setting			
ed_outcome, ed_setting, gender,	15.06475	9	
ed_setting by gender	15.00475	9	
ed_outcome, ed_setting, gender,			
ed_outcome by ed_setting, ed_setting by	3.96072	6	
gender			
Difference	11.10403	3	0.011
Ed_outcome Outcome by Gender			
ed_outcome, ed_setting, gender,	15.06475	9	
ed_setting by gender	13.00473	9	
ed_outcome, ed_setting, gender,			
ed_outcome by gender, ed_setting by	13.42719	6	
gender			
Difference	1.63756	3	0.651
Ed_outcome Outcome by Ethnicity			
ed_outcome, ed_setting, ethnicity,	22 72057	10	
ed_setting by ethnicity	23.72957	10	
ed_outcome, ed_setting, ethnicity,			
ed_outcome by ethnicity, ed_setting by	12.98066	6	
ethnicity			
Difference	10.74891	4	0.0230
Ed outcome Outcome by Socio-Economic Status			
ed outcome, ed setting, SES, ed setting	21 70795	0	
by SES	21.70785	9	
ed outcome, ed setting, SES,	10.00250	(	
ed_outcome by SES, ed_setting by SES	19.00359	6	
Difference	2.70426	3	0.440

*Note*. The p<sub>calculated</sub> value is found using the Excel CHIDIST statistical function.

The variable of disability category was not used in the loglinear analyses for any research question due to the lack of distribution among respondents. Three-fourths (76%) of the sample had a disability category of learning disability, with the other categories having five or fewer respondents each. However, a descriptive table providing

the frequency count of disability categories against the analyzed variable is provided for the first six questions. Although little can be said across individual questions, an overarching summary of these tables is presented in Chapter 5 with implications.

Although loglinear analyses have the ability to examine all main and interaction effects for an infinite number of variables, a maximum of four variables was used simultaneously on data from the exit-survey and of three variables from the post-school survey due to the number of overall cases in the data. When additional variables were examined simultaneously, the analyses were not accurate due to an excessive number of cells with zero cases. In addition, the three combinations of educational setting by gender, educational setting by ethnicity and educational setting by socio-economic status were analyzed in each set of loglinear analyses.

Finally, additional tables are provided in the body of Chapter IV showing descriptive results for those variables with statistically significant loglinear and chisquared distribution analyses. The additional tables help explain the differences among groups. No analyses were completed on the additional information which is provided only to create a more descriptive picture of the results. Through these tables, discrepancies among groups can be pinpointed quickly.

The remainder of the chapter progresses through the seven proposed questions. The first two questions were answered by analyzing data collected from the exit-survey administered during the weeks preceding high school graduation in May 2005. Questions three through six were answered through analysis of data collected from the post-school survey administered six-months following high school graduation. The final question was answered through an analysis of data collected through the post-secondary skill area inventory answered by students with disabilities and teachers.

#### Question 1: Post-School Preparation Activities

The first question examined activities in which students participated during high school that have been found to produce positive post-secondary outcomes. For analysis purposes six variables were examined and converted to four variable sets in order to answer the proposed question. The four variable sets examined were school related activities, school communication, outside work experience, and overall exit preparation. These four variable sets were analyzed by the independent variables of educational setting, gender, ethnicity, and socio-economic status.

# School Related Activities

The first analysis was of the two variables of participating in school sponsored activities and extracurricular activities by the independent variables. Table 7 provides the additional chi-squared distribution results based upon the initial loglinear analyses for these two variables when compared to the independent variables. The complete set of analyses and computations are found in Appendix I. In terms of school sponsored high school activities, the analyses did not produce statistically significant results; however, this does not imply that all groups participated in school sponsored high school activities equally. In terms of extracurricular activities, the two variables of educational setting and socio-economic status produced statistically significant results. This indicates that differences in groups involving educational setting and socio-economic status exist in terms of participation in extracurricular activities.

Table 8 highlights the specific differences that occurred within educational setting and socio-economic status. This table does not relate to the loglinear analyses but only creates a more complete picture of the results. Roughly 73% of the sample participated in extracurricular activities. However, half (53%) of the students in special education and 64% of students from low socio-economic backgrounds participated in extracurricular activities.

# Table 7

	Statistic	
	df	pcalculated
Difference	Difference	
1.22859	1	0.268
0.58240	1	0.445
3.63356	2	0.163
2.57226	1	0.109
14.25085	1	0.000*
0.00471	1	0.945
3.56892	2	0.168
9.09741	1	0.003*
	1.22859 0.58240 3.63356 2.57226 14.25085 0.00471 3.56892	L <sup>2</sup> df         Difference       Difference         1.22859       1         0.58240       1         3.63356       2         2.57226       1         14.25085       1         0.00471       1         3.56892       2

Test of the Effect of HS Sponsored Activities and HS Extracurricular Activities by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

*Note*. \* $p_{calculated} \leq 0.05$ .

	Participation in HS				
Variable	Extracurricula	ar Activities			
	No	Yes			
Full Sample	26.60%	73.40%			
Educational Setting					
General Education	17.19%	82.81%			
Special Education	46.67%	53.33%			
Socio-Economic Status					
High SES	16.28%	83.72%			
Low SES	35.64%	64.36%			

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Participation in HS Extracurricular Activities

*Note*. N=188.

By investigating the specific disability categories in terms of high school activity participation, insight into disability categories begins to emerge. Overall, students with disabilities tend to participate in school sponsored activities at a higher rate than extracurricular activities, as indicated through the statistical significance testing discussed previously. However, considering the relatively low number of students in disability categories other than learning disability, little can be said regarding differences among disability groups, as reported in Table 9.

	Participa	tion in HS	Participa	tion in HS
Disability Category	Sponsored	l Activities	Extracurricu	alar Activities
	No	Yes	No	Yes
Other Health Impairment	0	1	1	0
Auditory Impairment	0	4	3	1
Mental Retardation	1	4	2	3
Emotional Disturbance	0	1	0	1
Learning Disability	13	33	22	24
Traumatic Brain Injury	1	1	0	2

Disability Category by HS Activity Participation Crosstabulation

*Note*. N=59.

# School Communication

Another activity that occurs during high school is communication with school staff regarding graduation and post-secondary planning. Two measures of this activity, (a) providing information on graduation and (b) visiting with high school (HS) staff regarding graduation and post-secondary plans, were included in the analyses. The only interaction effect that produced a statistically significant result was visiting with HS staff regarding graduation and post-secondary plans by socio-economic status. The interaction of visiting with HS staff regarding graduation and post-secondary plans by socio-economic status. The interaction of visiting with HS staff regarding graduation and ethnicity produced a result that closely approached the statistically significant level. The results are found in Table 10. Results in Table 11 indicate that students from a low socio-economic background visited with

school staff at a higher rate than students from a high socio-economic background. This is opposite what was originally predicted in the hypotheses associated with Question 1.

# Table 10

		Statistic	
Model / Effect	L <sup>2</sup>	df	pcalculated
	Difference	Difference	
HS Information			
HS Information by Educational Setting	0.02347	1	0.878
HS Information by Gender	1.67893	1	0.195
HS Information by Ethnicity	1.44935	2	0.484
HS Information by Socio-Economic	0.00020		0.045
Status	0.89039	1	0.345
HS Communication			
HS Communication by Educational			
Setting	1.84216	1	0.175
HS Communication by Gender	0.01017	1	0.920
HS Communication by Ethnicity	5.37140	2	0.068
HS Communication by Socio-Economic			
	6.37263	1	0.012
Status			

Test of the Effect of HS Information and HS Communication by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

*Note.* \* $p_{calculated} \leq 0.05$ .

Educational Setting, Ethnicity, Gender and Socio-Economic Status by HS Communication

Variable —	HS Communication			
v allable —	No	Yes		
Full Sample	17.65%	82.35%		
Socio-Economic Status				
High SES	25.88%	74.12%		
Low SES	10.89%	89.11%		

*Note*. N=187.

The represented disability categories generally reported a positive outcome in terms of school communication as represented in Table 12. An interesting aspect that emerged was that students with learning disabilities reported at a higher rate than other disability categories not communicating with school staff regarding future plans. It is unexpected that any student in special education would indicate this since all students were required by law to have an Individual Transition Plan developed by the school prior to age 16 which would demonstrate that planning had occurred.

Dischility Catagory	HS Info	ormation	HS Comn	HS Communication	
Disability Category –	No	Yes	No	Yes	
Other Health Impairment	1	0	0	1	
Auditory Impairment	0	4	0	4	
Mental Retardation	0	5	0	5	
Emotional Disturbance	0	1	0	1	
Learning Disability	3	43	7	38	
Traumatic Brain Injury	0	2	0	2	

Disability Category by HS Communication Crosstabulation

*Note*. N=59.

# High School Employment

Although employment during high school is an indicator of employment after high school, this activity is not a service directly provided by the school. However, due to the importance of employment, it was included on the survey and in this analysis. Only one variable, employment during high school, was used to measure employment against the independent variables. The results from the loglinear and chi-squared distribution analyses demonstrated that students are employed during high school at rates that are not significantly different from one another. These results are portrayed in Table 13. The crosstabulation results for high school employment comparing differences among groups are contained in Appendix I.

Test of the Effect of HS Employment by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
HS Employment			
HS Employment by Educational setting	2.09472	2	0.351
HS Employment by Gender	3.00305	2	0.223
HS Employment by Ethnicity	5.19800	4	0.268
HS Employment by SES	0.05886	2	0.971

*Note.* \* $p_{calculated} \leq 0.05$ .

In examining the various disability categories, different trends emerge, as presented in Table 14. However due to the low number of students in disability categories other than learning disability, no real conclusions can be made. It is important to note that high school employment was found in all disability categories represented, with the exception of Other Health Impairment.

	High School Employment				
Disability Category	No	Work	Work		
	Employment	Part-time	Full-time		
Other Health Impairment	1	0	0		
Auditory Impairment	4	1	0		
Mental Retardation	4	2	0		
Emotional Disturbance	0	1	0		
Learning Disability	16	16	14		
Traumatic Brain Injury	1	1	0		

Disability Category by HS Employment Crosstabulation

*Note*. N=59.

# **Overall Preparation**

The final item used in this set of analyses asked students their perception on if Bryan ISD prepared them for graduation and post-secondary outcomes. Table 15 shows that, similar to the last section, no statistically significant results were found using the additional chi-squared distribution analyses. The interaction of high school preparation and educational setting produced results that approached the statistical significance level ( $p_{calculated} \le 0.05$ ). The crosstabulation results can be found in Appendix I; these results indicate students in special education stated that school prepared them at a lower rate than did students in general education.

Test of the Effect of HS Preparation by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
High School Preparation			
High School Preparation by	2.92021	1	0.087
Educational setting	2.72021	1	0.007
High School Preparation by Gender	0.02211	1	0.882
High School Preparation by Ethnicity	0.49117	2	0.782
High School Preparation by SES	0.22997	1	0.632

*Note.*  $*p_{calculated} \leq 0.05$ .

Table 16 shows the differences among the various disability categories. Almost one-quarter (23%) of students with learning disabilities indicated that the school did not prepare them for post-secondary outcomes. The only other groups with multiple respondents were mental retardation (N=4) and auditory impairments (N=5). For both of these groups, the entire sample reported that the high school prepared them for post-secondary outcomes.

**High School Preparation Disability Category** No Yes Other Health Impairment 1 0 Auditory Impairment 0 4 Mental Retardation 0 5 **Emotional Disturbance** 0 1 Learning Disability 10 34 Traumatic Brain Injury 1 1

Disability Category by HS Preparation Crosstabulation

*Note*. N=58.

### Post-school Preparation Activity Summary

In re-examining Question 1, post-school preparation activities, very few statistically significant differences were found among groups. Out of the 24 interaction effects examined, only three produced a statically significant result. The interactions that did produce a statistically significant result were (a) participation in extracurricular activities by educational setting, (b) participation in extracurricular activities by socioeconomic status, and (c) visiting with HS staff regarding graduation and post-secondary plans by socio-economic status. It was originally hypothesized that differences would be found in all groups except gender. However, the results are positive in that the discrepancies for post-school preparation activities found among groups may not be as large as those found in past research.

#### Question 2: Post-Secondary Outcome Expectations

The second question examined the expectations of students in the four postsecondary outcome areas of employment, post-secondary education, independent living, and recreation and leisure. For analysis purposes four variables were used which correspond to the four broad outcome areas mentioned above. However, the results were completed separately in four sets of analyses due to the sample not being large enough to run variables simultaneously. The remainder of this section provides the results for each variable.

#### **Employment Outcome Expectations**

Table 17 portrays the interaction effects between employment plans and the independent variables. The only interaction effect to produce a statistically significant result was employment plans by educational setting. Again, this was based upon the loglinear and chi-squared distribution analyses. Upon closer examination using a simple crosstabulation of employment plans and educational setting, represented in Table 18, students in special education were unsure of their post-secondary employment goals at a rate three times higher than students in general education. Students in special education also indicated the military as an employment expectation at roughly 25% the rate of those students in general education. A complete crosstabulation of all variables can be found in Appendix J.

Test of the Effect of Employment Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Employment Expectation			
Employment Expectations by Educational			
	8.07420	3	0.045*
setting			
Employment Expectations by Gender	5.64669	3	0.130
Employment Expectations by Ethnicity	5.44100	6	0.489
	0	Ū	01103
Employment Expectations by Socio-			
	2.63149	3	0.452
Economic Status			
Leonomie Status			

Note. \* $p_{calculated} \leq 0.05$ .

# Table 18

# Educational Setting by Employment Expectations

Employment Expectations						
Variable	Not Sure	Work Part-time	Work Full-time	Military		
Full Sample	7.41%	41.67%	35.19%	15.74%		
Educational Setting						
General Education	4.35%	42.03%	31.88%	21.74%		
Special Education	12.82%	41.03%	41.03%	5.13%		

In terms of specific disability categories, only 39 students with disabilities responded to the question and of these students 72% had learning disabilities. Of these students with learning disabilities, 82% expected employment through part-time and full-time work. Little can be concluded regarding students in other disability categories due to the sample not containing sufficient respondents in all categories. The findings of this analysis are represented in Table 19.

### Table 19

	Employment Expectations				
Disability Category	Not Sure	Work	Work	Military	
		Part-time	Full-time		
Other Health Impairment	0	1	0	0	
Auditory Impairment	0	2	1	0	
Mental Retardation	1	3	0	0	
Emotional Disturbance	0	0	1	0	
Learning Disability	3	10	13	2	
Traumatic Brain Injury	1	0	1	0	

Disability Category by Employment Expectations Crosstabulation

*Note*. N=39.

### **Education Outcome Expectations**

Although it was hypothesized that differences would be found among all groups except gender and education expectations, the resulting data did not produce statistically significant results using the discussed analyses. However, the independent variable of educational setting had a p<sub>calculated</sub> value approaching the statistically significant level, as reported in Table 20. The major differences between students served in general and special education were that more students in special education expected to enter a vocational/technical or 2-year college and fewer students expected to enter a 4-year college compared to the general education sample. The analysis results are included in Appendix J.

### Table 20

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Education Expectations			
Education Expectations by			
Educational setting	6.41473	3	0.093
Education Expectations by Gender	1.25410	3	0.740
	1.20 110	C C	0 472
Education Expectations by Ethnicity	5.57677	6	0.473
Education Expectations by SES	2.54802	3	0.467

Test of the Effect of Education Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

*Note.* \* $p_{calculated} \leq 0.05$ .

A closer visual examination of the specific disability categories proved interesting in that overwhelmingly students from all categories indicated enrollment in 2year and 4-year colleges. Even students with more significant and low-incidence disabilities, such as mental retardation and traumatic brain injury, indicated college as their post-secondary education expectation. Students with learning disabilities were the only group to indicate vocational/technical school as an educational expectation, as reported in Table 21.

### Table 21

Education Expectations				
Not Sure	Vocational/	2-Year	4-year	
	Technical School	College	College	
0	0	0	1	
0	0	2	1	
0	0	2	1	
0	0	0	1	
1	7	13	12	
1	0	1	0	
	0 0 0	Not SureVocational/ Technical School000000000017	Not SureVocational/ Technical School2-Year College0000020020020001713	

Disability Category by Education Expectations Crosstabulation	Disability	Category b	v Education	Expectations	Crosstabulation
---	------------	------------	-------------	--------------	-----------------

*Note*. N=42.

# Independent Living Outcome Expectations

Just as important as employment and education is independent living. The same sequence of loglinear and chi-squared distribution analyses were performed on this outcome variable. Unlike the previous two sections, living expectations produced statistically significant interactions for educational setting and ethnicity, as reported in Table 22. In a more in depth analysis that controlled for these independent variables, (See Table 23), ethnicity produced a more significant result than educational setting, possibly indicating that ethnicity played a larger role in living expectations than

educational setting.

# Table 22

Test of the Effect of Living Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Living Expectations			
Living Expectations by Educational setting	8.39102	3	0.039*
Living Expectations by Gender	4.95458	3	0.175
Living Expectations by Ethnicity	16.28050	6	0.012*
Living Expectations by SES	0.51567	3	0.915

*Note.* \* $p_{calculated} \leq 0.05$ .

# Table 23

Tests of the Effects of Educational Setting a	and Ethnicity (	Controlling for	Each Other
		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Educational Setting main effect			
	8.38294	3	0.039*
controlling for ethnicity			
Ethnicity main effect controlling for			
	16.27242	6	0.012*
Educational Setting			

*Note.* \* $p_{calculated} \leq 0.05$ .

In further examination of the crosstabulations between independent living expectations by educational setting and ethnicity, a more complete picture was drawn, as depicted in Table 24. Students in special education reported being unsure of post-secondary living expectations at a rate more than double that of students in general education (30% vs. 12.6%, respectively). Students in special education also reported anticipating living outside the parent/family home at a lower rate than peers in general education (48.3% vs. 64.6%, respectively). Also, discrepancies were found among the different ethnic groups. African-American students reported expecting to live outside the parent/family home at higher rates than other groups, while Hispanic students reported the opposite (living in the parent/family home at higher rates). The expectations of Anglo students closely mirrored the full sample results for independent living expectations.

Due to the fact that 30% of the students with disabilities reported being unsure of their post-secondary living expectations, it is difficult to make any generalizations among disability categories. Among the two groups with the largest frequencies, learning disability and mental retardation, roughly half of each group indicated expecting to live outside the parent/family home. In addition, no students with a disability category of auditory impairment indicated expecting to live inside the parent/family home. The frequency count for this information is located in Table 25.

		Living	Expectations	
Variable	Not Sure	Parent/	Spouse/	Independent/
		Family	Roommate	Dorm
Full Sample	18.18%	22.46%	24.60%	34.76%
Educational Setting				
General Education	12.60%	22.83%	27.56%	37.01%
Special Education	30.00%	21.67%	18.33%	30.00%
Ethnicity				
African-American	19.35%	8.06%	29.03%	43.55%
Hispanic	18.75%	35.94%	18.75%	26.56%
Anglo	16.39%	22.95%	26.23%	34.43%

Educational Setting and Ethnicity by Living Expectations

*Note.* N=187.

	Living	g Expectations	
Not Sure	Parent/	Spouse/	Independent/
	Family	Roommate	College Dorm
0	0	0	1
1	0	1	2
1	2	1	1
0	0	0	1
16	10	8	12
0	1	0	1
	0 1 1 0 16	Not Sure         Parent/ Family           0         0           1         0           1         2           0         0           16         10	Family         Roommate           0         0         0           1         0         1           1         2         1           0         0         0           16         10         8

Disability Category by Living Expectations Crosstabulation

*Note*. N=59.

### Recreation/Leisure Outcome Expectations

The final outcome area assessed was recreation and leisure. Within this variable, students indicated on a list of 18 activities those in which they anticipated participating in after high school. A count was then completed indicating the number of items the student chose. The analysis assumed that participation in more recreation and leisure activities indicated a more positive outcome. However, the loglinear and chi-squared distribution results did not produce statistically significant results given the variables examined. The results did indicate that educational setting may have the biggest impact on recreation and leisure activities as evident in Table 26. A detailed table showing the percentage breakdown of all independent variables against expected recreation and leisure outcomes is found in Appendix J.

Test of the Effect of Recreation/Leisure Expectations by Educational Setting, Gender	,
Ethnicity, and Socio-Economic Status	

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Recreation/Leisure Expectation			
Recreation/Leisure Expectations by	5.57794	3	0.134
Educational Setting			
Recreation/Leisure Expectations by	4.24611	3	0.236
Gender			
Recreation/Leisure Expectations by	6.72960	6	0.347
Ethnicity			
Recreation/Leisure Expectations by	0.75605	3	0.860
Socio-Economic Status		2	

*Note.* \* $p_{calculated} \leq 0.05$ .

By combining columns (0-7 Activities and 8+ Activities) presented in Table 27, trends emerged regarding different disability categories as well as students in special education as a whole. A majority of students with auditory impairments (75%) and learning disabilities (70%) reported recreation/leisure activities in the two lowest categories of participation (0-7 Activities). On the other hand, the majority of students with mental retardation (80%) indicate participation expectation in the highest two levels of recreation/leisure activities (8+ activities).

Recreation/Leisure Expectations 0-4 5-7 8-9 10 +Disability Category Activities Activities Activities Activities Other Health Impairment 0 0 0 1 Auditory Impairment 0 1 2 1 Mental Retardation 1 0 0 4 **Emotional Disturbance** 0 0 0 1 19 Learning Disability 13 10 4 Traumatic Brain Injury 1 0 1 0

Disability Category by Recreation/Leisure Expectations Crosstabulation

*Note*. N=59.

# Post-Secondary Outcome Expectations Summary

In addressing Question 2, the independent variables of educational setting and ethnicity impacted post-secondary outcome expectations. Gender and socio-economic status did not appear to play a large role in expectations alone. Overall, students with disabilities had lower post-secondary outcome expectations than students without disabilities. The only outcome variable that appeared to be significantly affected by ethnicity was living expectations. Hispanic students reported a lower rate of independent living outcome expectations than other students and African-American students reported a higher rate of independent living outcome expectations when compared to other students. The remainder of this chapter examines data from the post-school survey which was administered six months following high school graduation.

### Question 3: Post-Secondary Employment Outcomes

Only one variable from the post-school survey, current employment status, was compared to the four independent variables in the analyses. Consistently, the models involving educational setting were found to demonstrate statistical significance. The complete loglinear analyses results are presented in Appendix K. However, the more insightful findings are the chi-squared distribution results found in Table 28. It was discovered that the relationships between employment status by educational setting and employment status by socio-economic status produced statistically significant results. When the two variables were controlled for against one another, reported in Table 29, only socio-economic status produced a statistically significant result, indicating that socio-economic status may have created a more powerful interaction than educational setting. However, it is important to note that educational setting still produced a statistically significant result at the p<sub>calculated</sub>  $\leq 0.1$  level.

Test of the Effect of Employment Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Employment Outcomes			
Employment Outcome by Educational	7.99231	3	0.046*
Setting			
Employment Outcome by Gender	4.40320	3	0.221
Employment Outcome by Ethnicity	5.01850	7	0.658
Employment Outcome by Socio- Economic Status	18.08809	1	0.000
Economic Status			

*Note.* \* $p_{calculated} \leq 0.05$ .

# Table 29

Tests of the Effects of Educational Setting and Socio-Economic Status Controlling for Each Other

L <sup>2</sup> Difference 8.52365	df Difference 4	pcalculated
		0.074
8.52365	4	0.074
8.52365	4	0.074
13.67518	4	0.008*
	13.67518	13.67518 4

*Note.* \* $p_{calculated} \leq 0.05$ .

In terms of descriptive statistics, Table 30 includes the crosstabulations resulting from the independent variables educational setting and socio-economic status against employment outcome. Students in general education demonstrated overall employment (including volunteering) at a higher rate (68%) than students in special education (50%). In terms of socio-economic status the two groups, high and low socio-economic status, demonstrated comparable employment rates, but the type of employment differed greatly. Students who received a free and reduced lunch were employed on a full-time status at a rate double that of those students who did not receive a free and reduced lunch.

#### Table 30

	comes				
Volunteer	Military	Work	Work	Not	Variable
		Full-	Part-	Employed	vulluoie
		time	time		
7.8%	1.7%	22.6%	31.3%	36.5%	Full Sample
					Educational Setting
9.9%	2.5%	19.8%	35.8%	32.1%	General Education
2.9%	0.0%	29.4%	20.6%	47.1%	Special Education
					Socio-Economic Status
10.3%	3.4%	15.5%	37.9%	32.8%	High SES
5.3%	0.0%	29.8%	24.6%	40.4%	Low SES
_					High SES

Educational Setting and Socio-Economic Status by Employment Outcome

*Note*. N=189.

When looking at the specific disability categories, only students with learning disabilities demonstrated full-time employment, but roughly half of this sample was not employed. Another interesting trend was that no students with auditory impairments reporting data for the post-school survey had obtained employment, as reported in Table 31.

#### Table 31

	Employment Outcome							
Disability Category	Not	Work	Work	Military	Volunteer			
	Employed	Part-time	Full-time					
Auditory Impairment	2	0	0	0	0			
Mental Retardation	0	1	0	0	0			
Emotional	0	1	0	0	0			
Disturbance	0	1	0	0	0			
Learning Disability	14	5	10	0	1			
Traumatic Brain	0	0	1	0	0			
Injury	0	0	1	0	0			

Disability Category by Employment Outcome Crosstabulation

*Note*. N=35.

# Post-Secondary Employment Outcomes Summary

In returning to the original proposed question regarding employment outcomes, the results provided evidence that educational setting and socio-economic status may have impacted employment following high school graduation, with socio-economic status playing a larger role. Gender and ethnicity did not produce statistically significant results in terms of employment outcomes and therefore could not be determined as factors in employment outcomes.

#### *Question 4: Post-Secondary Education Outcomes*

This question focused on the various types of post-secondary educational training students received and how education differed among groups. Only one variable, that which measured the status and type of educational training, was used in the loglinear analysis. In addition, the category of vocational/technical school was eliminated in the loglinear analysis because only two students in the general education population (less than 2% of the sample) chose this response. This left zero cells in the analysis which caused unreliable results. In addition, the category of employment related training was not included in the analysis for ethnicity only due to the same reason.

The loglinear results coupled with the chi-squared distribution indicated that the interactions of post-secondary education outcomes against educational setting and ethnicity produced statistically significant results, as reported in Table 32. Upon closer examination of educational setting and ethnicity (See Table 33), it appeared as though educational setting may have had more of an impact on the education outcomes than ethnicity.

Test of the Effect of Education Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Education Outcomes			
Education Outcome by Educational Setting	11.10403	3	0.011*
	1 (275)	2	0 (51
Education Outcome by Gender	1.63756	3	0.651
Education Outcome by Ethnicity	10.74891	4	0.030*
Education Sucome by Elimenty	10.7 1071	·	0.050
Education Outcome by Socio-Economic			
Ş	2.70426	3	0.440
Status			

*Note.* \* $p_{calculated} \leq 0.05$ .

# Table 33

Tests of the Effects of Educational Setting and Socio-Economic Status Controlling for Each Other

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Educational Setting main effect controlling for			
	10.88021	2	0.004*
Ethnicity			
Ethnicity main effect controlling for	10.04250	4	0.000*
Educational Setting	10.84358	4	0.028*

*Note*.  $*p_{calculated} \leq 0.05$ .

Through the crosstabulation reported in Table 34, it can be seen that students in special education accessed post-secondary education at lower rates then students in general education (46% vs. 74%, respectively). The most dramatic difference occurred in attendance at 4-year colleges, which students in general education attended at a rate almost four-times that of students in special education. In terms of ethnicity, Anglo students attended college settings at a higher rate than students of color. Roughly 50% of Hispanic students did not participate in post-secondary education. Of the students enrolled in post-secondary education, a majority attended school on a full-time basis (Appendix L, Table L7).

	Education Outcome					
Variable	None	2-year	4-year	Employ.	Voc/ Tech	
		College	College	Related	School	
Full Sample	34.78%	35.65%	23.48%	4.35%	1.74%	
Educational Setting						
General Education	26.25%	36.25%	30.00%	5.00%	2.50%	
Special Education	54.29%	34.29%	8.57%	2.86%	0.00%	
Ethnicity						
African-American	35.14%	32.43%	24.32%	5.41%	2.70%	
Hispanic	48.72%	41.03%	10.26%	0.00%	0.00%	
Anglo	20.51%	33.33%	35.90%	7.69%	2.56%	

*Note*. N=115.

With 85% of the sample having the disability category of learning disability, generalizations were only made regarding this group. Data in Table 35 indicates that roughly 60% of students with learning disabilities had not accessed any post-secondary education, and only 6% of this group was attending a 4-year college. Only 20% of all other disability categories had accessed any form of additional training.

Education Outcome						
None	2-year	4-year	Employ.	Voc/ Tech		
	College	College	Related	School		
0	1	1	0	0		
0	0	0	1	0		
0	1	0	0	0		
18	10	2	0	0		
1	0	0	0	0		
	0 0 0	None2-year College0100011810	None2-year College4-year College01100001018102	None2-year College4-year CollegeEmploy. Related011000010100181020		

Disability Category by Education Outcome Crosstabulation

*Note*. N=35.

# Post-Secondary Education Outcomes Summary

The original hypotheses were that students in general education, Anglo students, and students from a higher socio-economic background would access post-secondary education at higher rates. It was determined that educational setting and ethnicity factored into post-secondary education but those conclusions could not be assessed relative to gender and socio-economic status.

# Productive Engagement

In examining the results of employment and educational outcomes, a third variable of interest arose, productive engagement. Productive engagement involves the concept of students both working and going to school in order to accomplish a higher level of success in the years to come. For example, Student A may be working full-time in a minimum wage job immediately upon graduation from high school. Upon a surface evaluation it appears as though Student A has obtained a high post-secondary outcome based upon full-time employment. Student B may be working part-time and attending a 2-year college part-time. By separating these variables it may appear as though Student B has obtained a lower employment outcome. However, Student B may achieve a much higher employment outcome in the years following high school graduation, given the well-documented beneficial effects of post-secondary education. The same types of analyses utilized on other variables were conducted on this new variable, coded productive engagement, to determine the differences in groups among students both working and going to school.

Using the loglinear and chi-squared distribution results found for productive engagement, no statistically significant results were found relative to any single group. However, it is important to emphasize that educational setting did produce a statistically significant results at the  $p_{calculated} \leq 0.1$  level. These results are found in Table 36. Table 37 contains some very interesting information in regard to what occurred among the various groups. In terms of educational setting, fewer students in special education were participating in either employment or education when compared to students in general education. This was also true for Hispanic students. Roughly one-quarter (27%) of Hispanic students were not experiencing positive outcomes for either employment or post-secondary education. Complete results are located in Appendix M.

Test of the Effect of Productive Engagement by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Model / Effect	$L^2$	df	pcalculated	
	Difference	Difference		
Productive Engagement				
Productive Engagement by Educational	7.32130	3	0.062	
Setting	7.52150	5	0.002	
Productive Engagement by Gender	2.18660	3	0.535	
Productive Engagement by Ethnicity	9.09859	6	0.168	
Productive Engagement by Socio-	2.70426	3	0.440	
Economic Status	2.70420	J	0.440	

*Note.*  $*p_{calculated} \leq 0.05$ .

By examining the crosstabulation of disability categories against productive engagement, it appeared that 30% of students with learning disabilities reported not being involved in employment or post-secondary education. Students belonging to other disability categories had all achieved some level of a successful post-secondary outcome. Due to the small sample size and in some cases zero cells, little can be concluded regarding the other categories. The frequency data representing this information is found in Table 38.

	Productive Engagement						
Variable	No working/	School	Working	School &			
	No School	Only	Only	Work			
Full Sample	15.38%	28.21%	21.37%	35.04%			
Educational Setting							
General Education	10.98%	32.93%	18.29%	37.80%			
Special Education	25.71%	17.14%	28.57%	28.57%			
Ethnicity							
African-American	13.51%	27.03%	24.32%	35.14%			
Hispanic	26.83%	21.95%	21.95%	29.27%			
Anglo	5.13%	35.90%	17.95%	41.03%			

Educational Setting and Ethnicity by Productive Engagement

*Note*. N=117.

# Table 38

Disability	Category by	Productive	Engagement	Crosstabulation

	Productive Engagement					
Disability Category	No working/	School Only	Working	School &		
	No School		Only	Work		
Auditory Impairment	0	1	0	1		
Mental Retardation	0	0	1	0		
	_	_	_			
Emotional Disturbance	0	0	0	1		
I D 111	0	5	0	0		
Learning Disability	9	5	8	8		
Traumatic Brain Injury	0	0	1	0		
Traumane Dram mjury	0	U	1	U		

*Note*. N=35.

#### Productive Engagement Summary

In order for researchers to obtain a complete picture of employment and postsecondary education in the early years following high school graduation, these two outcomes need to be analyzed together. Through this analysis it was determined that 25% of the special education students and 27% of the Hispanic students were experiencing unemployment and were not enrolled in post-secondary education.

#### **Question 5: Independent Living Outcomes**

The third area assessed in post-secondary outcomes was independent living. Only one measurement of this outcome was used in the analyses, current living status. The full results for this comparison are found in Appendix N. Looking at the results from the loglinear and chi-squared distribution analyses, only ethnicity produced a statistically significant result. However, educational setting and gender produced a significant result at the  $p_{calculated} \leq 0.1$  level and may have played a more significant role in the living outcome of students than this data set portrayed, as reported in Table 39. One difference found was that students of color lived outside the parent/family home at a rate lower than that of Anglo students (See Table 40). Also, Hispanic students lived in college dormitory facilities at a lower rate than other groups. However, given the findings that Hispanic students attended 4-year colleges at low rates, this was expected.

Test of the Effect of Independent Living Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

		Statistic	
Model / Effect	$L^2$	df	pcalculated
	Difference	Difference	
Independent Living Outcomes			
Independent Living Outcome by			
	6.85998	3	0.077
Educational Setting			
Independent Living Outcome by Gender	6.42376	3	0.093
Independent Living Outcome by Ethnicity	12.70594	6	0.048*
Independent Living Outcome by Socio-			
	6.05647	3	0.109
Economic Status			

*Note.* \* $p_{calculated} \leq 0.05$ .

# Table 40

# Ethnicity by Independent Living Outcome

	Independent Living Outcome						
Variable	Independent	Parent/	Spouse/	College			
		Family	Roommate	Dorm			
Full Sample	10.26%	60.68%	12.82%	16.24%			
Ethnicity							
African-American	8.11%	67.57%	2.70%	21.62%			
Hispanic	7.32%	68.29%	17.07%	7.32%			
Anglo	15.38%	46.15%	17.95%	20.51%			

*Note*. N=117.

Table 41 provides general information related to differences in independent living outcomes among disability categories. Students in the categories of auditory impairment, emotional disturbance and traumatic brain injury reported that all were living in the parent/family home. The learning disability category had the most variation, as expected given the response rate, but 70% of these students still reported living at home.

#### Table 41

	Independent Living Outcome Crossiabulation				
Disability Category	Independent	Parent/	Spouse/	College	
		Family	Roommate	Dorm	
Auditory Impairment	0	2	0	0	
Mental Retardation	1	0	0	0	
Emotional Disturbance	0	1	0	0	
Learning Disability	1	21	6	2	
Traumatic Brain Injury	0	1	0	0	

Disability Category by Independent Living Outcome Crosstabulation

Note. N=35.

# Independent Living Outcomes Summary

The original hypotheses for this question predicted more independent living outcomes for students in general education and for students from a higher socioeconomic background and that no differences would be found based upon gender and ethnicity. However, no differences were found within all groups except that of ethnicity. Unlike analyses of other outcome areas, educational setting did not seem to play as large of a role in independent living outcomes.

# Question 6: Recreation and Leisure Outcomes

The final outcome area assessed, which also involved loglinear analyses, was recreational and leisure outcomes among groups. Similar to the analyses of other outcome areas, only one variable was used to measure this outcome in the loglinear and chi-squared distribution analyses. Overall, all groups indicated high levels of recreational/leisure activities with roughly 90% of each group reporting completing at least one social activity per week. Students preferred to spend free time with the following: oneself, family, friends, and a combination of these people. The full results for this question can be found in Appendix O.

The variable used in the loglinear analyses was similar to the variable for recreation and leisure expectations used in the analyses for Question 2. On a list of 24 items, students indicated the number of items in which they participated during the past month. A count was then coded for the variable. Again, the assumption was made that participation in more recreation and leisure activities resulted in a more positive post-secondary outcome. Given the resulting chi-squared distribution values from the loglinear results in Table 42, the variable recreation/leisure outcome only produced a statistically significant result when coupled with educational setting. Table 43 shows the differences that existed within this group. It appeared that students in general education participated in more recreation/leisure activities than students in general education.

Students in general education participated in 15 or more activities at a rate of 63.4%

compared to only 22.9% of students in special education.

# Table 42

Test of the Effect of Recreation/Leisure Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

	Statistic					
Model / Effect	L <sup>2</sup> Difference	df Difference	pcalculated			
Recreation/leisure Outcome	Difference	Difference				
Recreation/leisure Outcome by		_				
Educational Setting	17.19221	3	0.001*			
Recreation/leisure Outcome by						
Gender	2.66445	3	0.446			
Recreation/leisure Outcome by						
Ethnicity	4.95435	6	0.550			
Recreation/leisure Outcome by						
Socio-Economic Status	1.48072	3	0.687			

*Note.* \* $p_{calculated} \leq 0.05$ .

Educational Setting by Recreation/Leisure Outcome Recreation/leisure Outcome Variable 0-10 11-14 18 +15-17 Activities Activities Activities Activities Full Sample 17.95% 30.77% 29.91% 21.37% **Educational Setting General Education** 24.39% 36.59% 26.83% 12.20% **Special Education** 8.57% 31.43% 45.71% 14.29% *Note*. N=117.

By examining the specific disability categories in terms of recreation/leisure activities, only students with learning disabilities indicated responses in the two highest categories (15 or more activities), as reported in Table 44. However, roughly 75% of the students with learning disabilities were participating in fewer than 15 activities per month.

## Recreation and Leisure Outcomes Summary

In addressing the question of participation in recreation and leisure activities, differences among groups were hypothesized for all groups except gender. The only variable which produced statistically significant results was educational setting. This indicated that students, for the most part, were participating in recreational and leisure activities at rates that did not differ significantly from one another.

Disability Category by Recreation/Leisure Outcome Crosstabulation Recreation/leisure Outcome 0-10 18 +Disability Category 11-14 15-17 Activities Activities Activities Activities Auditory Impairment 0 2 Ω 0 Mental Retardation 0 0 1 0 **Emotional Disturbance** 0 1 0 0 Learning Disability 10 12 5 3 0 Traumatic Brain Injury 0 1 0

*Note*. N=35.

#### Question 7: Agreement Study

Question 7 assessed the level of agreement between students and teachers on ratings of skill proficiency for the 25 post-secondary skill areas included in the TES exitsurvey instrument. This question was examined only for students served in special education in the study. If high agreement occurred, it might be an indication that individuals other than the student of interest might provide accurate information. Overall agreement between students and teachers in this study was high. Basically 33% of the time both students and teachers indicated the same level of ability for different skill areas. In 95% of the responses, students and teachers indicated either the same level of ability or were only one level different in the positive or negative direction. More often, the teacher indicated greater independent skill ability on items than the student did (indicated by a negative discrepancy number). A discrepancy score of  $\pm 1$  could be obtained two ways. In one way, one respondent said the skill area could be completed independently while the other respondent indicated the student needed assistance to complete the skill. The other possibility was one respondent indicated assistance was needed to complete the skill while the other respondent marked that the student was not prepared for the skill area. To obtain a discrepancy score of  $\pm 2$  one respondent indicated the student could perform the skill area independently while the other respondent said the student was not prepared for the skill area. The percentages attached with each discrepancy score are presented in Table 45. Due to the small number of respondents in disability categories other than learning disability, summaries were not made regarding differences among these categories.

Table 45

ancy Scores	between Res	spondent		
-2	-1	0	1	2
3.76%	31.11%	34.86%	28.60%	1.67%
umbers indi	cate the teac	her provided	d a higher as	sessment of
	-2 3.76%	-2 -1 3.76% 31.11%	3.76% 31.11% 34.86%	-2 -1 0 1

ability. Positive numbers indicate the student provided a higher assessment of ability.

Given that the overall agreement between students and their teachers regarding skill level was high, it was necessary to examine the items with unusually high levels of disagreement. Those items with 18 or more non-zero discrepancy scores are presented in Table 46. This process reduced the number of items from 25 to 8. A full discrepancy table is found in Appendix P. The resulting post-secondary skill areas were further classified into broad skill areas to determine what items were not appropriate for individuals other than the student to answer. The first identified area involved reading and writing skills. In half the cases where agreement did not occur, teachers indicated a higher skill level while in the other half students indicated a higher skill level. In this situation, it would be necessary to solicit responses from an individual who could speak specifically to the reading and writing skills of a student. Most teachers are proficient regarding skills in this area, but teachers may instruct classes with relatively few instances requiring reading and writing.

The second broad area was defined as higher level application skills. The same trend was found here as with the reading and writing skill area. Both students and teachers equally indicated higher skill levels. The same suggestion holds in that the respondent, if not the student, needs to be an individual who has detailed knowledge of this skill.

The final skill area was categorized as domestic skills. It is not surprising that a great number of discrepancies were found in this area since teachers do not directly teach many of these skills. However, students and teachers equally indicated higher skill abilities. More interesting is that teachers would indicate a student could complete a skill independently, while the student indicated not being prepared to complete the skill at a higher rate than other skill domains. The reverse discrepancy score, students indicating independence when completing a skill area while teachers indicated that students were not prepared to complete the skill, was not found.

Skill Item		Discrepancy Analysis				
Skill Itelli	-2	-1	0	1	2	
Reading/ Writing Skills						
Read and understand printed technical	1	5	26	12	0	
instruction	1	5	20	12	0	
Use study skills to learn new things	1	10	26	5	2	
Higher Level Application						
Apply math at home and work	1	5	26	13	1	
Teach others new skills	2	9	24	8	2	
Apply for admission to a community college,	0	0	26	0	0	
University or Technical College	0	9	26	9	0	
Domestic Skills						
Budget own money	0	8	25	11	0	
Find a place to live	1	10	25	9	0	
Find help in the community if needed	1	9	23	11	0	

*Note*. Negative numbers indicate the teacher provided a higher assessment of ability. Positive numbers indicate the student provided a higher assessment of ability.

This information could be important in determining the best respondent for follow-up research. The results indicated that although teachers do have high agreement with students overall, teachers are not prepared to answer all questions regarding a student's ability. The researcher needs to carefully decide on those questions being answered by other respondents than the student.

## Summary of Key Findings

One of the overall benefits of follow-up research is to determine areas of discrepancies among different groups of students in terms of educational setting, disability category, gender, ethnicity, and socio-economic status in order to determine programming implications to diminish these differences for future students. The majority of the hypotheses presented in Chapter III indicated differences in educational setting, ethnicity and socio-economic status. The majority of the time statistically significant differences were not found related to gender. Given the results of this study, the category of educational setting (general education and special education) consistently resulted in statistically significant differences among groups. Students in special education were not achieving the same level of post-secondary outcomes as their peers in general education. In this study, ethnicity and socio-economic status might also have played a role in determining group differences depending on the outcome areas of employment, postsecondary education, independent living, and recreation and leisure. In terms of the preparation that occurred prior to students graduating, few statistically significant results were found. However, this does not imply that students were participating in preparation activities at the same rate.

#### CHAPTER V

#### CONCLUSION

#### **Overview** of Chapter

In the previous chapters the research surrounding this work was proposed, a literature base established, associated methodology discussed, and results presented. This chapter provides the concluding thoughts and the broader implications for the study. The chapter is divided into five sections including (a) interpretation of findings, (b) further discussions, (c) limitations of the study, (d) implications and recommendations, and (e) final thoughts. However, the information provided in this study simply adds to the expansive knowledge base of post-secondary outcomes for students with disabilities. This research does not confirm any one hypothesis.

## Interpretation of Findings

## High School Preparation for Post-school Life

As defined in Chapter II, high school preparation for post-school life involves the activities in which students participate prior to graduation. The assumption is that a greater level of participation in activities will lead to more successful post-secondary outcomes. Overall, the participation in post-secondary preparation activities was not significantly different among variables measured, namely educational setting, gender, ethnicity, and socio-economic status. These results are positive in that in this study, students with disabilities in high school did not necessarily receive a different experience than their peers without disabilities. The only statistically significant discrepancies occurred between educational setting by participation in extra-curricular activities,

socio-economic status by participation in extra-curricular activities, and socio-economic status by visiting with school staff regarding post-secondary plans. The results suggest that socio-economic status might have impacted high school preparation more than educational setting.

Within the context of high school, students described their post-school expectations in terms of the four major outcomes of employment, post-secondary education, independent living, and recreation and leisure. There were no statistically significant differences based upon gender and socio-economic status. Statistically significant differences were found based on ethnicity for independent living only. Statistically significant differences based on educational setting were found for employment and independent living. However, educational setting may also have impacted education and recreation and leisure expectations. Based upon the results of this study, students with disabilities did not express the same expectations for postsecondary outcomes as students without disabilities. Or at the very least, students in this study did not see these options as viable.

#### Productive Engagement

In this chapter the two outcomes of employment and post-secondary education are discussed simultaneously under productive engagement, a concept introduced in Chapter IV (p. 101). A quarter of students with disabilities were not engaged in any productive employment or post-secondary education. This rate was over double compared to that of students in general education. Hispanic students experienced the same trend in that a quarter of Hispanic students were not engaged in any productive employment or post-secondary education. Only 15% of the full sample indicated no engagement in employment or post-secondary education. The full results can be found in Table 37 of Chapter IV.

In terms of employment, the statistical analyses indicated that both educational setting and socio-economic status factored into the outcomes experienced by students. However, when the two variables were controlled against one another, socio-economic status appeared to create a greater discrepancy. Within these two groups, students in special education, as compared to students in general education, and students from low socio-economic backgrounds, as compared to students from high socio-economic backgrounds, experienced unemployed at a higher rate. These findings corresponded with recent literature (D'Amico & Blackorby, 1992; Huang, Pergamit, & Shkolnik, 2001).

Another interesting finding involved rates of full-time employment. Students in special education, as opposed to students in general education, and students from low socio-economic backgrounds, as opposed to those from high socio-economic backgrounds, both experienced full-time employment at a higher rate. The opposite hypothesis was proposed, that student students from general education and higher socio-economic backgrounds would experience a higher rate of full-time employment. The findings represent a trend most likely related to the concept of productive engagement. Students experiencing full-time employment were most likely in low-wage, entry-level positions without the benefits of education. In roughly five years, when peers complete post-secondary education and enter the workforce full-time, large discrepancies may

118

emerge between the type of employment and wage earning between those attending post-secondary and those not attending.

The individual results for post-secondary education mirrored those of employment in several regards. As expected, students in special education did not attend post-secondary education at the same rates as students in general education. This interaction effect produced a statistically significant response. More than half of the students in special education did not access any form of additional training or education after high school graduation.

The factor of ethnicity also produced statistically significant results in relation to education. The main differences in terms of ethnicity were found with respect to the Hispanic sample. Roughly 50% of Hispanic students did not access any form of additional training. In addition, Anglo students and students from high socio-economic backgrounds were more likely to attend 4-year colleges than African-American students, Hispanic students, and students from low socio-economic backgrounds. It is possible that an underlying correlation may exist between ethnicity and socio-economic status within these variables. For example, a greater percentage of Hispanic students have low socio-economic backgrounds as compared to Anglo students. The National Longitudinal Transition Study 2 (NLTS2) suggested that family financial means may have a direct impact on the ability of a student to attain post-secondary education (Newman, 2005). The over-representation of students in special education from low socio-economic backgrounds (Baca & Cervantes, 2004) may explain another aspect of the results.

#### Independent Living

Three-quarters of all students in this study still resided with parents/family in the first few months following high school graduation. In the previous section related to high school preparation for post-school life, it was stated that educational setting and ethnicity were factors in student expectations for independent living. Ethnicity was the only variable providing statistically significant results related to actual independent living status after graduating from high school. Anglo students were experiencing independent living outcomes at higher rates than were students of color. This trend may be related to other hidden issues, such as larger numbers of Anglo students enrolling in 4-year colleges.

Although examining independent living provided interesting information, individuals should be conservative in constructing broad statements from the results found in this study. A six-month time frame offers a relatively short span for students to demonstrate this post-secondary outcome. According to the Capacity Building Institute (2006), independent living is a difficult item to assess since students in general currently live with parents/family for longer periods of time than in past generations.

# Recreation/Leisure

The final post-secondary outcome studied was recreation and leisure. Overall, 90% of students indicated participating in social events at least once per week and with a variety of individuals. However, upon closer examination of the number of activities in which students participated, educational setting became a distinguishing characteristic. Students served by special education did not participate in as many recreation and leisure activities as did students in general education.

Contrary to the original hypotheses, ethnicity and socio-economic status did not impact recreation and leisure outcomes. However, it might be very insightful to analyze the types of activities in which students participate to see if trends exist across these factors. Gender was not predicted to produce differences between groups and this was supported through the findings.

#### Agreement Findings

The final issue examined in this study was the agreement between students and ratings from teachers on the ability levels of students on certain skill inventory items. As portrayed in Table 45 of Chapter IV, the overall agreement was 34%. However, given that only three choices existed (due to the nature of the instrument developed by the Texas Effectiveness Study), this level of agreement between students and teachers would occur by chance. On the other hand, in only 5% of the possible chances for agreement did students and teachers differ by more than one. This inventory was administered to students during the exit-survey. The researcher added administration of the skill inventory to teachers for the purpose of assessing the agreement between teachers and students as an additional study.

Generally, this finding was positive in that teachers and students provided similar responses 95% of the time. The remaining 5% of responses indicated a discrepancy in perceived skill area ability according to the following scenario: one group indicated the skill area could be completed independently while the other group indicated the student

121

was not prepared for the skill area or could not complete the skill area. However, since skill area proficiency is subjective, some discrepancy was expected.

Through targeting the items with low agreement, it became evident that some items may not have been appropriate for individuals other than the student of interest to answer, such as domestic skills because teachers do not generally teach these skills and may not be familiar with the skills students perform at home. However, some of the items which produced a greater discrepancy were directly related to academic skills in which one would assume an academic teacher would serve as an appropriate respondent. This reinforces the necessity of researchers to choose the individual best suited to provide the most accurate answer when collecting data.

## Discussion of Findings

The above section provided a summary of the key findings for the study. However some of the more interesting and possibly more noteworthy findings were determined by looking more closely into the variables and determining what relationships existed. This section attempts to read between the lines in order to create a more complete picture of the findings. In addition, a brief synopsis is provided of a focus group study conducted at the conclusion of all data collection about the process.

# Comparisons between Expectations and Outcomes

The relationship between high school preparation and post-secondary outcome expectations and actual post-secondary outcomes was not the purpose of this study and research questions did not investigate this relationship. However, consideration of this information provides a critical and insightful component to the study. In particular it highlights the instances in which students may not have a clear conception of what is involved in accomplishing post-secondary outcomes.

In terms of employment, more students in special education had no employment expectations prior to graduation and almost half of the sample were not employed sixmonths following graduation. The largest discrepancy occurred relative to part-time employment, where 41% of students in special education indicated this option as a goal but only 21% were actually employed on a part-time basis after leaving high school. A great deal needs be learned about the methods students are using to find employment after graduation and how the variable of productive engagement factors into the results before conclusions can be made.

Data related to post-secondary education possibly delivered the most intriguing results. Students from all groups, except special education, indicated an expectation of attending a 4-year college at a rate of 40% or higher, with the overall sample indicating that 50% anticipated this setting. However, less than 25% of the follow-up sample had achieved this outcome six-months after graduation, with special education students and Hispanic students being greatly under-represented. Student written comments within the original exit-survey indicated that many students did not have a clear concept of the procedures necessary to apply for admission into college. For example, students expected to enroll in a 4-year college the semester following graduation. However, as of May students had not applied for admission into a college. The timeline for admission to college was not made clear to students prior to graduation.

123

Independent living results also provided some interesting findings which deserve further investigation. When comparing independent living expectations stated on the exit-survey to those on the post-school survey, the African-American sample produced drastic differences. Only 8% of the sample expected to still be residing with parents/family, yet 68% of the sample were at the follow-up data collection point. In addition, a trend similar to that noticed in employment expectations was noticed with independent living. A greater percentage of students in special education indicated being unsure of living arrangements following high school that did their general education peers. Discovering this trend emerge in multiple questions may indicate that students in special education needed additional education regarding post-secondary options than did students in general education.

The final comparison between student expectations and actual outcomes involved recreation and leisure activities. Differences were not expected to be as drastic since statistically significant results were not found in the exit survey and a different number of items was used in the two surveys. Students in special education indicated expected participation at a lower rate and, in fact, experienced actual participation in fewer activities than did students in general education.

Data concerning the four transition outcome areas related to this study quickly raised additional questions regarding the complete picture of post-secondary outcomes for students with disabilities. This additional discussion needs to occur in order to impact current practices in high schools to change the outcomes for future students.

#### Students with Learning Disabilities

Since 87% of the sample of students with disabilities from the post-school survey had the diagnosis of learning disabled, findings regarding comparisons among different disability categories have limited utility. However, strong trends emerged concerning students with learning disabilities. More students with learning disabilities were educated in the general curriculum with non-disabled peers than were students from other disability categories (McLeskey, Henry, & Axelrod, 1999). The assumption is often made that students with learning disabilities are similar to students without disabilities, possibly a little slower, but are able to achieve positive post-secondary outcomes without extensive additional support (Patton & Blalock, 1996). Due to this, these students are often not exposed to functional curricula and intense transition training as compared to students with more significant disabilities educated in special education classrooms a large portion of the school day (McLeskey, Henry, & Axelrod, 1999). It appears from these results that students with learning disabilities need more consideration and instruction on post-secondary results.

The outcome results found in this study indicated that students with learning disabilities were not achieving the same outcomes as their non-disabled peers. In some instances, although difficult to determine due to the low number of respondents from other disability categories, students with learning disabilities were not achieving the same outcomes as students with other disabilities. For example, students with learning disabilities accounted for all students in special education demonstrating unemployment coupled with no post-secondary education. These findings may have indicated that

125

students with learning disabilities were not receiving the services necessary to achieve high levels of positive post-school outcomes during high school. Students with learning disabilities may need explicit instruction searching for employment and completing college applications. High school personnel need to think critically about the education of students with learning disabilities and ensure these students are receiving the necessary education for post-school success in the classrooms in which their education occurs. Schools and teachers need to include within high school curricula instruction on how to reach post-secondary goals, such as completing financial aid forms and budgeting for independent living, so that students are better prepared to attain high levels of post-secondary outcomes.

#### Focus Group Results

In order to provide perspective on the survey instruments and the findings from this study, two focus groups were conducted, one with general education students and one with special education students. The general education group consisted of two males and two females while the special education group consisted of two females and one male. Ethnicity and socio-economic status were not considered when composing the two groups. The two groups were composed based upon availability of the students and willingness to participate. During the post-school survey students indicated a willingness to participate in future research; only these students were contacted for the focus group. The purpose of the groups was to identify the strengths and weaknesses of the current study as well as to determine more effective and efficient methods to collect future follow-up information. Students overwhelmingly indicated that the most beneficial aspect of the study was the potential of receiving a door prize and the most frustrating aspect was the survey itself. One general education student compared the initial exit-survey to a taking a test. Based on the Fry's Readability Graph, survey item questions had a readability level ranging from 7<sup>th</sup> grade through 11<sup>th</sup> grade, which could easily produce reading frustration for students, and the frustration may have been compounded for students in special education who might have more difficulty reading. After this initial comment was made, other students indicated the survey seemed long and redundant. One student stated that the continual change in directions throughout the survey caused confusion. For example, some questions asked for one response while other items asked for all appropriate responses.

The majority of the students (N=4) indicated that postal mail was the best way to reach students to complete the post-school survey. The other three students indicated that telephone was the best. Due to postal mail receiving a high response of the preferred contact method but a low response rate when utilized, students were asked why initial responses did not occur with this method. The consensus among the students was that the survey was too long and the questions repeated themselves from the initial survey. Students felt that completing the survey during the school day prior to graduation worked well. One student in special education indicated a wish that the survey had been administered earlier in the year because his/her class was reviewing for a final exam on the day surveyed.

After general questions were discussed, specific questions were targeted which produced unreliable data from survey administrations. One question involved receiving assistance or services from adult and government agencies. For all students there was at least one agency with whose name and/or services provided the students were completely unfamiliar. In fact, the students in general education had a better sense of the services agencies provided, deduced from the name only, than did students in special education, who were more likely to be receiving services. A better way to collect this information would be to use language familiar to high school students or give examples of what services the various agencies provide.

Several items on the surveys had missing or overlapping response choices. For example, on the exit survey if the students worked 30 hours per week, two responses were correct. On the post-school survey, a response did not exist for students enrolling in 7-11 hours of college credit. Students were asked if these items provided difficulty when answering. All focus group participants indicated that they personally did not fall into the boundaries of discussed items, but believed it would provide confusion to those students who did.

In conclusion, students in general education provided more insight than students in special education into designing an improved survey instrument for future data collection. This may have been a direct result of the methods used to solicit participation from the two focus groups, as students in the general education focus group were more willing to participate. However, insightful information both to the current survey and future research designs was collected through this additional communication with the

128

participants. This included methods to improve the actual survey and collected of data. Based on the results from the student focus group, researchers interested in surveying high school students must give consideration to method of participant contact, survey language and question construction, and overall survey length.

#### Limitations of the Study

Despite good intentions, all research has limitations. These limitations can affect data and findings in different ways and levels. The following section discusses the four main limitations of this study: (a) the survey instrument, (b) the short time frame for data collection, (c) the non-response rate and attrition and (d) the actual statistical analyses. *Survey Instrument* 

As previously discussed items on the survey caused confusion for some students. One of the overarching concerns was that the survey was constructed using formal, adult language of an individual familiar with transition education as opposed to language familiar to high school students. The most apparent examples of this were the questions related to adult and government agency support. Students often did not know the formal names of agencies in complete form, much less the abbreviations used. For example, the abbreviation of WIA (Workforce Investment Act) was given with no additional support. Many students may be unaware of the Workforce Investment Act and whether or not they received services under this funding source. Another example of confusing language was found in the exit-survey. One question was asked which teacher was the most helpful to the student during high school. Many students were unsure as to which category a specific teacher belonged and were often unfamiliar with the official school labels attached to different teachers, such as a career/technology teacher. Occasionally students wrote the name of the teacher being considered for this question. The researcher was then able to code the correct answer due to familiarity with the staff at Bryan High School. For example, one student checked special education and wrote the name of the VAC (Vocational Adjustment Coordinator) teacher next to the question. These were coded as two separate categories on the survey.

The readability of the survey also presumed a high level of reading ability in the respondents. Only six students requested the exit-survey be read during the May administration. It is possible that individuals from the original 14 students who chose not to participate in the study, but scanned the survey, declined participation due to poorer reading skills.

Another overarching concern of the survey was that the responses for multiple items on both surveys were not mutually exclusive, meaning more than one response for correct. For example, the question asking annual financial earnings had overlapping categories. It was also possible that a correct response was not available for the student on certain questions. For example, in the exit survey students were asked to indicate part-time (20 hours or less) or full-time (30 hours or more) employment. There was no answer choice for working between 21-29 hours.

Another issue related to the survey was that students might not have been the most appropriate source for some information. The exit-survey asked students to indicate the diploma option under which they expected to graduate. However, students did not typically know this information. School counselors may have been a more reliable

130

source for this information. A properly designed survey should ask respondents only the pertinent questions to which they know the answers (Dillman, 2000). A better source for information which is more accurately kept by school counselors should be collected from the school district and then coded into the results. This includes gender, ethnicity, and diploma option. Several students indicated ethnic backgrounds that contradicted with the official school records. Another benefit of doing this would be to somewhat shorten a lengthy survey.

The final limitation of the survey was the overall length and number of questions. As stated previously, one student in a focus group aptly compared the survey to an exam. The survey took complete concentration to finish and was not a simple task. This could have led to an increase in unreliable answers provided by the student, because the survey was completed quickly without carefully reading every item.

#### Six-Month Follow-up Time Frame

The nature of follow-up research provides a snapshot of achieved post-secondary outcomes at a particular period of time. However, the design of this study provided for the follow-up data to be collected six-months following graduation. This established a relatively short period for students to demonstrate a change in status from that of high school. Researchers need to be careful when comparing results from short and long-term follow-up study designs to ensure that respondents were allowed reasonably equal time periods to achieve outcomes.

Independent living was possibly the outcome area most affected by the short period of time between survey administrations. The number one reason provided on the post-school survey for students to be still living at the parent/family residence was finances; they were not earning enough money to live independently. Post-secondary education was another outcome that could have been greatly affected by the time frame. Many students still indicated an expectation of attending post-secondary education in the post-school survey, but first needed to save money for a semester/year. Based upon these issues, it is possible that outcomes may appear drastically different were data collected following an additional six-month time frame.

#### Sample Size

Because data were collected in a single school district in Texas, results may not be generalizable to a larger population; however, the findings can provide useful information for high schools with similar contexts. Table 47 provides a comparison based on ethnicity of Texas public schools, Bryan ISD campuses used in the study, and the sample surveyed. The state information was obtained through the 2004-2005 Bryan ISD data from the Texas Education Agency Academic Excellent Indicator System (n.d). Roughly 60% of the state student population is African-American and Hispanic students. The same is true for Bryan HS and ACE. There was a slight overrepresentation of students of color in the study sample. This was most likely attributed to the overrepresentation of students of color in special education (Baca & Cervantes, 2004). It is important to note that both Bryan HS and ACE had a large African-American population compared to the state average. This rough estimate of ethnicities makes a small claim to the utility of the findings within the state of Texas for ethnicity. However, researchers and consumers need to practice extreme thoughtfulness in making broad claims based upon this research. Other factors, such as the socio-economic status of students, geographical location, and district wealth must also be taken into consideration for useful comparison of the findings from this study to other populations.

#### Table 47

Grouping	Ethnicity			
Grouping	African-American	Hispanic	Anglo	
State of Texas	14.2%	44.7%	37.7%	
Bryan High School	23.1%	34.2%	42.2%	
ACE	29.2%	29.2%	31.5%	
Study Sample	33.9%	33.9%	32.3%	

#### Ethnicity by Different Groupings

#### Non-Response and Attrition

Attrition was first discussed in Chapter II as a concern of follow-up research and defined as the rate at which participants who fail to respond in subsequent survey administrations (Dillman, 2000). In the short six-month time frame, roughly 38% of the original sample was lost due to attrition. It is likely a greater number of participants would have been lost to attrition over a longer time frame and additional follow-up survey administration points. One concern in research is that non-respondents provide different responses than respondents, resulting in biased data. To help control for this, the researcher monitored that response rates were above 50% for specific educational setting and ethnicity groups. Through a meta-analysis of survey research, it was

determined that the average response rate for a paper survey was 55.6 % (Cook, Heath, & Thompson, 2000). However, some outcomes may be more affected than others. For example, the majority of students were contacted via telephone at the parent/family home. This could provide a bias for students continuing to live at home because contact information was not available for those students having moved during the six-months following high school graduation.

#### Analyses

The final limitation involved the actual analyses used. As mentioned previously, this study was descriptive in nature and correlations between items were not investigated. The loglinear analyses used to investigate the majority of research questions provided a strong and powerful tool for investigating both main and interaction effects of categorical data (Thompson, 2006). Unfortunately, all benefits of the statistical analyses were not utilized with the data. Loglinear analysis allows for an infinite number of variables to be examined simultaneously. In this study, only four variables could be used for the exit-survey and three for the post-school survey, due to the limited number of cases. In addition, the analyses were not used on the variable of disability category due to the number of zero cases within some disability categories. The researcher must assure that a sufficient number of cases are available in order to maximize the benefits of the analysis.

#### Implications and Recommendations

As mentioned in the beginning of this chapter, this study only adds to the knowledge of post-secondary outcomes and follow-up research. The information learned

from this study should be used in conjunction with other studies in order to determine the actual outcomes that students with disabilities experience. In this portion of Chapter V, implications for practice and research will be provided. Both practitioners and researchers must take what is learned from studies in order to both improve opportunities for students and advance the field. In addition, recommendations from lessons learned are presented to help improve the reliability and validity of future research. Future researchers should consider these recommendations when designing follow-up research and develop methods that most appropriately fit the research questions and hypotheses. *Implications and Recommendations for Practice* 

School districts and other educational entities must be willing both to collect follow-up information and to actively use the findings from those studies in order to improve the post-secondary outcomes of future graduates. After all, one of the key underpinnings of post-school follow-up studies is that school districts must be able to process the findings and results in a manner to effect positive change in the current practices of the school (Mooney, Phelps, & Anctil, 2002). Three recommendations (discussed below) are provided to school districts in order to maximize the benefits of follow-up research: (a) opportunities for all students, (b) transition planning for all students, and (c) instruction on achieving post-secondary goals are provided to school districts in order to maximize the benefits of follow-up research. In addition, school districts are now required to report outcome data to OSEP under Indicator 14 of the State Performance Plan on Effective Transition. Finally, although suggestions are provided, school districts need to carefully examine individual concerns that arise in their own

specific follow-up data and carefully consider what changes are appropriate under the individual needs and constraints.

*Opportunities for all students*. Although an examination of student participation in school sponsored and extra-curricular activities did not produce statistically significant results among all groups, differences were evident. Differences were especially evident for students in special education and from low socio-economic backgrounds. Because active participation in high school is linked to future postsecondary success (Wagner et al., 1993) schools need to ensure that all students are provided opportunities for participation. This may include providing transportation in the evenings, facilitating public transportation, or even arranging carpools so that additional students may stay after school for school-sponsored clubs and sporting activities, designing a creative bell schedule to allow for clubs to hold meetings during the school day, or even providing school funds to purchase individual student equipment for athletic participation. Whatever methods schools decide to implement, guarantees needs to be outlined so that all students are equally accessing the benefits of these additional services provided through education.

*Transition planning for all students*. Although the majority (82%) of students indicated speaking with school staff regarding high school graduation and post-secondary plans, all students would benefit from the Individual Transition Planning process required for students in special education. Through this process, all students could be made aware of the various post-secondary options that exist. For example, one student, from the general education sample, during the initial exit-survey administration,

was unfamiliar with vocational/technical schools. The student believed the only options for post-secondary education were either a 2-year or 4-year college. This transition planning may allow for underrepresented groups to consider other options after high school graduation.

Instruction on achieving post-secondary goals. The final implication for the field involves specific instructions for students on the steps necessary to reach postsecondary goals. Although not specifically analyzed in this study, both survey implementations asked students open ended questions regarding one's future. Many students had a disjointed perception of the steps necessary to completing their ultimate expectations. For example, one student in general education reported a goal of being enrolled in a 2-year college one year following high school and completing medical school five years following high school. Although the end result may be a realistic goal for the student, he/she did not have a clear picture of the timeline involved in completing medical school. Another example involved the relatively large number of students who expected to obtain an independent living status following high school but who were still residing with parents/family. These students may not have understood all the costs and financial implications of living independently prior to graduation. This could be an area where teachers could assist students in comprehending all aspects of independent living. High Schools need to consider the explicit instruction of post-secondary adult outcomes delivered through stand alone coursework or incorporated into the current academic subjects. This will ensure that students are not only made aware but given instruction on ascertaining post-secondary goals.

#### Implications and Recommendations for Research

Although this study intended to answers questions regarding follow-up research, additional questions and areas for future research emerged. This section identifies four issues that should be considered in future research: (a) research design, (b) survey design, (c) sample size, and (d) participant contact. Finally, in addition to follow-up research examining outcomes based upon employment, education, independent living, and recreation and leisure, resulting data needs to be disaggregated into all interested categories, such as gender and ethnicity, not just the comparison of general and special education.

*Research design.* Halpern (1990) provided some insight for more effective and efficient ways to collect follow-up research. The initial ideas proposed in this article still apply 15 years later. One of Halpern's suggestions was to collect follow-along data versus follow-up data. The first implication provided to researchers follows this notion in that future follow-up research must utilize research designs in which respondents are followed for a longer period of time both before and after high school graduation. The second National Longitudinal Transition Study (NLTS) serves as a model for this type of design. This would enable researchers both to collect data on high school preparation activities as well as to establish a more concrete picture of the success students experience after graduation. In addition, students must be followed for a minimum of five years following high school graduation in order to capture the outcomes resulting from those students entering and completing college. Secondly, this study design only examined descriptive statistics associated with the provided data. Relationships between the original exit-survey and post-school survey were not compared to determine variables which might have influenced future success. Unfortunately, many large scale follow-up research designs are more descriptive in nature, including the NLTS. However, the field needs more research to determine correlations between school preparation and post-secondary outcome success in order to create and change the current practices in high schools.

*Survey design.* Without a valid and reliable survey instrument, it is impossible to attain valid and reliable data. Therefore the utmost attention must be provided initially in order to create a well-constructed instrument. The first major concern is producing a survey that is friendly to the population completing the survey. This entails that the survey be a reasonable length with only the critical elements included. A fault of the surveys utilized in this research was their overall length. Each survey was estimated to take students between 30-45 minutes to complete. However, during the exit-survey several students took over 45 minutes and had difficultly navigating the survey to be 72 questions long and require 30 minutes to complete. Both the exit-survey and post-school survey used in this study had over 100 response items for students to complete.

Questions also need to be written so that it becomes obvious what the researcher is asking. Respondents should not have any doubt to the nature of the information being asked within a question. Also, unless the survey is open-ended, the corresponding choices must be both mutually exclusive and understandable to the respondent. This

involves carefully choosing language so that questions and the corresponding choices following a question are worded appropriately for the sample. These choices must allow for only one correct answer per question. Otherwise, confusion occurs for the respondent and the data results are inaccurate. Field-testing survey instruments prior to initial administrations would help alleviate some inaccuracies.

*Sampling design.* Follow-up research needs to occur on all levels from individual schools and districts to a national survey. However, for more conclusive data to be collected, it is imperative that enough students representing all categories of interest be included in the study. This particular study had difficulty soliciting participation from students representing all the disability categories. Larger sample sizes might allow for the comparison of additional variables simultaneously, produce more generalizable results, and help correct for attrition and non-response rates. However, the researcher may still have difficulty achieving large sample sizes of low-incidence disabilities due to the nature of these disabilities. Different research techniques may be more appropriate for this population of students.

Halpern (1990) provided guidance on carefully constructing sampling designs. For the purposes of this study, the Texas Effectiveness Study provided all sampling guidelines. However, researchers need to ensure an adequate sample is drawn based upon the questions being analyzed. For example, in a descriptive study, such as this one, a sample ensuring that all groups are equally and adequately represented may be sufficient. For explanatory and predictive research questions, a large sample size may be required to produce the power necessary for statistical analyses (Halpern, 1990).

*Participant contact.* A final implication is to utilize personal or telephone interviews to collect data as opposed to mail surveys. During the post-school survey administration, both methods were utilized to collect data and the telephone interview resulted in a higher response rate. Therefore, the mail survey data collection method is not recommended for future research designs. On the other hand, collecting initial exitsurvey data while students were still enrolled in high school produced a successful response rate. It is recommended that this initial contact be established prior to graduation with more than one avenue for attaining post-graduation contact. This may also provide an opportunity for researchers to over sample a population to help correct for attrition during the subsequent data collection points.

The methods of contacting respondents play a role in the response rates. The closer the connection a researcher has with the population being studied the higher the response rate. For example, the researcher in this study was a former teacher within the district being studied. Because the researcher previously had contacts with administrators, teachers and students, cooperation was attained relatively easily. Another benefit to this was the researcher was able to ask teachers within the district if additional contact information was known for students. For example, one student was reached on the post-school survey because a current special education teacher called and asked the student to participate.

Another interesting aspect of ensuring connection to the respondents involved how the student was informed as to who was collecting the research. Often when phone calls were made, students were reluctant to answer and parents/families were reluctant to pass the telephone to the student without first realizing it was Bryan ISD collecting the information. Individuals have a personal connection with their school district and specific school, not with an outside agency hired to collect data.

This brings in the unique question of who is the best source of collecting postschool information. The recommendation of this study is to have an individual who previously had a strong connection with the student complete the follow-up survey. This may include a teacher, counselor, coach, or other adult. The pre-established rapport with the student would possibly allow for a greater response rate. Students may be less likely to decline participation if a personal relationship existed with the individual requesting the information.

#### Final Thoughts

The purpose of this study was to examine high school preparation and postschool outcomes of students graduating from Bryan ISD. The information was collected through a follow-up study design. In a broad conclusion, all students were not experiencing the same preparation during high school and post-secondary outcome results. Differences in these areas existed across educational setting, disability category, ethnicity, gender and socio-economic status. Although gender did not produce any statistically significant results, differences were found. However follow-up research can not end here. The findings must be transferred to individual school programs to ensure that all students are provided equal opportunities. In addition, this report may symbolize the conclusion of one piece of literature in the field of transition education for students with disabilities, but many holes and uncertainties continue to exist. These included discrepancies among groups on both post-secondary expectations and outcomes and why these discrepancies occurred. Future research is imperative to improve the success of the students discussed in this study.

In addition, the researcher gained invaluable experience and learned numerous lessons during the study. The importance of a well constructed design instrument and the difficulty that can occur in obtaining acceptable response rates was emphasized. For example, only an 80% return rate was achieved for the teachers involved in the agreement study. This was a sample that was easy to contact because the researcher knew the specific place of employment and surveys were hand delivered to schools. The researcher also grew in the ability to understand and interpret results from statistical analyses.

The time period when students with disabilities and from diverse backgrounds were allowed to achieve less successful post-secondary outcomes than peers in general education must end. Both researchers and practitioners need to become advocates for transition education and students in order to promote successful outcomes. Everyone in education has an obligation to ensure that students are provided with every opportunity to pursue their dreams and reach their highest potential.

#### REFERENCES

- Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*, 469-480.
- Babbie, E. (1990). *Survey research methods* (2<sup>nd</sup> ed.). Belmont, CA: Wadsworth Publishing Company.
- Baca, L.M., & Cervantes, H.T. (2004). *The bilingual special education interface* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Pearon Merrill Prentice Hall.
- Bakeman, R., & Gottman, J.M. (1986). *Observing interaction: An introduction to sequential analysis*. New York: Cambridge University Press.
- Barr, V.M., Harttnan, R.C., & Spillane, S.A. (1995, November). Getting ready for college: Advising high school students with learning disabilities. Retrieved on December 20, 2005 from

http://www.ldonline.org/ld\_indepth/postsecondary/hrc\_gettingready.html.

- Blackorby, J. (1993). Participation in vocational education by students with disabilities.
  In M. Wagner (Ed.), *The secondary school programs of students with disabilities.*A report from the National Longitudinal Transition Study of Special Education
  Students (pp 5-1 5-48). Menlo Park, CA: SRI International.
- Blackorby, J., & Wagner, M. (1996). Longitudinal postschool outcomes of youth with disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children*, 62, 399-413.

- Bruininks, R.H., Wolman, C., & Thurlow, M.L. (1990). Considerations in designing survey studies and follow-up systems for special education service programs. *Remedial and Special education*, 11(2), 7-17, 46.
- Bryan Independent School District. (2005). *Bryan Independent School District*. Retrieved on May 10, 2005 from http://www.bryanisd.org.
- Bullis, M., Bull, B., Johnson, B., & Peters, D. (1994). Young adults who are hearing and deaf in a transition study: Did they and their parents supply similar data?.*Exceptional Children*, 60(4), 323-333.

Bureau of Labor Statistics. (2004). Table 1: Labor force participation of 2003 high school graduates and 2002-04 high school dropout from 16 to 24 years old by school enrollment, sex, race, and Hispanic or Latino ethnicity, October 2003.
Retrieved February 10, 2006 from

http://www.bls.gov/news.release/hsgec.t01.htm.

- Burnett, J.D. (1983). Loglinear analysis: A new tool for educational researchers. *Canadian Journal of Education*, *8*, 139-154.
- Cadwallader, T.W., & Wagner, M. (2003). The uses of free time by youth with disabilities. In M. Wagner, T.W. Cadwallader, C. Marder, R. Cameto, D. Cardoso, N. Garza, P. Levine, & L. Newman (2003), *Life outside the classroom for youth with disabilities: A report from the National Longitudinal Transition Study -2* (pp. 2-1 2-5). Washington, DC: Office of Special Education Programs.

- Cadwallader, T.W., Wagner, M., & Garza, N. (2003). Participation in extracurricular activities. In Wagner, M., Cadwallader, T.W., Marder, C., Cameto, R., Cardoso, D., Garza, N., Levine, P. & Newman, L. (2003), *Life outside the classroom for youth with disabilities: A report from the National Longitudinal Transition Study* -2 (pp. 4-1 4-8). Washington, DC: Office of Special Education Programs.
- Cameto, R. (2005). Employment of youth with disabilities after high school. In M.
  Wagner, L. Newman, R. Cameto, N. Garza, & P. Levine (2005), *After high school: A first look at the postschool experiences of youth with disabilities: A report from the National Longitudinal Transition Study -2* (5-1 5-21).
  Washington, DC: Office of Special Education Programs.
- Cameto, R., Marder, C., Wagner, M., & Cardoso, D. (2003). *Youth employment: A report from the National Longitudinal Transition Study* – 2. Menlo Park, CA: SRI International.
- Camp, W. (1990). Participation in student activities and achievement: A covariance structural analysis. *Journal of Educational Research*, *83*, 272-278.
- Capacity Building Institute (2005, October). *Research-based tools and strategies for improving outcomes for secondary youth with disabilities*. Presented at The National Center of Secondary Education and Transition, University of Minnesota, and the Council for Exceptional Children's Division on Career Development and Transition, Albuquerque, NM.
- Catterall, J.S. (1989). Standards and school dropouts: A national study of tests required for high school graduation. *American Journal of Education*, *98*(1), 1-34.

- Choy, S.P. (1999, Summer). College access and affordability. *Education Statistics Quarterly*, 1(2), 74-90.
- Cook, C., Heath, F., & Thompson, R.L. (2000). A meta-analysis of response rates in web or internet-based surveys. *Educational and Psychological Measurement*, 60, 821-836.
- D'Amico, R. (1991). The working world awaits: Employment experience during and shortly after secondary school. In M. Wagner, L. Newman, R. D'Amico, E.D. Jay, P. Butler-Nalin, C. Marder, & R. Cox (1991), *Youth with disabilities: How are they doing? The first comprehensive report from the National Longitudinal Transition Study of Special Education Students* (pp. 8-2 8-55). Menlo Park, CA: SRI International.
  - D'Amico, R., & Blackorby, J. (1992). Trends in employment among out-of-school youth with disabilities. In M. Wagner, R. D'Amico, C. Marder, L. Newman, & J. Blackorby (1992), *What happens next? Trends in postschool outcomes of youth with disabilities. The second comprehensive report from the National Longitudinal Transition Study of Special Education Students* (pp. 4-1 4-47). Menlo Park, CA: SRI International. (ERIC Document Reproduction Service No. ED356603)
- Dillman, D.A. (2000). *Mail and internet surveys: The tailored design method* (2<sup>nd</sup> ed.). New York: John Wiley & Sons, Inc.
- Fowler, W., & Walberg, H. (1991). School size, characteristics, and outcomes. *Education Evaluation and Policy Analysis*, 13, 189-202.

- Furney, K.S., Hasazi, S.B., & Destefano, L. (1997). Transition policies, practices, and promises: Lessons from three states. *Exceptional Children*, 63(3), 343-255.
- Halpern, A. (1985). Transition: A look at the foundations. *Exceptional Children*, 51(6), 479-486.
- Halpern, A. (1990). A methodological review of follow-up and follow-along studies tracking school leavers from special education. *Career Development for Exceptional Individuals, 13*(1), 13-27.
- Hasazi, S., Gordon, I.R., & Roe, C.A. (1985). Factors associated with the employment status of handicapped youth exiting high school fro 1979-1983. *Exceptional Children*, 51(6), 455-469.
- Hinkle, D.E., Wiersma, W., & Jurs, S.G. (2003). *Applied statistics for the behavioral sciences* (5<sup>th</sup> ed.). Boston, MA: Houghton Mifflin Company.
- Huang, L., Pergamit, M., & Shkolnik, J. (2001). Youth initiation into the labor marker. Monthly Labor Review, 124(8), 18-24.
- Individuals with Disabilities Education Act Amendments of 1997, 20 U.S.C. § 1400 *et seq.*
- Individuals with Disabilities Education Act of 1990 (IDEA), P.L. 101-146, 20 U.S.C. § 1401 et seq.
- Individuals with Disabilities Education Improvement Act of 2004, P.L. 108-446, 20

U.S.C. § 1400 et seq.

- Janes, C., Hesselbrock, V., Myers, D.G., & Penniman, J. (1979). Problem boys in young adulthood: Teacher's ratings and twelve-year follow-up. *Journal of Youth and Adolescence*, 8, 453-473.
- Javitz, H.S., & Wagner, M. (1990). Report of sample design and limitations, wave 1 (1987): A Report from the National Longitudinal Transition Study of Special Education Students. Menlo Park, CA: SRI International. (ERIC Document Reproduction Service No. ED368151)
- Jefferson on Education. (n.d.). Retrieved October 18, 2005, from http://www.geocities.com/Athens/6529/notebook/jefferson\_quotes.html.
- Johnson, D.R., McGrew, K., Bloomberg, L., Bruininks, R.H., & Lin, H.C. (1997).Results of a national follow-up study of young adults with severe disabilities.*Journal of Vocational Rehabilitation*, 8, 119-133.
- Kohler, P. D. (1993). Best practices in transition: Substantiated or implied? *Career* Development for Exceptional Individuals, 16, 107-121.
- LD Online (n.d.) Retrieved December 20, 2005, from http://www.ldonline.org/ld\_indepth/postsecondary/.
- Levesque, K., Lauen, D., Teitelbaum, P., Alt, M., Librera, S. (2000, February).
  Vocational education in the United States: Toward the year 2000. *National Center for Education Statistics*. U.S. Washington, DC: Department of Education:
  Office of educational Research and Improvement.
- Levine, P., & Edgar, E. (1994). Respondent agreement in follow-up studies of graduates of special and regular education programs. *Exceptional Children*, *60*(4), 334-343.

Levine, P., & Nourse, S.W. (1998). What do follow-up studies say about postschool life for young men and women with learning disabilities: A critical look at the literature. *Journal of Learning Disabilities*, *31*(3), 212-233.

Levine P., & Wagner, M. (2005). The household circumstances and emerging independence of out-of-school youth with disabilities. In M. Wagner, L. Newman, R. Cameto, N. Garza & P. Levine (2005), *After high school: A first look at the postschool experiences of youth with disabilities: A report from the National Longitudinal Transition Study -2* (pp. 6-1 – 6-22). Washington, DC: Office of Special Education Programs.

- Mahoney, J.L., & Cairns, R.B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, *33*, 241-253.
- McLeskey, J., Henry, D., & Axelrod, M.I. (1999). Inclusion of students with learning disabilities: An examination of data from reports to congress. *Exceptional Children*, 6(1), 55-66.
- McNamara, J.F. (2003). Getting good results from survey research: Part one. International Journal of Educational Reform, 12(4), 275-288.
- McNamara, J.F. (2004). Getting good results from survey research: Part two. International Journal of Educational Reform, 13(1), 84-98.
- McNamara, J.F. (in press a). Getting good results from survey research: Part three. International Journal of Educational Reform.
- McNamara, J.F. (in press b). Getting good results from survey research: Part four. International Journal of Educational Reform.

- 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.
- Mittag, K.C. (1993, January). Scale-free nonparametric factor analysis: A user-friendly introduction with concrete heuristic examples. Paper presented at the Annual Meeting of the Southwest Educational Research Association, Austin, TX. (ERIC Document Reproduction Service No. ED355281)
- Mooney, M., Phelps, L.A., & Anctil, T.M. (2002, July). Using postschool outcome data to improve practices and policies in restructured inclusive high schools (RISER Brief No. 6). Madison, WI: Center on Education and Work, University of Wisconsin.
- National Center for Education Statistics (NCES). (2004). *Trends in education equity of girls & woman: 2004*. Washington, DC: U.S. Department of Education: Institute of Education Sciences.
- National Center for Education Statistics (NCES). (2005). *Youth indicators 2005: Trends in the well-being of American youth.* Washington, DC: U.S. Department of Education: Institute of Education Sciences.
- National Center on Secondary Education and Transition. (2002, April). *Generation D: The next generation of independent living leadership teleconference transcript.* Retrieved on December 22, 2005 from
  - http://www.ncset.org/teleconferences/transcripts/2002\_04ncil.asp.

- National Commission on the High School Senior Year. (2001, October). *Raising our sights: No high school senior left behind*. Princeton, NJ: The Woodrow Wilson National Fellowship Foundation.
- National Longitudinal Transition Study 2. (n.d.). NLTS2 FAQ. Retrieved on January 2, 2006 from http://www.nlts2.org/nlts2faq.html#Whatis.
- National School-to-Work Office. (1996). *School-to-work opportunities*. Washington, DC: U.S. Department of Education, U.S. Department of Labor.
- National Transition Network. (1997). Transition requirements of IDEA. (Policy Update).
   Minneapolis. MN: US Department of Education, Office of Special Education and Rehabilitative Services.
- New York State Education Department (1999). *Report of the post school status of former special education students in the big five cities*. Albany, NY: Office of Vocational and educational Services for Individuals with Disabilities. (ERIC Document Reproduction Service No. ED452620)
- Newman, L. (1991a). Growing up, moving on: Aspects of personal and residential independence. In M. Wagner, L. Newman, R. D'Amico, E.D. Jay, P. Butler-Nalin, C. Marder, & R. Cox (1991), *Youth with disabilities: How are they doing? The first comprehensive report from the National Longitudinal Transition Study of Special Education Students* (pp. 7-1 7-39). Menlo Park, CA: SRI International.

- Newman, L. (1991b). Social activities. In M. Wagner, L. Newman, R. D'Amico, E.D.
  Jay, P. Butler-Nalin, C. Marder, & R. Cox (1991), *Youth with disabilities: How* are they doing? The first comprehensive report from the National Longitudinal Transition Study of Special Education Students (pp. 6-1 – 6-50). Menlo Park, CA: SRI International.
- Newman, L. (2005). Postsecondary education participation of youth with disabilities. In
  M. Wagner, L. Newman, R. Cameto, N. Garza, & P. Levine (2005), *After high* school: A first look at the postschool experiences of youth with disabilities: A report from the National Longitudinal Transition Study -2 (pp 4-1 4-16).
  Washington, DC: Office of Special Education Programs.

No Child Left Behind Act of 2001 (NCLB), P.L. 107-110, 20 U.S.C.

- Otto, L.B., & Allwin, D.F. (1977). Athletics, aspirations, and attainments. *Sociology of Education*, *42*, 102-113.
- Patton, J.R. & Blalock, G. (1996). Transition and students with learning disabilities: Facilitating the movement from school to adult life. Austin, TX: PRO-ED, Incorporated.
- Peter, T.L., & Heron, T.E. (1993). When the best is not good enough: An examination of best practice. *Journal of Special Education*, 26, 370-385.
- Post-School Outcomes Center (n.d.). Retrieved on December 28, 2005 from http://www.psocenter.org/reporting.html.
- Quotes of the Heart. (n.d.). Retrieved on October 18, 2005, from http://www.heartquotes.net/Einstein.html.

- Rice, J. (1992). Loglinear analysis: Analysis of categorical variables in the logit setting.
  In B. Thompson (Ed.), *Advances in social science methodology* (Vol. 2, pp. 1-52). Greenwich, CT: JAI Press.
- Rusch, F.R., & Chadsey, J.G. (1998). *Beyond high school: Transition from school to work*. Belmont, CA: Wadsworth Publishing Company.
- Rusch, F.R., Kohler, P.D., & Hughes, C. (1992). An analysis of OSERS: Sponsored secondary special education and transitional services research. *Career Development for Exceptional Individuals*, 15, 121-143.
- Rusch, F.R., & Phelps, L.A. (1987). Secondary special education and transition from school to work: A national priority. *Exceptional Children*, *53*(6), 487-492.
- Sheskin, D.J. (2004). *Handbook of parametric and nonparametric statistical procedures*. (3<sup>rd</sup> ed.). New York: Chapman & Hall/CRC.
- Shin, H.B. (2005, May). School enrollment: Social and economic characteristics of *students*: (Census 2000 Brief). Washington, DC: U.S. Bureau of the Census.
- Sittlington, P.L., & Frank, A.R. (1990). Are adolescents with learning disabilities successfully crossing the bridge into adult life? *Learning Disability Quarterly*, *13*(1), 97-111.
- Skrtic, T. (1991). The special education paradox: Equity as the way to excellence. *Harvard Educational Review*, *61*(2), 148-206.
- Spraggins, R.E. (2003, March). Woman and men in the United States: March 2002: Population characteristics. Washington, DC: Bureau of the Census.

- SRI International (2000). Sampling plan. A report form the National Longitudinal Transition Study of Special Education Students - 2. Menlo Park, CA: SRI International.
- Stanard, R.P. (2003). High school graduation rates in the United States: Implications for the counseling profession. *Journal of Counseling & Development*, 81(2), 217-223.
- Tabachnick, B.G., & Fidell, L.S. (1996). *Using multivariate statistics* (3<sup>rd</sup> ed.). New York: Harper Collins College Publishers.
- Texas Education Agency Academic Excellent Indicator System (n.d). Retrieved on April 24, 2006, from http://www.tea.state.tx.us/cgi/sas/broker.
- Texas Effectiveness Study. (1997). Texas effectiveness study: Interim report, 1996-97.Austin, TX: Texas Education Agency. (ERIC Document Reproduction Service No. ED440129)
- Thompson, B. (2006). Some logistic models: Model fitting in a logistic context. In B.
  Thompson (2006), *Foundations of behavioral statistics* (pp. 393 426). New York: Guilford.
- Thompson, J.R., Lin, H.C., Halpern, S., & Johnson. D.R. (1994). 1994 Minnesota postschool follow-up study. University of Minnesota: Institute on Community Integration (UAP). (ERIC Document Reproduction Service No. ED398703)
- U.S. Bureau of the Census (1991). *Current population reports, series P-20: Martial status and living arrangements* (No. 410 and 445). Washington DC: Bureau of the Census

U.S. Department of Labor (2005). *History of federal minimum wage rates under the fair labor standards act, 1938-1996.* Retrieved from http://www.dol.gov/esa/minwage/chart.htm.

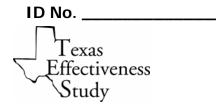
Wagner, M. (1992). A little help from my friends: The social involvement of young people with disabilities. In M. Wagner, R. D'Amico, C. Marder, L. Newman, & J. Blackorby (1992), *What happens next? Trends in postschool outcomes of youth with disabilities. The second comprehensive report from the National Longitudinal Transition Study of Special Education Students* (pp. 6-1 – 6-43). Menlo Park, CA: SRI International. (ERIC Document Reproduction Service No. ED356603)

- Wagner, M. (1993). The secondary school programs of students with disabilities: A report from the National Longitudinal Transition Study of Special Education Students. Menlo Park, CA: SRI International.
- Wagner, M. (2003). An overview of the school programs of the secondary school students with disabilities. In M. Wagner, L. Newman, R. Cameto, P. Levine, P. & C. Marder (2003), *Going to school: Instructional contexts, programs, and participation of secondary school students with disabilities. A report from the National Longitudinal Transition Study -2* (pp. 4-1 4-12). Washington, DC: Office of Special Education Programs.

- Wagner, M., Balckorby, J., Cameto, R., Newman, L. (1993). The relationship of secondary school factors to postschool outcomes. In M. Wagner, J. Balckorby, R. Cameto, L. Newman (1993), *What made a difference? Influences on postschool outcomes of youth with disabilities. The third comprehensive report from the National Longitudinal Transition study of Special Education Students* (pp. 4-1 4-24). Menlo Park, CA: SRI International.
- 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. Washington, DC: Office of Special Education Programs.
- Wagner, M., Newman, L., D'Amico, R., Jay, E.D., Butler-Nalin, P., Marder, C., & Cox,
  R. (1991). Youth with disabilities: How are they doing? The first comprehensive report from the National Longitudinal Transition Study of Special Education Students. Menlo Park, CA: SRI International.
- Wehmeyer, M. & Schwartz, M.A. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation and learning disabilities. *Exceptional Children*, 63, 245-255.
- Will, M. (1984). OSERS programming for the transition of youth with disabilities:
   Bridges from school to working life. Washington, DC: Office of Special
   Education and Rehabilitative Services.

APPENDIX A

EXIT SURVEY



# Texas Effectiveness Study Grade-12 Exit Survey

#### Instructions

- Read each question carefully.
- Fill in the blank or check the most appropriate answer.
- If a question does not apply to you, <u>choose NA for Not Applicable.</u>

#### Who completed this survey? (Please check the one best answer)

- O I completed this survey myself
- O I completed this survey with help from someone else

O Someone else completed this survey for me

# I. Contact Information (Please Print)

First Name:	Street Address:
Last Name:	City:
Telephone Numbers:	State:
Home: ( ) -	Zip Code:
Work : ( ) -	
Cell : ( ) -	E-mail Address:

## *II. Parent/Guardian/or Nearest Relative Contact Information* (Please Print)

Parent's First Name:	Street Address:
Parent's Last Name:	City:
Parent's Telephone Numbers	State:
Home: ( ) -	Zip Code:
Work : ( ) -	
Cell : ( ) -	E-mail Address:

# III. School District Information

District Name:	High School Name:

у

y

## **IV. General Information**

What is the month and year you will graduate or leave high school?

<u>m m y y y y</u>

What is your date of birth (mm-dd-yyyy)? \_\_\_/ \_\_/ \_\_\_/ \_\_\_/ \_\_\_\_ m m d d y y y y

What is your gender?				
0	Male			
0	Female			

#### What is your ethnic background?

O White, not of Hispanic origin

O Hispanic

O Black, not of Hispanic origin

- O American Indian or Alaskan Native
- O Asian or Pacific Islander

#### Are you married?

O Yes

O No

## Do you have children?

O Yes O No

W	Where do you currently live?				
0	With parent(s) or relative	0	Live in group home		
0	Live on my own, independent of parent(s) or relative	0	Live with husband or wife		
0	Live with friend(s)	0	Live with boyfriend or girlfriend		
0	Live with foster family	0	Other (Please specify)		

# When you receive your high school diploma, under which credit plan will you graduate for the 2004-2005 school year?

0	Minimum high school program	0	Not Sure
0	Recommended high school program	0	I plan to leave school, but I will not
			graduate
0	Distinguished achievement program	0	I do not plan to leave this school year

	If you plan to leave school during the 2004-2005 school year without graduating, what is the main reason? (Please check the one main reason)			
0	NA, this question does not apply to me	0	to get a job	
0	to earn a GED	0	for personal reasons	
0	for medical reasons	0	another reason (Please specify):	

#### V. Your High School Experience

Do	you feel your high school is a safe place to learn?
-	

- O Yes
- O No, because

Did your high school give you clear and up-to-date information about what you needed to gradaute?

- O Yes
  - O No, because

Did you take part in class related activities sponsored by your school to help you develop your vocational and college related interests and abilities? (For example: Meetings with school counselors, in-class speakers, career fairs, etc.) O Yes

- 0 Yes
- O No, because

Did you take part in extra-curricular activities sponsored by your school to help you develop your personal and social interests and abilities? (For example: choir, band, clubs, sports, etc.)

O Yes

O No

Was there someone in high school that was most helpful to you as you prepared to leave high school? (Please check the one best answer)

0	Special Education Teacher	0	School Counselor
0	Career Education and Technology	0	Transition Specialist
	Teacher		
0	General Education Teacher	0	School Administrator (Principal, Vice-
			Principal)
0	Coach	0	Other (Please specify):
0	VAC Teacher	0	No, there was no one at my high
			school

wh	What kinds of information and/or activities helped you develop your plans for what you want to do after graduating or leaving high school? (Please check all that apply)				
0	Talked to someone at school about my goals	0	Took an elective class at school		
0	Interviewed a teacher	0	Took a field trip to a local business/industries		
0	Took an interest inventory	0	Mentored with a person in field of interest to me		
0	Took part in an Internship while in high school	0	Referred to my IEP/Transition Plan		
0	Participated in volunteer work	0	Completed a college application		
0	Worked a paying job outside of school	0	Located information about financial aid		
0	Participated in job shadowing activities	0	Located information about jobs available in my city		
0	Became a member of a student organization (TSO, TSA, HOSA, Skills USE, etc.)	0	Watched a TV program or other media event about an area of interest to me		
0	Attended a career fair	0	Read books or other print media		
0	Listened to a guest speaker at school	0	Talked to friends who have the same interests		
0	Took a specific class at school	0	Talked to my parents		
0	Looked up resources on the Internet	0	Completed a resume		
0	Filled out a job application	0	Visited colleges/universities		
0	Looked up resources on the Internet				

#### Did someone at your school talk to you about what you plan to do when you graduate or leave high school?

Yes (If you answered Yes, Who talked to you about your plans?) 0

No 0

## Did you feel that school has prepared you for what you plan to do after you graduate or leave high school? (Please explain)

- O Yes, because
- O No, because

# During your last year in high school did you have a paying job outside of school?

	0	None, have not worked while attending	0	Worked 11-20 hours a week
		high school		
ĺ	0	Worked less than 5 hours a week	0	Worked 21-30 hours a week
	0	Worked 5-10 hours a week	0	Worked 30 or more hours a week

How	How long have you been working at your current job?			
0	I don't have a job			
0	6 months or less			
0	6 months to 1 year			
0	1-2 years			
0	2 or more years			

For this next section, first read each skill listed below. Then tell us how prepared you feel in performing each skill. If you feel that you are not prepared or you are not able to perform the skill you can indicate a need for additional instruction or training by checking the last column.

Skill Area	l can do this <b>by</b> myself	l can do this with help	I am <b>not</b> <b>prepared</b> to do this	I need more trainin g in this area
Read and understand printed technical instructions (For example: Instruction on how to program a cell phone or install a DVD player)	0	0	0	0
Read newspapers, books and/or magazines	0	0	0	0
Apply math at home and work (For example: calculate my paycheck, figure the cost of a sale item, or use measures when cooking)	0	0	0	0
Use study skills to learn new things	0	0	0	0
Follow a schedule (For example: complete everyday jobs when due)	0	0	0	0
Report to work or school on time	0	0	0	0
Get along with others at work and school	0	0	0	0
Make good decisions	0	0	0	0
Monitor my own progress on assignments at school or work	0	0	0	0
Ask for help when I need it at school or work	0	0	0	0
Teach others new skills	0	0	0	0
Work with others on a team	0	0	0	0
Work with others who are different from me	0	0	0	0
Use a computer to write letters/reports	0	0	0	0
Use a computer for Internet/email	0	0	0	0
Budget my own money	0	0	0	0
Cook food for myself	0	0	0	0
Do my own laundry	0	0	0	0
Find a place to live	0	0	0	0

Take care of my health needs (For example: make an appointment with my doctor or fill a prescription)	0	0	0	0
Find help in the community if needed	0	0	0	0
Find my own job	0	0	0	0
Locate financial resources (For example: apply for a loan, how to buy a car, how to buy a house, getting out of debt, etc.)	0	0	0	0
Make a plan for my future (that means I can decide what I want to do and make sure it happens)	0	0	0	0

If you checked that you need more training in a skill area listed above what kind of education or training do you require at this time? (For example: Do you need more instruction in computer skills, functional math skills, team building skills, time management training, job interviewing skills, ect?)

#### Do you currently receive assistance or services from any of the following? (Please check all that apply) Social Security (SSI, SSDI, SSA) WIA (formerly JTPA) 0 0 Mental Retardation Services Ticket-to-Work 0 0 (DADS) 0 Mental Health Services (DSHS) 0 Rehabilitation Services (DARS) Office of Dischilling C Dilinal al \/!a 0 0 - II. . I. -1 C

0	Office of Disability Services	0	Blind and Visually Impaired Services
	(College/Univ)		(DARS)
0	Texas Workforce Commission (TWC)	0	Deaf and Hard of Hearing Services (DARS)
0	Other (Please Specify):	0	Texas Youth Commission (TYC)

# VI. Plans for Your Future

Where do you plan to live after you graduate or leave high school? (Please check the one best answer)				
0	Not Sure	0	Live with foster family	
0	With parent(s) or relative	0	Live in a group home	
0	Live on my own, independent or parent(s) or relative	0	Live with husband or wife	
0	Live with friend(s)	0	Other (Please specify):	

W	What do you expect to do after high school? (Please check all that apply)				
0	Not sure	0	Attend a 4-year Colleg/University		
0	Working part-time for pay in the community (29 hours or less a week)	0	Join the military		
0	Working full-time for pay in the community (30 hours or more a week)	0	Enroll in GED classes		
0	Attend a vocational/technical school	0	Receive employment related training		
0	Attend a 2-year Community College	0	Work in a supported employment environment		
0	Other (Please specify):				

	If you are planning to continue your education, have you already applied to a community college or university?					
0	Yes	If you answered Yes, what College/University did you apply to?				
0	No					

# What are your goals in the areas of leisure and community participation after high school?

# (Please check all that apply)

· ·	(i lease check an that appry)				
0	Vote in the next election	0	Get a driver's license		
0	Learn to drive	0	Travel		
0	Learn to use public transportation	0	Learn things on my own that interest me		
0	Learn computer skills	0	Participate in church or religious services/activities		
0	Participate in league sports (baseball, basketball, bowling, etc.)	0	Sign up for volunteer work at a community organization or business		
0	Spend more time on hobbies	0	Participate in self-advocacy activities, training, or support groups		
0	Spend time with friends	0	Participate in civic organization (Rotary Clubs, Lions Clubs, etc.)		
0	Spend more time doing outdoor activities (fishing, camping, hiking, etc.)	0	Get out and do more fun stuff in the community (mall, movies, danced, etc.)		
0	Listen to music	0	Join a community theatre or arts activity		
0	Other (Please specify):				
0	Other (Please specify):				

What do you see yourself doing one year after leaving high school? (where are you working or going to school, where do you live, what goals did you make happen for yourself, what do you do in your free time?).

What do you see yourself doing five years after leaving high school? (where are you working or going to school, where do you live, what goals did you make happen for yourself, what do you do in your free time?)

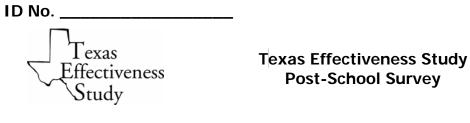
Which teacher knows the most about you?

THANK YOU for taking time to complete this survey.

The information that you provide will help schools evaluate and plan education programs for all students. All information you provide is confidential and no information will be released in reports that will identify you personally. You will be contacted two more times after leaving high school as a follow-up to this survey.

# APPENDIX B

POST-SCHOOL SURVEY



# Instructions

- Read each question carefully.
- Fill in the blank or check the most appropriate answer.
- If a question does not apply to you, choose NA for Not Applicable.

W	Who completed this survey? (Please check the <u>one</u> best answer)		
0	I completed this survey myself		
0	I completed this survey with help from someone else		
0	Someone else completed this survey for me		

May we contact you in the near future to talk to you in more detail about how high school prepared you for adult life?

O Yes

(*If Yes, please give us the best number to reach you by phone*) (\_\_\_\_) \_\_\_\_\_ O No

First Name:		Street Address:			
Last Name:		City:			
Telephone Numbers	5:	State:			
Home: ( ) -		Zip Code:			
Work : (	) -				
Cell : (	) -	E-mail Address:			

### I. Contact Information (Please Print)

## *II. Parent/Guardian/or Nearest Relative Contact Information* (Please Print)

Parent's First Name:	Street Address:
Parent's Last Name:	City:
Parent's Telephone Numbers	State:
Home: ( ) -	Zip Code:
Work : ( ) -	
Cell : ( ) -	E-mail Address:

# III. Demographic Information

Wł	nat is your gender?
0	Male
0	Female

What is your date of birth (mm-dd-yyyy)?	 /	 	/	 	
		d			

## Are you married?

O Yes O No

Do	you have children?
0	Yes
0	No

## IV. High School Reflection

What is the name of the school district and high school you last attended?						
District Name:	High School Name:					

## What was the month and year you graduated or left high school:

\_\_\_\_/\_\_\_\_\_\_ m\_\_\_\_y\_\_y\_\_y

W	When you graduated from high school did you meet requirements for the						
0	Minimum high school program	0	Not Sure				
0	Recommended high school program	0	I left school without graduating				
0	Distinguished achievement program	0	I am still in high school				

# If you left school without graduating, what was the main reason? (Please checkthe one main reason)ONA, this question does not apply to meOto get a job

0	NA, this question does not apply to me	0	iu gei a juu
0	to earn a GED	0	for personal reasons
0	for medical reasons	0	another reason (Please specify):

When you first entered high school, did you have a written graduation plan? (a written plan describing the classes you would take while in high school)

O Yes

O No

O Don't Know

### While in high school did you <u>participate</u> in meetings with school staff to talk about the goals you set for your future? (*Participate means that you were invited*, *attended*, *talked to teachers about your plans for the future*, *and/or you helped prepare an education plan to achieve your desired outcomes for your future*).

O Yes

O No

O Don't Know

What is something <u>you wished you had learned in high school but did not</u>, that would be useful to you now?

What is something <u>you did learn in high school that has been helpful</u> to you, now that you have been out of school for a while?

For this next section, first read each skill listed below. Then tell us how prepared you feel in performing each skill. If you feel that you are not prepared or you are not able to perform the skill you can indicate a need for additional instruction or training by checking the last column.

Skill Area	l can do this <b>by</b> myse If	l can do this <b>with</b> help	I am <b>not</b> <b>prepared</b> to do this	I need more trainin g in this area
Read and understand printed technical instructions (For example: Instruction on how to program a cell phone or install a DVD player)	0	0	0	0
Read newspapers, books and/or magazines	0	0	0	0
Apply math at home and work (For example: calculate my paycheck, figure the cost of a sale item, or use measures when cooking)	0	0	0	0
Use study skills to learn new things	0	0	0	0
Follow a schedule (For example: complete everyday jobs when due)	0	0	0	0
Report to work or school on time	0	0	0	0
Get along with others at work and school	0	0	0	0
Make good decisions	0	0	0	0
Monitor my own progress on assignments at school or work	0	0	0	0
Ask for help when I need it at school or work	0	0	0	0
Teach others new skills	0	0	0	0
Work with others on a team	0	0	0	0
Work with others who are different from me	0	0	0	0
Use a computer to write letters/reports	0	0	0	0
Use a computer for Internet/email	0	0	0	0
Budget my own money	0	0	0	0
Cook food for myself	0	0	0	0
Do my own laundry	0	0	0	0
Find a place to live	0	0	0	0
Take care of my health needs (For example: make an appointment with my doctor or fill a prescription)	0	0	0	0
Find help in the community if needed	0	0	0	0
Find my own job	0	0	0	0
Locate financial resources (For example: apply for a loan, how to buy a car, how to buy a house, getting out of debt, etc.)	0	0	0	0

Make a plan for my future (that means I can	0	0	0	0
decide what I want to do and make sure it				
happens)				

If you checked that you need more training in a skill area listed above what kind of education or training do you require at this time? (For example: Do you need to take a study skills seminar at the community college you are attending, do you need to enroll in self-advocacy training, do you need to develop budgeting skills, do you need training in time management, etc?)

### V. Employment

Dia	Did you have a job when you graduated or left high school?				
0	Yes				
0	No				

Did you learn vocational and work related skills in high school that helped prepare you to get a job?

O Yes O No

Ar	Are you currently doing any of the following?					
0	Working part-time (29 hours or less a week)	0	Supported employment (working for pay with a Job Coach)			
0	Working full-time (30 hours or more a week)	0	Working for pay in a sheltered workshop			
0	Working 2 or more part-time jobs	0	Volunteer work without pay			
0	Full-time military service	0	Other (Please specify):			
0	Part-time military service	0	Unemployed, currently not working			

What is your current job? (Describe your job duties.)

### Where do you work?

### If you are paid hourly, what do you make per hour?

\$\_\_\_\_\_ per hour

### How much do you make a year?

ion muon uo jou marto a journ				
NA, unemployed	0	I would rather not answer this question		
I don't know how much I get paid	0	I don't get paid for the work I do		
		(Volunteer work)		
Less than \$5,000	0	\$30,000 - \$40,000		
\$5,000 - \$10,000	0	\$40,000 - \$50,000		
\$10,000 - \$15,000	0	\$50,000 - \$60,000		
\$15,000 - \$20,000	0	\$60,000 - \$70,000		
\$20,000 - \$30,000	0	More than \$70,000		
	NA, unemployed I don't know how much I get paid Less than \$5,000 \$5,000 - \$10,000 \$10,000 - \$15,000 \$15,000 - \$20,000	NA, unemployed         O           I don't know how much I get paid         O           Less than \$5,000         O           \$5,000 - \$10,000         O           \$10,000 - \$15,000         O           \$15,000 - \$20,000         O		

# What benefits do you receive with your current job? (Please check all that apply)

0	No benefits	0	Retirement plan
0	Paid vacation	0	Employee discounts
0	Paid sick leave	0	Life insurance
0	Health insurance	0	Other benefits (Please specify)

## Do you like your current job?

O Yes O No

## If you don't have a job but you want a job, what's the <u>main reason</u> for not working? (Choose the one best answer)

0	NA, I have a job	0	I don't know how to find a job		
0	There are few job or no jobs to apply for	0	I have problems getting along with other people		
0	I go to school and prefer not to work (Comm. College, University, or Technical School)	0	I have medical or health concerns that prevent me from working		
0	I take care of my family (care for my children, my parents, etc.)	0	I feel I would loose my benefits if I worked (Example: SSI)		
0	I don't have a way to get to work	0	I don't want to work		
0	I can't find a job I'm trained to do	0	Another reason (Please specify):		

	If you are unemployed and looking for work what are you doing to find a				
jol	job? (Choose all that apply)				
0	NA, I am not looking for a job	0	Ask family and friends for job leads		
0	I go to school and prefer not to work (Comm. College, University, or	0	Visit local employment office for help (one-Stop Center or Workforce		
	Technical School)		Development Board)		
0	Look at want ads in newspaper	0	Visit local rehabilitation services office for help		
0	Pick up and complete job applications	0	Go back to High School for help (counselor, teacher, etc.)		
0	Get employment help through a Ticket-To-Work Network Provider	0	Go to placement office at Community College, University, or Technical School		
0	Look for job leads on the Internet	0	Other (Please Specify):		

### VI. Postsecondary Education

**Since high school have you had additional training or coursework?** (*This could be formal education or training through a school or college or informal education or training through an employer or job training program*)

O Yes, Please answer the questions in this section

 No, Please skip this section and go to *Section VII. Independent Living and Community Resources*

Did the classes you took in high school prepare you for further training and coursework? (Did the classes prepare you to go to college or vocational/technical school?)
O Yes

0 No

# Since you left high school have you had any training or coursework through the following?

Enrolled but <u>Quit</u> the Program	<u>Currently</u> <u>Enrolled</u> in the Program	Graduated or Completed the
		Program
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
	Quit Program000000000000000000000	Quit ProgramEnrolled Enrolled in the Program00

# If you graduated or completed the program, list the degree or certificate you received.

# If you enrolled in a program but quit before finishing, what prevented you from completing the program?

<b>_</b>	J			
0	NA, This question does not apply to	0	I wasn't prepared for all the work I had to	
	me		do	
0	It cost too much (tuition was too	0	I had poor study habits	
	expensive)			
0	The instructors were not supportive	0	I had medical issues	
0	I didn't have a way to class	0	The classes were too big	
0	I had poor grades and dropped out	0	I had a hard time passing tests	
0	I didn't ask for help until it was too	0	I had personal problems	
	late			
0	Other (please specify):			

# Are you currently attending a community college, university, or vocational/technical school?

O Yes, full-time (12 or more semester hours or equivalent)

O Yes, part-time (6 semester hours or equivalent)

What is the name of the Postsecondary Education or Training Program you are currently attending?

### What is your major or area of study?

# Are you currently going to school and working at the same time? (This does not include work study or work associated with financial aid)

0	Yes, going to school ar	nd working part-time	(20 or fewer hours a week)
---	-------------------------	----------------------	----------------------------

O Yes, going to school and working full-time (30 or more hours a week)

O No, I am not working but I am going to school

	Who influenced your decision to go on to college after high school? (community college, university or vocational/technical school) (Choose all that apply)			
0	Parents	0	High school counselor	
0	Brother/Sister	0	Mentor	
0	Close relatives	0	Pastor/Clergy	
0	Friend	0	Employer	
0	High school teacher	0	Someone already working in the field	
0	High school coach	0	Someone else (please specify):	

# If you are currently enrolled in a community college, university or vocational/technical school what support services or accommodations do you receive? (Check all that apply)

0	NA, I do not receive support services	0	Large print materials		
	or accommodations				
0	Tutor	0	Additional time for assignments		
0	Copy of class notes from scribe	0	Sign language interpreter		
0	Test modifications	0	Special seating in the classroom		
0	Adaptive equipment	0	Employment assistance		
0	Taped textbooks	0	Help in accessing support services		
0	Help finding a personal assistant	0	Other (Please specify):		
0	Help with registration and/or	0	Other (Please specify):		
	scheduling				

# VII. Independent Living and Community Resources

W	Where do you currently live?				
0	Live on my own, independent of	0	Live in a group home		
	parent(s) or relative				
0	With parent(s) or other relatives	0	Live with foster companion		
0	Live with husband or wife	0	College dorm most of the year		
0	Live with boyfriend or girlfriend	0	Fraternity/Sorority house		
0	Live with roommate/friend	0	Other (Please specify):		

# Is this the same place you lived while you were in high school? O Yes O No

W	Where do you EXPECT to live in 3-5 years?				
0	Live on my own, independent of	0	Live in a group home		
	parent(s) or relative				
0	With parent(s) or other relatives	0	Live with foster companion		
0	Live with husband or wife	0	College dorm most of the year		
0	Live with boyfriend or girlfriend	0	Fraternity/Sorority house		
0	Live with roommate/friend	0	Other (Please specify):		

### If you are still living at home what is the main reason?

 Do you pay your own living expenses (rent, groceries, phone bill, etc)?

 O
 Yes

 O
 Na

O No

Do you earn enough money to pay your own living expenses (rent, groceries, phone bill, etc)?

- O Yes
- O No

Do	Do you receive assistance or services from the following? (Check all that apply)						
0	Money from parent(s) or other relatives	0	WIA (formerly JTPA)				
0	Scholarships/Endowments (Example: College scholarship for tuition and housing costs)	0	Transportation assistance (Example: MITS, HandiTran, city bus system, Taxi cabs, etc.)				
0	Social Security benefits (SSI, SSDI, SSA)	0	Women, Infants, and Children ( <i>WIC</i> ) program				
0	Food stamps	0	Section 8 housing assistance				
0	TANF (formerly AFDC and JOBS)	0	Public utility assistance				
0	Medicaid/Medicare	0	Blind and Visually Impaired Services (DARS)				
0	Employment assistance (Example: Ticket to Work)	0	Mental Retardation Services (DADS)				
0	Healthcare/medical assistance (Example: health insurance through your job)	0	Deaf and Hard of Hearing Services (DARS)				
0	Rehabilitation Services (DARS) - formerly <i>TRC</i>	0	Mental Health Services (DSHS)				
0	Office of Disability Services	0	Texas Workforce Commission				
0	(College/University) Texas Youth Commission (TYC)	0	(TWC) Other (please specify)				

# When you have free time who do you prefer to spend most of your time with?

- O I prefer to chill out by myself
- O My family
- O My friends
- O Other (Please specify):

# **Do you get out of the house at least once a week to take part in social or entertainment activities?** (For example: go out to eat, go to the park, go to the movies, attend church, attend a social event, go to a museum or to the zoo, etc.)

- O Yes
- O No

	Looking back over this <u>past month</u> which of the following activities have you done at least once? (Please check <u>all</u> that apply)						
0	Spent time with family	0	Spent time "hanging out" with friends				
0	Attended church or religious services/activities	0	Went out to eat at a restaurant				
0	Watched TV, videos, or DVDs	0	Went to the mall				
0	Played video games	0	Went to a gym				
0	Listened to music	0	Traveled				
0	Browsed the Internet	0	Went to the movies				
0	Sent or received email	0	Watched sports programs on TV or in person				
0	Read a newspaper or magazine	0	Checked out a book to read from the library				
0	Took a class for fun (For example: a photography class, an acting class, a computer class, etc.)	0	Volunteered time to work at a community organization or business				
0	Played league sports (For example: baseball, bowling, basketball, etc.)	0	Attended a self-advocacy activity, training, support group				
0	Worked on hobbies (For example: model cars, scrapbook, painting, collecting, etc)	0	Attended a meeting of a civic organization (Rotary Clubs, Lions Clubs, etc.)				
0	Spent time on outdoor activities like fishing, camping, and hiking	0	Joined a community theatre or arts group to express the artist in me				
0							

Please respond to the following questions by answering YES or No.			
Question	YES	NO	
Do you have a driver's license?	0	0	
Are you registered to vote?	0	0	
Do you have your own checking or saving's account at a bank?	0	0	
Do you have investments? (For example: stocks, bonds, mutual funds)	0	0	
Do you have your own credit card?	0	0	
Have you received a traffic ticket since high school? (Ex: speeding, no seat belt, etc.)	0	0	
Have you been arrested since high school (Ex: theft, assault, etc.)	0	0	

What has been your greatest challenge since graduating or leaving high school?

What has been your greatest success or victory since graduating or leaving high school?

### Which teacher knows the most about you?

THANK YOU for taking time to complete this survey.

The information that you provide will help schools evaluate and plan education programs for all students. All information you provide is confidential and no information will be released in reports that will identify you personally. You will be contacted again in about one year to follow-up on how you are doing after high school.

APPENDIX C

# CONSENT FORMS FOR EXIT AND POST-SCHOOL SURVEYS

#### Student Consent/Assent Form

I have been asked to participate in a research study about post-secondary outcomes in Bryan Independent School District. I was selected to be a possible participant because I am graduating from BISD in May 2005. A total of 170 students have been asked to participate in this study. The purpose of this study is to examine how successful BISD is at preparing all students for successful post-secondary goals.

If I agree to be in this study, I will be asked to complete two surveys. The first survey will be administered in May 2005 prior to my high school graduation. This survey is expected to take 15-30 minutes to complete and will be administered at my school prior to graduation. I will participate in the second survey in September 2005. This survey is expected to take 30-45 minutes to complete. The risks associated with this study are minimal and none are expected. The benefits of participation are a random drawing of prizes including gift certificates to local stores and restaurants and a grand prize of a CD player. Two rounds of drawings will held following each survey administration. In addition by participating in this study, I understand that contact information will be collected for me and my parent(s)/guardian(s). This information will include name, address, and phone numbers.

This study is confidential. I will be assigned a randomly generated identification number. Only Kendra L. Williams-Diehm, principal investigator, and Linda Montoya, director of special services at Bryan Independent School District, will be able to identify my survey. In addition, the records of this study will be kept private. No identifiers linking me to the study will be included in any sort of report that might be published. Research records will be stored securely and only Kendra L. Williams-Diehm, principal investigator, will have access to the records. My decision whether or not to participate will not affect my current or future relations with Texas A&M University or Bryan Independent School District. If I decide to participate, I am free to refuse to answer any of the questions that may make me uncomfortable. I can withdraw at any time with out my relations with Texas A&M University or Bryan Independent School District being affected. I can contact Kendra L. Williams-Diehm at (979) 845-2317 (kwilliams@coe.tamu.edu). I can also contact the Educational Psychology department head, Dr. Michael Benz, at 979-845-1394 or by email (mbenz@tamu.edu).

Kendra L. Williams-Diehm is a doctoral student at Texas A&M University. She is working directly with Bryan Independent School District with this project. BISD has agreed to allow Ms. Williams-Diehm access to the data for dissertation purposes.

This research has been reviewed by the Institutional Review Board-Human Subjects in Research Texas A&M University. For research-related problems or questions regarding subjects' rights, I can contact the institutional Review Board through Ms. Angelia Raines, Director of Research Compliance, Office of the Vice President for Research, at (979) 458-4067 (<u>araines@vprmail.tamu.edu</u>).

I have read the above information. I have asked questions and have received answers to my satisfaction. I have been given a copy of this consent document for my records. By signing this document, I consent to participate in the study.

Signature:	Date:
Signature of investigator:	Date:
Signature of Special Services Director:	Date:

#### Parent Consent Form

My child has been asked to participate in a research study about post-secondary outcomes at Bryan Independent School District. My child was selected to be a possible participant because he/she is graduating from BISD in May 2005. A total of 180 students have been asked to participate in this study. The purpose of this study is to examine how successful BISD is at preparing all students for successful post-secondary goals.

If I agree to be in this study, my child will be asked to complete two surveys. The first survey will be administered in May 2005 prior to my child's high school graduation. This survey is expected to take 15 minutes to complete and will be administered at my child's school. The second survey will be administered in September 2005 following your child's high school graduation. This survey is expected to take 30 minutes to complete. The risks associated with this study are minimal and none are expected. The benefits of participation are a random drawing of prizes available to my child including gift certificates to local stores and restaurants and a grand prize of a CD player. Two rounds of drawings will held following each survey administration. In addition, by having my child participate in this study, I understand that contact information will be collected for my child and his/her parent(s)/guardian(s). This information will include name, address, and phone numbers.

This study is confidential. You child will be assigned a randomly generated identification number. Only the principal investigator, Kendra L. Williams-Diehm, will be able to identify the survey to your child. In addition, the records of this study will be kept private. No identifiers linking your child to the study will be included in any sort of report that might be published. Research records will be stored securely and only Kendra L. Williams-Diehm, principal investigator, and Linda Montoya, director of special services at Bryan Independent School District, will have access to the records. My decision whether or not to allow my child to participate will not affect my child's current or future relations with Texas A&M University or Bryan Independent School District. If I decide to allow my child to participate, my child is free to refuse to answer any of the questions that may makes him/her uncomfortable. In addition, my child can withdraw at any time with out relations with Texas A&M University or Bryan Independent I can contact Kendra L. Williams-Diehm at (979) 845-2317 (kwilliams@coe.tamu.edu). I can also contact the Educational Psychology department head, Dr. Michael Benz, at 979-845-1394 or by email (mbenz@tamu.edu).

Kendra L. Williams-Diehm is a doctoral student at Texas A&M University. She is working directly with Bryan Independent School District with this project. BISD has agreed to allow Ms. Williams-Diehm access to the data for dissertation purposes.

This research has been reviewed by the Institutional Review Board-Human Subjects in Research Texas A&M University. For research-related problems or questions regarding subjects' rights, I can contact the institutional Review Board through Ms. Angelia Raines, Director of Research Compliance, Office of the Vice President for Research, at (979) 458-4067 (araines@vprmail.tamu.edu).

I have read the above information. I have asked questions and have received answers to my satisfaction. I have been given a copy of this consent document for my records. By signing this document, I consent to allowing my child to participate in the study.

. . . . . .

Name of Child:		
Signature:	Date:	_
Signature of investigator:	Date:	
Signature of Special Services Director:	Date:	_

APPENDIX D

LETTERS FOR EXIT AND POST-SCHOOL SURVEYS

Dear Parent(s)/Guardian(s),

Congratulations on your child's upcoming high school graduation. Graduation is just as much a reflection on parents as it is on students. Your hard work and support of your child is evident and we congratulate you.

Beginning in May, Bryan Independent School District will be administering surveys to graduating seniors on how successful BISD is at preparing students for postsecondary outcomes. We believe this information is extremely important, as we are constantly improving our current educational program. A total of 180 graduating seniors were randomly selected to participate in this study.

Your child was selected! To participate in the study, your child will be asked to complete two surveys. The first survey will be administered in May 2005 prior to your child's high school graduation. This survey is expected to take 30 minutes to complete and will be administered at your child's school. The second survey will be administered in September 2005. This survey is expected to take 30-45 minutes to complete. The risks associated with this study are minimal and none are expected. The benefits of participation are a random drawing of prizes including gift certificates to local stores and restaurants and a grand prize of a CD player for your child. Two rounds of drawings will be held following each survey administration.

Enclosed in this letter are two copies of an informed consent form. This consent form is a requirement of all institutions wishing to conduct research. Please retain one copy for your personal records and sign and return the second copy in the provided envelope.

We at BISD are excited about these surveys. We strongly feel that the information provided will be a huge asset to our planning. Thank you for your cooperation. If you have further questions about this study or do not want your child to participate, please contact Linda Montoya at (979) 209-1036 or Kendra L. Williams-Diehm at (979) 845-2317.

Thank you in advance for your cooperation,

Linda Montoya, Director of Special Services Kendra L. Williams-Diehm Texas A&M University June, 2005

Dear BISD Graduate,

Congratulations on your recent graduation from Bryan Independent School District. Your years of hard work have finally paid off! However, BISD is still hard at work and wants your input.

Beginning in May, BISD began administering surveys to graduating seniors on how successful BISD was at preparing students for post-secondary outcomes. We believe this information is extremely important, as we are constantly improving our current educational program. Over 170 graduating seniors were randomly selected to participate in this study, and you are one of them.

To participate in the study, you will be asked to complete two surveys. The first survey is included in this letter. The second survey will be administered in September 2005. The benefits of participation are a random drawing of prizes including gift certificates to local stores and restaurants and a grand prize of a CD player. Two rounds of drawings will be held following each survey administration.

Enclosed in this letter are two copies of an informed consent form. This consent form is a requirement of all institutions wishing to conduct research. Please keep one copy for your personal records and sign and return the second copy with the completed survey in the provided envelope. If you choose to not participate in the survey, please return a blank survey in the envelope so that we can remove your name from all future correspondence.

We are excited about these surveys. We strongly feel that the information provided will be a huge asset to our planning. Thank you for your cooperation. If you have further questions about this study or do not want to participate, please contact Linda Montoya at (979) 209-1036 or Kendra L. Williams-Diehm at (979) 845-2317.

### And again – Congratulations!

Thank you in advance for you help,

Linda Montoya, Director of Special Services Kendra Williams-Diehm Texas A&M University October, 2005

Dear <Insert Student Name>,

Congratulations on your recent graduation from Bryan High School. Your years of hard work have finally paid off! However, Bryan High School is still hard at work and wants your input.

If you remember, in May you completed a survey at Bryan High School. We missed you at Bryan High School when the second survey was administered, but we believe your input is valuable. The same survey is attached in this letter and should take between 30-45 minutes to complete.

Results from this survey will be used to help Bryan ISD and Bryan High School prepare for future graduates. BHS strives to help ensure students of success following graduation and this information is very important to us. When you return your completed survey, your name will be added to a list of participants for a random drawing of door prizes.

I want to remind you that your answers are completely confidential and will be released only as summaries in which no individual's answers can be identified. And, as with the other survey, this is voluntary. You can help us out tremendously by returning the survey in the enclosed envelope. If you would like to not respond, however, I do ask that you return the envelope with a blank survey attached. This will end all future communication.

### And again – Congratulations!

Thank you in advance for you help,

Linda Montoya, Director of Special Services Kendra L. Williams-Diehm Texas A&M University APPENDIX E

# POST-SECONDARY SKILL AREA SURVEY FOR TEACHERS



### Instructions

- •
- Read each skill listed below carefully. Fill in the circle that tells how prepared your ٠ feel this student is in performing the skill listed.

# Student's Name: \_

# Teacher's Name: \_\_\_\_\_

Skill Area	Student can do this <b>by</b> <b>his/herself</b>	Student can do this <b>with</b> <b>help</b>	Student is not prepared to do this
Read and understand printed technical instruction (For example: Instruction on how to program a cell phone or install a DVD player)	0	0	0
Read newspapers, book and/or magazines	0	0	0
Apply math at home and work (For example: calculate a paycheck, figure the cost of a sale item, or use measure when cooking)	0	0	0
Use study skills to learn new things	0	0	0
Follow a schedule (For example: complete everyday jobs when due)	0	0	0
Report to work or school on time	0	0	0
Get along with other at work and school	0	0	0
Make good decisions	0	0	0
Monitor own progress on assignments at school or work	0	0	0
Ask for help when needed at school or work	0	0	0
Teach others new skills	0	0	0
Work with others on a team	0	0	0
Get along with others at work and school	0	0	0
Work with others who are different	0	0	0
Use a computer to write letters/reports	0	0	0
Use a computer for Internet/email	0	0	0
Budget own money	0	0	0
Cook food for self	0	0	0
Do own laundry	0	0	0
Find a place to live	0	0	0
Take care of health needs (For examples: Make an appointment with a doctor or fill a prescription)	0	0	0
Find help in the community if needed	0	0	0
Find own job	0	0	0
Apply for admission to a community college, University of Technical College	0	0	0
Make a plan for his/her future (that means can decide what he/she wants to do and make sure it happens)	0	0	0

APPENDIX F

## CONSENT FORM FOR POST-SECONDARY SKILL AREA SURVEY

### Teacher Consent Form

I have been asked to participate in a research study about post-secondary outcomes in Bryan Independent School District. I was selected to be a possible participant because I am the designated teacher of a student who graduated in May 2005. A total of 170 students were originally asked to participate in this study. The purpose of this study is to examine how successful BISD is at preparing all students for successful post-secondary goals and to determine if students have an accurate selfperception of themselves.

If I agree to be in this study, I will be asked to complete a short questionnaire. The questionnaire is expected to take roughly 5 minutes to complete. The risks associated with this study are minimal and none are expected. The benefits of participation are a random drawing of prizes including gift certificates to local restaurants.

This study is confidential. I will be assigned a randomly generated identification number. Only Kendra L. Williams-Diehm, principal investigator, and Linda Montoya, director of special services at Bryan Independent School District, will be able to identify my survey. In addition, the records of this study will be kept private. No identifiers linking me to the study will be included in any sort of report that might be published. Research records will be stored securely and only Kendra L. Williams-Diehm, principal investigator, will have access to the records. My decision whether or not to participate will not affect my current or future relations with Texas A&M University or Bryan Independent School District. If I decide to participate, I am free to refuse to answer any of the questions that may make me uncomfortable. I can withdraw at any time with out my relations with Texas A&M University or Bryan Independent School District being affected. I can contact Kendra L. Williams-Diehm at (979) 845-2317 (kwilliams@coe.tamu.edu). I can also contact the Educational Psychology department head, Dr. Michael Benz, at 979-845-1394 or by email (mbenz@tamu.edu).

Kendra L. Williams-Diehm is a doctoral student at Texas A&M University. She is working directly with Bryan Independent School District with this project. BISD has agreed to allow Ms. Williams-Diehm access to the data for dissertation purposes.

This research has been reviewed by the Institutional Review Board-Human Subjects in Research Texas A&M University. For research-related problems or questions regarding subjects' rights, I can contact the institutional Review Board through Ms. Angelia Raines, Director of Research Compliance, Office of the Vice President for Research, at (979) 458-4067 (araines@vprmail.tamu.edu).

I have read the above information. I have asked questions and have received answers to my satisfaction. I have been given a copy of this consent document for my records. By signing this document, I consent to participate in the study.

Teacher Signature:	Date:
Signature of investigator:	Date:
Signature of Special Services Director:	Date:

APPENDIX G

LETTER FOR SKILL AREA SURVEY

January, 2006

Dear BISD Teacher,

Seeing students graduate from high school is one of the true accomplishments a teacher experiences. You deserve recognition for all your time and energy you put into educating the students in Bryan Independent School District.

Last May, Bryan Independent School District began administering surveys to graduating seniors on how successful BISD was at preparing students for post-secondary outcomes. We believe this information is extremely important, as we are constantly improving our current educational program. A total of 180 graduating seniors were randomly selected to participate in this study.

You have been selected through the students responses as a teacher who made a difference within their life! We are asking selected teachers to fill out a one page questionnaire regarding your student's skill ability upon leaving high school. The questionnaire should only take roughly 5 minutes to complete.

Enclosed in this letter are two copies of an informed consent form. This consent form is a requirement of all institutions wishing to conduct research. Please retain one copy for your personal records and sign and return the second copy along with the completed questionnaire in the provided envelope. A drop box has been placed in the Blue Campus Office to return the information.

We at BISD are excited about this information. We strongly feel that the information provided will be a huge asset to our planning. Thank you for your cooperation. If you have further questions about this study, please contact Linda Montoya at (979) 209-1036 or Kendra L. Williams-Diehm at (979) 845-2317.

Thank you in advance for your cooperation,

Linda Montoya, Director of Special Services Kendra L. Williams-Diehm Texas A&M University APPENDIX H

FOCUS GROUP GUIDING QUESTIONS

### Focus Group Guiding Questions

- 1. What was the most beneficial aspect of participating in the study?
- 2. What was the most frustrating aspect of participating in the study?
- 3. What is one thing you would change about the survey that would encourage more students to participate?
- 4. What is the most effective way to reach students after high school graduation?
  - a. Postal mail
  - b. Email
  - c. Telephone
  - d. Other
- 5. What door prize would encourage students to participate?
- 6. Do you see the benefit of Bryan ISD continuing to collect similar information on high school graduates?
- 7. Specific questions related to questionnaire items

# APPENDIX I

**QUESTION 1: FULL RESULTS** 

Table I-1

Statistic Model  $L^2$ df  $L^2/df$ pcalculated Baseline 0.00000 Null, equiprobability model 120.53670 23 5.24073 Single Margins HS\_act 0.00000 120.53670 22 5.47894 0.00000 169.98078 22 HS\_ext 7.72640 ed\_set 0.00000 187.66400 22 8.53018 ethnic 0.00000 212.75159 21 10.13103 Two Margins HS\_act, HS\_ext 0.00000 77.69123 21 3.69958 HS\_act, ed\_set 0.00000 95.37445 21 4.54164 HS\_act, ethnic 0.00000 120.46204 20 6.02310 HS\_ext, ed\_set 0.00000 144.81852 21 6.89612 HS\_ext, ethnic 0.00000 169.90611 20 8.49531 0.00000 187.58934 20 9.37947 ed\_set, ethnic Three Margins 0.00000 52.52897 20 HS\_act, HS\_ext, ed\_set 2.62645 19 HS act, HS ext, ethnic 0.00000 77.61656 4.08508 HS\_act, ed\_set, ethnic 0.00000 95.29978 19 5.01578 19 HS\_ext, ed\_set, ethnic 0.00000 144.74386 7.61810 Four Margins HS\_act, HS\_ext, ed\_set, ethnic 0.00000 18 52.45430 2.91413 1 Two-way Relationship HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext 0.00010 41.69062 17 2.45239 HS act, HS ext, ed set, ethnic, HS act by ed set 48.05389 17 0.00000 2.82670 0.00000 3.07922 HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by ethnic 49.26755 16 HS\_act, HS\_ext, ed\_set, ethnic, HS\_ext by ed\_set 0.00600 35.05203 17 2.06188 HS\_act, HS\_ext, ed\_set, ethnic, HS\_ext by ethnic 0.00000 49.50548 16 3.09409 HS\_act, HS\_ext, ed\_set, ethnic, ed\_set by ethnic 0.00000 52.31912 16 3.26995 2 Two-way Relationships HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, 0.00200 37.29021 16 2.33064 HS\_act by ed\_set HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, 0.00100 38.50386 15 2.56692 HS act by ethnic HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, 0.08300 24.28835 16 1.51802 HS\_ext by ed\_set

Model Fit Statistics for all Possible Loglinear Models: HS Sponsored Activities by HS Extracurriculuar Activities, Educational Setting and Ethnicity

	HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_ext by ethnic	0.00100	38.74179	15	2.58279
	HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.00000	41.55544	15	2.77036
	ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set,	0.00000	44.86714	15	2.99114
	HS_act by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set,	0.01500	30.65162	16	1.91573
	HS_ext by ed_set HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set,	0.00000	45.10507	15	3.00700
	HS_ext by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set,	0.00000	47.91871	15	3.19458
	ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ethnic,	0.00700	31.86528	15	2.12435
	HS_ext by ed_set HS_act, HS_ext, ed_set, ethnic, HS_act by ethnic,	0.00000	46.31872	14	3.30848
	HS_ext by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ethnic,	0.00000	49.13236	14	3.50945
	ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_ext by ed_set,	0.00600	32.10320	15	2.14021
	HS_ext by ethnic				
	HS_act, HS_ext, ed_set, ethnic, HS_ext by ed_set, ed_set by ethnic	0.00300	34.91685	15	2.32779
	HS_act, HS_ext, ed_set, ethnic, HS_ext by ethnic, ed_set by ethnic	0.00000	49.37029	14	3.52645
31	Two-way Relationships				
	HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic	0.00200	34.10345	14	2.43596
	HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_ext by ed_set	0.08400	23.02375	15	1.53492
	HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.00200	34.34138	14	2.45296
	HS_act by ed_set, HS_ext by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.00100	37.15503	14	2.65393
	HS_act by ed_set, ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.09900	21.10159	14	1.50726
	HS_act by ethnic, HS_ext by ed_set HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.00100	35.00148	13	2.69242
	HS_act by ethnic, HS_ext by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.00000	38.36868	13	2.95144
	HS_act by ethnic, ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.09300	21.33952	14	1.52425
	HS_ext by ed_set, HS_ext by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.04400	24.15317	14	1.72523
	HS_ext by ed_set, ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,	0.00000	38.60661	13	2.96974
	HS_ext by ethnic, ed_set by ethnic				
	HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set	0.01700	27.46487	14	1.96178
	HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_act by ethnic, HS_ext by ethnic	0.00000	41.91831	13	3.22449
	HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_act by ethnic, ed_set by ethnic	0.00000	44.81361	13	3.44720
	_ , _ ,				

HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_ext by ed_set, HS_ext by ethnic	0.01600	27.70279	14	1.97877
HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set,	0.00600	30.51644	14	2.17975
HS_ext by ed_set, ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set,	0.00000	44.96988	13	3.45922
HS_ext by ethnic, ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ethnic,	0.00700	28.91645	13	2.22434
HS_ext by ed_set, HS_ext by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ethnic,	0.00300	31.73009	13	2.44078
HS_ext by ed_set, ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ethnic,	0.00000	46.18354	12	3.84863
HS_ext by ethnic, ed_set by ethnic HS_act, HS_ext, ed_set, ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic 4 Two-way Relationships	0.00300	31.87639	13	2.45203
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set	0.09900	19.83699	13	1.52592
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ethnic	0.00200	30.60107	12	2.55009
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, ed_set by ethnic	0.00100	34.04993	12	2.83749
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_ext by ed_set, HS_ext by	0.09300	20.07492	13	1.54422
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_ext by ed_set, ed_set by	0.04300	22.88856	13	1.76066
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_ext by ethnic, ed_set by	0.00100	34.22955	12	2.85246
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ethnic, HS_ext by ed_set, HS_ext by	0.12800	17.59921	12	1.46660
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ethnic, HS_ext by ed_set, ed_set by	0.05000	21.02687	12	1.75224
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ethnic, HS_ext by ed_set, HS_ext by	0.12800	17.59921	12	1.46660
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ethnic, HS_ext by ed_set, ed_set by	0.05000	21.02687	12	1.75224
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by	0.01700	24.47894	12	2.03991
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, ed_set by ethnic	0.00700	27.41134	12	2.28428

HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_act by ethnic, HS_ext by ethnic, ed_set by	0.00000	41.86479	11	3.80589
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_ext by ed_set, HS_ext by ethnic, ed_set by	0.00700	27.47398	12	2.28950
ethnic HS_act, HS_ext, ed_set, ethnic, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic	0.00300	28.68964	11	2.60815
5 Two-way Relationships				
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic	0.12900	16.33461	11	1.48496
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, ed_set by ethnic	0.04800	19.78347	11	1.79850
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ethnic, ed_set by ethnic	0.00100	30.54755	10	3.05476
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic	0.04700	19.84811	11	1.80437
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic	0.06700	17.37240	10	1.73724
HS_act, HS_ext, ed_set, ethnic, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic 6 Two-way Relationships	0.00700	24.37089	10	2.43709
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic 6 Two-way Relationships, 1 Three-way Relationship	0.06300	16.21455	9	1.80162
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic, HS_act by HS_ext by ed_set	0.12600	12.60447	8	1.57556
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic, HS_act by HS_ext by ethnic	0.05700	13.71027	7	1.95861
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic, HS_act by ed_set by ethnic	0.02400	16.09618	7	2.29945
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic, HS_ext by ed_set by ethnic	0.17000	10.34917	7	1.47845

by ed\_set by ethnic

6 Two-way	Relationships.	2 Three-way	<b>Relationships</b>

HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ed\_set, HS\_act by HS\_ext by ethnic HS act, HS ext, ed set, ethnic, HS act by HS ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ed\_set, HS\_act by ed\_set by ethnic HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ed\_set, HS\_ext by ed\_set by ethnic HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ethnic, HS\_act by ed\_set by ethnic HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ethnic, HS\_ext by ed\_set by ethnic HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by ed\_set by ethnic, HS\_ext by ed\_set by ethnic 6 Two-way Relationships, 3 Three-way Relationships HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext,

HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ed\_set, HS\_act by HS\_ext by ethnic, HS\_act by ed\_set by ethnic HS act, HS ext, ed set, ethnic, HS act by HS ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ed\_set, HS\_act by HS\_ext by ethnic, HS\_ext by ed\_set by ethnic HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, HS\_act by ed\_set, HS\_act by ethnic, HS\_ext by ed\_set, HS\_ext by ethnic, ed\_set by ethnic, HS\_act by HS\_ext by ed\_set, HS\_act by ed\_set by ethnic, HS\_ext by ed\_set by ethnic HS\_act, HS\_ext, ed\_set, ethnic, HS\_act by HS\_ext, HS act by ed set, HS act by ethnic, HS ext by ed set, HS ext by ethnic, ed set by ethnic, HS act by HS\_ext by ethnic, HS\_act by ed\_set by ethnic, HS ext by ed set by ethnic

0.11600	10.20952	6	1.70159
0.05300	12.44805	6	2.07468
0.51100	5.25556	6	0.87593
0.02100	13.24986	5	2.64997
0.21800	7.03185	5	1.40637
0.07300	10.07201	5	2.01440
0.03900	10.09082	4	2.52271
0.61400	2.67046	4	0.66762
0.35200	4.42037	4	1.10509
0.07600	6.86064	3	2.28688

6 Two-way Relationships, 4 Three-way Relationships				
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic, HS_act by HS_ext by ed_set, HS_act by HS_ext by ethnic, HS_act by ed_set by ethnic, HS_ext by ed_set by ethnic Saturated (df=0) Model	0.43800	1.65106	2	0.82553
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext, HS_act by ed_set, HS_act by ethnic, HS_ext by ed_set, HS_ext by ethnic, ed_set by ethnic, HS_act by HS_ext by ed_set, HS_act by HS_ext by ethnic, HS_act by ed_set by ethnic, HS_ext by ed_set by ethnic, HS_act by HS_ext by ed_set by		0.00000	0	

Table I-2 Model Fit Statistics for all Interested Loglinear Models: HS Sponsored Activities, HS Extracurriculuar Activities, Educational Setting and Gender

Model –	Statistic			
	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	106.52414	15	7.10161
5 Two-way Relationships				
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender	0.23800	8.00340	6	1.33390
HS_ext by ed_set, HS_ext by gender HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, ed_set by gender	0.24200	7.95071	6	1.32512
HS_ext, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by gender, ed_set by gender	0.00100	22.19685	6	3.69948
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_ext by ed_set, HS_ext by gender, ed_set by gender	0.20200	8.52840	6	1.42140
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender	0.16400	9.17459	6	1.52910
HS_act, HS_ext, ed_set, gender, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender 6 Two-way Relationships	0.01700	15.52147	6	2.5869
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender 6 Two-way Relationships, 1 Three-way	0.15900	7.94600	5	1.58920
Relationship				
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set	0.36300	4.32977	4	1.08244
HS_act, HS_act by HS_ent by ed_set HS_act, HS_act by ed_set, HS_act by gender, HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by gender	0.09400	7.93470	4	1.98368
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by	0.10300	7.70695	4	1.92674
gender, HS_act by ed_set by gender HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by	0.26200	5.25752	4	1.31438

gender, HS\_ext by ed\_set by gender

6 Two-way Relationship, 2 Three-way Relationships				
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_act	0.23000	4.30902	3	1.43634
by HS_ext by gender HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_act by ed_set by gender	0.25300	4.07604	3	1.35868
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_ext by ed_set by gender	0.57600	1.98365	3	0.66122
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by gender, HS_act by ed_set by gender	0.05300	7.70453	3	2.56818
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by gender, HS_ext by ed_set by gender	0.15900	5.18638	3	1.72879
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by ed_set by gender, HS_ext by ed_set by gender 6 Two-way Relationships, 3 Three-way Relationships	0.21400	3.37602	3	1.12534
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_act by HS_ext by gender, HS_act by ed_set by gender	0.13100	4.06760	2	2.03380
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_act by HS_ext by gender, HS_ext by ed_set by gender	0.37800	1.94739	2	0.97370
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_act by ed_set by gender, HS_ext by ed_set by gender	0.52300	1.29803	2	0.64902

<ul> <li>HS_act, HS_ext, ed_set, gender, HS_act by</li> <li>HS_ext, HS_act by ed_set, HS_act by gender,</li> <li>HS_ext by ed_set, HS_ext by gender, ed_set by</li> <li>gender, HS_act by HS_ext by gender, HS_act</li> <li>by ed_set by gender, HS_ext by ed_set by</li> <li>gender</li> <li>6 Two-way Relationships, 4 Three-way</li> <li>Relationships</li> </ul>	0.10700	4.47584	2 2.23792
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_act by HS_ext by gender, HS_act by ed_set by gender, HS_ext by ed_set by gender, HS_ext by ed_set by gender HS_ext by ed_set by gender Saturated (df=0) Model	0.256	1.29012	1 1.29012
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender, HS_act by HS_ext by ed_set, HS_act by HS_ext by gender, HS_act by ed_set by gender, HS_ext by ed_set by gender, HS_act by HS_ext by ed_set by gender		0.00000	0

Table I-3

Model Fit Statistics for all Interested Loglinear Models: HS Sponsored Activities, HS Extracurriculuar Activities, Educational Setting and Socio-Economic Status

	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	121.64848	15	7.1016
5 Two-way Relationships				
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES	0.00300	19.60450	6	1.3339
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, ed_set by SES	0.00000	28.20940	6	1.3251
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by SES, ed_set by SES	0.00000	31.20101	6	3.6994
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_ext by ed_set, HS_ext by SES, ed_set by SES	0.00100	21.68425	6	1.4214
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES	0.00200	20.52327	6	1.529
HS_act, HS_ext, ed_set, SES, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES Two-way Relationships	0.00000	28.38193	6	2.5869
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES Two-way Relationships, 1 Three-way Relationship	0.00200	19.11199	5	1.5892
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES, HS_act by HS ext by ed set	0.00400	15.51841	4	1.0824
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES, HS_act by HS_ext by SES	0.02000	11.71045	4	1.9830
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES, HS_act by ed_set by SES	0.00100	19.01699	4	1.926
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES, HS_ext by ed_set by SES	0.00400	15.31847	4	3.8290

6 Two-way Relationships, 2 Three-way Relationships	
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by	0.0
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by ed_set, HS_act by HS_ext by SES	
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by	
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by ed_set, HS_act by ed_set by SES	
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by	
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by ed_set, HS_ext by ed_set by SES	
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by	
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by SES, HS_act by ed_set by SES	0.0
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by SES, HS_ext by ed_set by SES, HS_ext by	
HS_cxt by SES, HS_cxt by Cd_sct by SES HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by	0.0
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
ed_set by SES, HS_ext by ed_set by SES	
6 Two-way Relationships, 3 Three-way Relationships	
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by	0.0
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by ed_set, HS_act by HS_ext by SES,	
HS_act by ed_set by SES	
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.4
HS_act by ed_set, HS_act by SES, HS_ext by	
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by ed_set, HS_act by HS_ext by SES,	
HS_ext by ed_set by SES	
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	0.0
HS_act by ed_set, HS_act by SES, HS_ext by	
ed_set, HS_ext by SES, ed_set by SES, HS_act by	
HS_ext by ed_set, HS_act by ed_set by SES,	
HS_ext by ed_set by SES HS_act HS_ext ed_set SES_HS_act by HS_ext	0.0
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by	0.0
ed_set, HS_ext by SES, ed_set by SES, HS_ext by	
HS_ext by SES, HS_act by ed_set by SES, HS_ext	
by ed_set by SES	
- , - 5_0000 ; 828	

0.06200	7.34312	3	2.44771
0.00100	15.48117	3	5.16039
0.01500	10.46785	3	3.48928
0.01500	10.45945	3	3.48648
0.08700	6.56988	3	2.18996
0.00200	15.28839	3	5.09613
0.02600	7.31799	2	3.65900
0.40900	1.78854	2	0.89427
0.00800	9.67232	2	4.83616
0.05200	5.90485	2	2.95243

6 Two-way Relationships, 4 Three-way Relationships				
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES, HS_act by HS_ext by ed_set, HS_act by HS_ext by SES, HS_act by ed_set by SES, HS_ext by ed_set by SES Saturated (df=0) Model	0.27500	1.19348	1	1.19348
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext, HS_act by ed_set, HS_act by SES, HS_ext by ed_set, HS_ext by SES, ed_set by SES, HS_act by HS_ext by ed_set, HS_act by HS_ext by SES, HS_act by ed_set by SES, HS_ext by ed_set by SES, HS_act by HS_ext by ed_set by SES		0.00000	0	

Table I-4

Test of the Effect of HS Sponsored Activities and HS Extracurricular Activities by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Model / Effect		Statistic	
	$L^2$	df	pcalculated
HS Sponsored Activities by Educational Setting			
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext,			
HS_act by gender, HS_ext by ed_set, HS_ext by	9.17459	6	
gender, ed_set by gender			
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext,			
HS_act by ed_set, HS_act by gender, HS_ext by	7.94600	5	
ed_set, HS_ext by gender, ed_set by gender			
Difference	1.22859	1	0.26768
HS Sponsored Activities by Gender			
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext,			
HS_act by ed_set, HS_ext by ed_set, HS_ext by	8.52840	6	
gender, ed_set by gender			
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext,			
HS_act by ed_set, HS_act by gender, HS_ext by	7.94600	5	
ed_set, HS_ext by gender, ed_set by gender			
Difference	0.58240	1	0.44537
HS Sponsored Activities by Ethnicity			
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,			
HS_act by ed_set, HS_ext by ed_set, HS_ext by	19.84811	11	
ethnic, ed_set by ethnic			
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,			
HS_act by ed_set, HS_act by ethnic, HS_ext by	16.21455	9	
ed_set, HS_ext by ethnic, ed_set by ethnic			
Difference	3.63356	2	0.16255
HS Sponsored Activities by Socio-Economic Status			
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,		_	
HS_act by ed_set, HS_ext by ed_set, HS_ext by	21.68425	6	
SES, ed_set by SES			
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,	10 11100	_	
HS_act by ed_set, HS_act by SES, HS_ext by	19.11199	5	
ed_set, HS_ext by SES, ed_set by SES	0.5500.6		0.10075
Difference	2.57226	1	0.10875
HS Extracurricular Acitivities by Educational Setting			
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext,	00 10 60 5	<i>.</i>	
HS_act by ed_set, HS_act by gender, HS_ext by	22.19685	6	
gender, ed_set by gender			
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext,	7.04600	~	
HS_act by ed_set, HS_act by gender, HS_ext by	7.94600	5	
ed_set, HS_ext by gender, ed_set by gender	11 75005	1	0.00016
Difference	14.25085	1	0.00016

HS Extracurricular Acitivities by Gender HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, ed_set by gender	7.95071	6	
HS_act, HS_ext, ed_set, gender, HS_act by HS_ext, HS_act by ed_set, HS_act by gender, HS_ext by ed_set, HS_ext by gender, ed_set by gender	7.94600	5	
Difference	0.00471	1	0.94528
HS Extracurricular Acitivities by Ethnicity			
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,			
HS_act by ed_set, HS_act by ethnic, HS_ext by	19.78347	11	
ed_set, ed_set by ethnic			
HS_act, HS_ext, ed_set, ethnic, HS_act by HS_ext,			
HS_act by ed_set, HS_act by ethnic, HS_ext by	16.21455	9	
ed_set, HS_ext by ethnic, ed_set by ethnic			
Difference	3.56892	2	0.16789
HS Extracurricular Acitivities by Socio-Economic			
Status			
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,			
HS_act by ed_set, HS_act by SES, HS_ext by	28.20940	6	
ed_set, ed_set by SES			
HS_act, HS_ext, ed_set, SES, HS_act by HS_ext,			
HS_act by ed_set, HS_act by SES, HS_ext by	19.11199	5	
ed_set, HS_ext by SES, ed_set by SES			
Difference	9.09741	1	0.00256

Educational Setting, Ethnicity, Gender and Socio-Economic Status by HS Sponsored Activities Participation in HS Sponsored Activities

Variable	Participation in HS Sponsored Activities		
vallable	No	Yes	
Full Sample	16.49%	83.51%	
Educational Setting			
General Education	12.50%	87.50%	
Special Education	25.00%	75.00%	
Ethnicity			
African-American	11.11%	88.89%	
Hispanic	15.63%	84.38%	
Anglo	22.95%	77.05%	
Gender			
Male	18.89%	81.11%	
Female	14.29%	85.71%	
Socio-Economic Status			
High SES	18.60%	81.40%	
Low SES	14.85%	85.15%	
N=188			

Table I-6

Variable	Participation in HS Extracurricular Ac		
variable	No	Yes	
Full Sample	26.60%	73.40%	
Educational Setting			
General Education	17.19%	82.81%	
Special Education	46.67%	53.33%	
Ethnicity			
African-American	22.22%	77.78%	
Hispanic	34.38%	65.63%	
Anglo	22.95%	77.05%	
Gender			
Male	27.78%	72.22%	
Female	25.51%	74.49%	
Socio-Economic Status			
High SES	16.28%	83.72%	
Low SES	35.64%	64.36%	

Educational Setting, Ethnicity, Gender and Socio-Economic Status by HS Extracurricular Activities

N=188

	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	119.67638	15	7.9784
Two-way Relationships				
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender	0.11500	10.24592	6	1.7076
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, ed_set by gender	0.11700	10.19610	6	1.6993
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by gender, ed_set by gender	0.06100	12.02809	6	2.004
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_comm by ed_set, HS_comm by gender, ed_set by gender	0.06500	11.86486	6	1.977
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by gender, HS_comm by	0.11600	10.20940	6	1.701
ed_set, HS_comm by gender, ed_set by gender HS_info, HS_comm, ed_set, gender, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender Two-way Relationships	0.03200	13.81324	6	2.302
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender Two-way Relationships, 1 Three-way Relationship	0.07000	10.18593	5	2.037
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set	0.25700	6.54296	4	1.635
by gender, HS_info by HS_comm by ed_set HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set	0.45300	4.70661	4	1.176
by gender, HS_info by HS_comm by gender HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set	0.05500	9.26910	4	2.3172
by gender, HS_info by ed_set by gender HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_comm by ed_set by gender	0.09600	7.89124	4	1.972

Table I-7 Model Fit Statistics for all Interested Loglinear Models: HS Information, HS Communication, Educational Setting and Gender

6 Two-way Relationships, 2 Three-way Relationships				
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_info by HS_comm by gender	0.95200	1.12119	5	0.22424
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_info by ed_set by gender	0.23300	5.57645	4	1.39411
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_comm by ed_set by gender	0.31200	4.76904	4	1.19226
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by gender, HS_info by ed_set by gender	0.37900	4.20241	4	1.05060
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by gender, HS_comm by ed_set by gender	0.69600	2.21866	4	0.55467
<ul> <li>HS_info, HS_comm, ed_set, gender, HS_info by</li> <li>HS_comm, HS_info by ed_set, HS_info by gender,</li> <li>HS_comm by ed_set, HS_comm by gender, ed_set</li> <li>by gender, HS_info by ed_set by gender, HS_comm</li> <li>by ed_set by gender</li> <li>6 Two-way Relationship, 3 Three-way Relationships</li> </ul>	0.06200	7.31568	3	2.43856
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_info by HS_comm by gender, HS_info by ed_set by gender	0.89100	1.12114	4	0.28029
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_info by HS_comm by gender, HS_comm by ed_set by gender	1.00000	0.00750	4	0.00188
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_info by ed_set by gender, HS_comm by ed_set by gender	0.28400	3.80069	3	1.26690

6 Two-way Relationships, 2 Three-way Relationships

<ul> <li>HS_info, HS_comm, ed_set, gender, HS_info by</li> <li>HS_comm, HS_info by ed_set, HS_info by gender,</li> <li>HS_comm by ed_set, HS_comm by gender, ed_set</li> <li>by gender, HS_info by HS_comm by gender,</li> <li>HS_info by ed_set by gender, HS_comm by ed_set</li> <li>by gender</li> <li>6 Two-way Relationships, 4 Three-way Relationships</li> </ul>	0.59300	1.89972	2	0.94986
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_info by HS_comm by gender, HS_info by ed_set by gender, HS_comm by ed_set by gender Saturated (df=0) Model	1	0.00000	3	0.00000
HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender, HS_info by HS_comm by ed_set, HS_info by HS_comm by gender, HS_info by ed_set by gender, HS_comm by ed_set by gender, HS_info by HS_comm by ed_set by gender		0.00000	0	

Model		Statistic		
viodel	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	123.45008	23	5.3673
5 Two-way Relationships				
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic	0.46600	10.73308	11	0.9757
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, ed_set by ethnic	0.14600	15.87989	11	1.4436
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ethnic, ed_set by ethnic	0.25300	12.50773	10	1.2507
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic	0.36700	11.95784	11	1.0870
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic	0.39500	10.53375	10	1.0533
HS_info, HS_comm, ed_set, ethnic, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic Two-way Relationships	0.15500	14.41079	10	1.4410
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic Two-way Relationships, 1 Three-way Relationship	0.31100	10.50849	9	1.1676
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set	0.65100	6.86495	9	0.7627
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ethnic	0.16400	10.46228	7	1.4946
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by ed_set by ethnic	0.48400	7.49762	8	0.9372
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set	0.28100	8.62256	7	1.2317

 Table I-8

 Model Fit Statistics for all Interested Loglinear Models: HS Information by HS Communication,

 Educational Setting and Ethnicity

6 Two-way Relationships, 2 Three-way Relationships				
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set	0.44600	6.83911	7	0.97702
by ethnic, HS_info by HS_comm by ed_set, HS_info by HS_comm by ethnic HS_info, HS_comm, ed_set, ethnic, HS_info by	0.93500	2.99319	8	0.37415
HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set, HS_info by ed_set by ethnic				
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set,	0.63500	5.20763	7	0.74395
HS_comm by ed_set by ethnic HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set	0.28100	7.45529	6	1.24255
by ethnic, HS_info by HS_comm by ethnic, HS_info by ed_set by ethnic HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic,	0.12700	8.57618	5	1.71524
HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ethnic, HS_comm by ed_set by ethnic HS_info, HS_comm, ed_set, ethnic, HS_info by	0.55100	4.94040	6	0.82340
HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by ed_set by ethnic, HS_comm by ed_set by ethnic 6 Two-way Relationships, 3 Three-way Relationships	0.55100	1.5 10 10	0	0.023 10
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set, HS_info by HS_comm by ethnic, HS_info by ed_set				
by ethnic HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set, HS_info by HS_comm by ethnic, HS_comm by	0.40000	5.13009	5	1.02602
ed_set by ethnic HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set,	0.97200	1.29097	6	0.21516

by ethnic, HS\_in HS\_info by ed\_set by ethnic, HS\_comm by ed\_set by ethnic

<ul> <li>HS_info, HS_comm, ed_set, ethnic, HS_info by</li> <li>HS_comm, HS_info by ed_set, HS_info by ethnic,</li> <li>HS_comm by ed_set, HS_comm by ethnic, ed_set</li> <li>by ethnic, HS_info by HS_comm by ethnic,</li> <li>HS_info by ed_set by ethnic, HS_comm by ed_set</li> <li>by ethnic</li> <li>6 Two-way Relationships, 4 Three-way Relationships</li> </ul>	0.29400	4.93189	4	1.23297
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set, HS_info by HS_comm by ethnic, HS_info by ed_set by ethnic, HS_comm by ed_set by ethnic Saturated (df=0) Model				
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic, HS_info by HS_comm by ed_set, HS_info by HS_comm by ethnic, HS_info by ed_set by ethnic, HS_comm by ed_set by ethnic, HS_info by HS_comm by ed_set by ethnic		0.00000	0	

Table I-9

Model Fit Statistics for all Interested Loglinear Models: HS Information by HS Communication Activities, Educational Setting and Socio-Economic Status

	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	124.54268	15	8.3028
5 Two-way Relationships				
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES,	0.13000	9.87158	6	1.6452
HS_comm by ed_set, HS_comm by SES HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, ed_set by SES	0.02400	14.56641	6	2.4277
HS_comm, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by SES, ed_set by SES	0.15100	9.42891	6	1.5714
HS_comm, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_comm by ed_set, HS_comm by SES, ed_set by SES	0.16900	9.08417	6	1.5140
HS_comm by SES, ed_set by SES HS_comm, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES	0.22400	8.19484	6	1.3658
HS_comm by SES, ed_set by SES HS_info, HS_comm, ed_set, SES, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES 5 Two-way Relationships	0.05400	12.37847	6	2.0630
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES 6 Two-way Relationships, 1 Three-way Relationship	0.14600	8.19378	5	1.6387
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set	0.47200	4.56295	5	0.9125
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by SES	0.09000	8.04915	4	2.0122
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by ed_set by SES	0.13000	7.10405	4	1.7760
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES_HS_comm by ed_set by SES	0.08500	8.19123	4	2.0478

SES, HS\_comm by ed\_set by SES

6 Two-way Relationships, 2 Three-way Relationships				
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_info by HS_comm by SES	0.34200	4.50475	4	1.12619
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_info by ed_set by SES	0.65900	2.42241	4	0.60560
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_comm by ed_set by SES	0.34000	4.51985	4	1.12996
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by SES, HS_info by ed_set by SES	0.07700	6.85306	3	2.28435
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by SES, HS_comm by ed_set by SES	0.04500	8.04649	3	2.68216
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by ed_set by SES, HS_comm by ed_set by SES 6 Two-way Relationships, 3 Three-way Relationships	0.07000	7.05427	3	2.35142
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_info by HS_comm by SES, HS_info by ed_set by SES	1.00000	0.00013	3	0.00004
HS_comm by BLS, HS_line by Cd_set by BLS HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_info by HS_comm by SES, HS_comm by ed_set by SES	0.21400	4.47626	3	1.49209
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_info by ed_set by SES, HS_comm by ed_set by SES	0.50000	2.36452	3	0.78817

HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by SES, HS_info by ed_set by SES, HS_comm by ed_set by SES 6 Two-way Relationships, 4 Three-way Relationships	0.03300	6.79436	2	3.39718
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_info by HS_comm by SES, HS_info by ed_set by SES, HS_comm by ed_set by SES Saturated (df=0) Model	1	0.00000	2	0.00000
HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES, HS_info by HS_comm by ed_set, HS_info by HS_comm by SES, HS_info by ed_set by SES, HS_comm by ed_set by SES, HS_info by HS_comm by ed_set by SES		0.00000	0	

Table I-10

Test of the Effect of HS Information by HS Communication by Educational Setting, Gender, Ethnicity, and Socio-Economic Etatus

Model / Effect		Statistic	
	$L^2$	df	pcalculated
HS Information by Educational Setting			
HS_info, HS_comm, ed_set, gender, HS_info by			
HS_comm, HS_info by gender, HS_comm by ed_set,	10.20940	6	
HS_comm by gender, ed_set by gender			
HS_info, HS_comm, ed_set, gender, HS_info by			
HS_comm, HS_info by ed_set, HS_info by gender,	10.18593	5	
HS_comm by ed_set, HS_comm by gender, ed_set	10.10575	5	
by gender			
Difference	0.02347	1	0.87824
HS Information by Gender			
HS_info, HS_comm, ed_set, gender, HS_info by			
HS_comm, HS_info by ed_set, HS_comm by ed_set,	11.86486	6	
HS_comm by gender, ed_set by gender			
HS_info, HS_comm, ed_set, gender, HS_info by			
HS_comm, HS_info by ed_set, HS_info by gender,	10.18593	5	
HS_comm by ed_set, HS_comm by gender, ed_set	10.10575	5	
by gender			
Difference	1.67893	1	0.19507
HS Information by Ethnicity			
HS_info, HS_comm, ed_set, ethnic, HS_info by			
HS_comm, HS_info by ed_set, HS_comm by ed_set,	11.95784	11	
HS_comm by ethnic, ed_set by ethnic			
HS_info, HS_comm, ed_set, ethnic, HS_info by			
HS_comm, HS_info by ed_set, HS_info by ethnic,	10.50849	9	
HS_comm by ed_set, HS_comm by ethnic, ed_set by		-	
ethnic		•	<u> </u>
Difference	1.44935	2	0.48448
HS Information by Socio-Economic Status			
HS_info, HS_comm, ed_set, SES, HS_info by	0.00417	<i>.</i>	
HS_comm, HS_info by ed_set, HS_comm by ed_set,	9.08417	6	
HS_comm by SES, ed_set by SES			
HS_info, HS_comm, ed_set, SES, HS_info by			
HS_comm, HS_info by ed_set, HS_info by SES,	8.19378	5	
HS_comm by ed_set, HS_comm by SES, ed_set by			
SES	0 20020	1	0 24527
Difference	0.89039	1	0.34537

HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender10.185935Difference1.842160.17470HS Communication by Gender HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by ed_set, ed_set by gender10.196106HS_comm by ed_set, ed_set by gender, HS_comm, HS_info by ed_set, HS_info by ed_set, ed_set by gender, HS_comm, by ed_set, HS_info by ed_set, ed_set by gender, ed_set, ed_set by gender, ed_set by gender10.185935HS Communication by Ethnicity HS_comm, HS_info by ed_set, HS_info by HS_comm, by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_info by ethnic, HS_comm, HS_info by ed_set, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_info, HS_comm by ed_set, HS_info by SES, HS_comm by ed_set, HS_info by SES, HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES8.193785Difference6.3726310.01159	HS Communication by Educational Setting HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by gender, ed_set by gender HS_info, HS_comm, ed_set, gender, HS_info by	12.02809	6	
Difference1.8421610.17470HS Communication by GenderHS_info, HS_comm, ed_set, gender, HS_info by10.196106HS_comm, HS_info by ed_set, effective gender10.196106HS_comm by ed_set, effective gender, HS_info by10.196106HS_comm, HS_info by ed_set, HS_info by10.196106HS_comm, HS_info by ed_set, HS_info by10.185935HS_comm by ed_set, HS_comm by gender, ed_set10.185935by gender0.0101710.91967HS Communication by Ethnicity15.8798911HS_comm, HS_info by ed_set, ethnic, HS_info by15.8798911HS_comm, HS_info by ed_set, ethnic, HS_info by10.508499ethnic10.5084999ethnic10.50849910.50849Difference5.3714020.06817HS Communication by Socio-Economic Status14.566416HS_comm, HS_info by ed_set, HS_info by14.566416HS_comm, HS_info by ed_set, SES, HS_info by14.566416HS_comm, HS_info by ed_set, SES, HS_info by14.566416HS_comm hy ed_set, ed_set by SES14.566416HS_comm hy ed_set, HS_info by SES, HS_info by8.193785HS_comm by ed_set, HS_comm by SES, ed_set by8.193785	HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set	10.18593	5	
HS Communication by GenderHS_info, HS_comm, ed_set, gender, HS_info byHS_comm, HS_info by ed_set, HS_info by gender,HS_info, HS_comm, ed_set, gender, HS_info byHS_comm, HS_info by ed_set, HS_info byHS_comm, HS_info by ed_set, HS_info byHS_comm by ed_set, HS_comm by gender,HS_comm by ed_set, HS_comm by gender,HS_comm by ed_set, HS_comm by gender,HS_comm by ed_set, HS_comm by gender,UterstandHS_comm, HS_info byHS_comm, ed_set, ethnic, HS_info byHS_comm, HS_info by ed_set, SES, HS_info byHS_comm, HS_info by ed_set, SES, HS_info byHS_comm, HS_info by ed_set, SES, HS_info byHS_comm, HS_info by ed_set, SES, HS_info byHS_comm, HS_info by ed_set, SES, HS_info byHS_comm, HS_info by ed_set, HS_info byHS_comm, HS_info by ed_set, HS_info byHS_comm by ed_set, HS_comm by SES, ed_set bySES	• •	1.84216	1	0.17470
HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set by gender10.185935Difference0.0101710.91967HS Communication by Ethnicity HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm, HS_info by ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm, by ed_set, HS_info by ethnic, ed_set by ethnic10.508499Difference5.3714020.06817HS Communication by Socio-Economic Status HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by 	HS Communication by Gender HS_info, HS_comm, ed_set, gender, HS_info by HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, ed_set by gender			
Difference0.0101710.91967HS Communication by Ethnicity HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, ed_set by ethnic HS_comm, HS_info by ed_set, HS_info by ethnic Difference15.8798911HS comm by ed_set, ed_set by ethnic, HS_comm by ed_set, HS_comm by ed_set, HS_info by ethnic10.508499Difference5.3714020.06817HS Communication by Socio-Economic Status HS_comm, HS_info by ed_set, HS_info by 	HS_comm, HS_info by ed_set, HS_info by gender, HS_comm by ed_set, HS_comm by gender, ed_set	10.18593	5	
HS Communication by Ethnicity HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, ed_set by ethnic 	. e	0.01017	1	0.91967
HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, ed_set by ethnic HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic10.508499Difference5.3714020.06817HS Communication by Socio-Economic Status HS_comm, HS_info by ed_set, HS_info by HS_comm, HS_info by ed_set, HS_info by HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm, HS_info by ed_set, HS_info by HS_comm, HS_info by ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES8.193785		0101017	-	0171701
HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by ethnic10.508499Difference5.3714020.06817HS Communication by Socio-Economic Status HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_info by SES, HS_sES8.193785	HS_info, HS_comm, ed_set, ethnic, HS_info by HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, ed_set by ethnic	15.87989	11	
Difference5.3714020.06817HS Communication by Socio-Economic Status HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES,14.566416HS_comm by ed_set, ed_set by SES HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES8.193785	HS_comm, HS_info by ed_set, HS_info by ethnic, HS_comm by ed_set, HS_comm by ethnic, ed_set by	10.50849	9	
HS Communication by Socio-Economic Status HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_info, HS_comm, ed_set by SES 		5.37140	2	0.06817
HS_comm, HS_info by ed_set, HS_info by SES, 14.56641 6 HS_comm by ed_set, ed_set by SES HS_info, HS_comm, ed_set, SES, HS_info by HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES				
HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by SES 8.19378 5	HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, ed_set by SES	14.56641	6	
	HS_comm, HS_info by ed_set, HS_info by SES, HS_comm by ed_set, HS_comm by SES, ed_set by	8.19378	5	
		6.37263	1	0.01159

Table I-11

Educational Setting, Ethnicity, Gender and Socio-Economic Status by HS Information

Variable —	HS Information		
variable	No	Yes	
Full Sample	6.95%	93.05%	
Educational Setting			
General Education	7.09%	92.91%	
Special Education	6.67%	93.33%	
Ethnicity			
African-American	9.68%	90.32%	
Hispanic	4.76%	95.31%	
Anglo	6.56%	93.44%	
Gender			
Male	4.44%	95.56%	
Female	9.28%	90.72%	
Socio-Economic Status			
High SES	5.88%	94.12%	
Low SES	7.92%	92.08%	
N=187			

Table I-12

Educational Setting, Ethnicity, Gender and Socio-Economic Status by HS Communication

Variable —	HS Communication		
variable —	No	Yes	
Full Sample	17.65%	82.35%	
Educational Setting			
General Education	20.31%	79.69%	
Special Education	11.86%	88.14%	
Ethnicity			
African-American	14.29%	85.71%	
Hispanic	12.70%	87.30%	
Anglo	26.23%	73.77%	
Gender			
Male	16.85%	83.15%	
Female	18.37%	81.63%	
Socio-Economic Status			
High SES	25.88%	74.12%	
Low SES	10.89%	89.11%	
N=187			

Table I-13

Model	Statistic				
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df	
Baseline					
Null, equiprobability model	0.00000	42.32057	17	2.4894	
Single Margins					
HS_job	0.00000	42.18026	15	2.81202	
ed_set	0.28300	18.72378	16	1.1702	
ethnic	0.00000	43.81137	15	2.9207	
Two Margins					
HS_job, ed_set	0.25500	17.01800	14	1.2155	
HS_job, ethnic	0.00000	42.10559	13	3.2388	
ed_set, ethnic	0.17900	18.64911	14	1.3320	
Three Margins					
HS_job, ed_set, ethnic	0.15200	16.94333	12	1.4119	
Relationship Between Two Variables					
HS_job, ed_set, HS_job by ed_set	0.24600	14.92328	12	1.2436	
HS_job, ethnic, HS_job by ethnic	0.00000	36.90759	9	4.1008	
ed_set, ethnic, ed_set by ethnic	0.10100	18.51393	12	1.5428	
Relationship and One Omitted Margin					
HS_job, ed_set, ethnic, HS_job by ed_set	0.13800	14.84862	10	1.4848	
HS_job, ed_set, ethnic, HS_job by ethnic	0.16300	11.74533	8	1.4681	
HS_job, ed_set, ethnic, ed_set by ethnic	0.07900	16.80815	10	1.6808	
Two Relationships Among Predictors					
HS_job, ed_set, ethnic, HS_job by ed_set, HS_job by ethnic	0.14000	9.65062	6	1.6084	
HS_job, ed_set, ethnic, HS_job by ed_set, ed_set by ethnic	0.06500	14.71344	8	1.8391	
HS_job, ed_set, ethnic, HS_job by ethnic, ed_set by ethnic Fhree Sets of Relationships	0.07100	11.61015	6	1.9350	
HS_job, ed_set, ethnic, HS_job by ed_set, HS_job by ethnic, ed_set by ethnic Saturated (df=0) Model	0.04800	9.56167	4	2.3904	
HS_job, ed_set, ethnic, HS_job by ed_set, HS_job by ethnic, ed_set by ethnic, HS_job by ed_set by ethnic		0.00000	0		

Model Fit Statistics for all Possible Loglinear Models: HS Employment, Educational Setting and Ethnicity

Table I-14

Model		Statisti	С	
Model	pcalculated	$L^2$	df	$L^2/df$
Baseline				
Null, equiprobability model	0.00000	33.81001	11	3.0736
Single Margins				
HS_job	0.00000	33.66969	9	3.7410
ed_set	0.42200	10.21321	10	1.0213
gender	0.00000	35.03494	10	3.5034
Гwo Margins				
HS_job, ed_set	0.38600	8.50743	8	1.0634
HS_job, gender	0.00000	33.32916	8	4.1661
ed_set, gender	0.36100	9.87268	9	1.0969
Three Margins				
HS_job, ed_set, gender	0.31800	8.16690	7	1.1667
Relationship Between Two Variables				
HS_job, ed_set, HS_job by ed_set	0.37900	6.41272	6	1.0687
HS_job, gender, HS_job by gender	0.00000	30.32612	6	5.0543
ed_set, gender, ed_set by gender	0.28600	9.71288	8	1.2141
Relationship and One Omitted Margin				
HS_job, ed_set, gender, HS_job by ed_set	0.29900	6.07219	5	1.2144
HS_job, ed_set, gender, HS_job by gender	0.39600	5.16386	5	1.0327
HS_job, ed_set, gender, ed_set by gender	0.23800	8.00711	6	1.3345
Two Relationships Among Predictors				
HS_job, ed_set, gender, HS_job by ed_set, HS_job by gender	0.38100	3.06915	3	1.0230
HS_job, ed_set, gender, HS_job by ed_set, ed_set by gender	0.20600	5.91239	4	1.4781
HS_job, ed_set, gender, HS_job by gender, ed_set by gender	0.28700	5.00406	4	1.2510
Three Sets of Relationships	0 22100	2 01750	2	1 5000
HS_job, ed_set, gender, HS_job by ed_set, HS_job by gender, ed_set by gender Saturated (df=0) Model	0.22100	3.01759	2	1.5088
HS_job, ed_set, gender, HS_job by ed_set, HS_job by gender, ed_set by gender, HS_job by ed_set by gender		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: HS Employment, Educational Setting and Gender

Statistic Model  $L^2$  $L^2/df$ df pcalculated Baseline Null, equiprobability model 0.00000 32.08393 11 2.91672 Single Margins 0.00000 31.98327 9 3.55370 HS\_job 9.34363 10 ed\_set 0.50000 0.93436 SES 0.00000 32.68642 10 3.26864 Two Margins HS\_job, ed\_set 0.49000 7.43598 8 0.92950 8 HS\_job, SES 0.00000 30.77877 3.84735 9 ed set, SES 0.52000 8.13913 0.90435 Three Margins HS\_job, ed\_set, SES 0.51300 6.23148 7 0.89021 **Relationship Between Two Variables** HS\_job, ed\_set, HS\_job by ed\_set 0.47600 5.54310 6 0.92385 5.11999 HS\_job, SES, HS\_job by SES 30.71991 6 0.00000 ed set, SES, ed set by SES 6.03878 8 0.75485 0.64300 **Relationship and One Omitted Margin** HS job, ed set, SES, HS job by ed set 4.33860 5 0.86772 0.50200 HS\_job, ed\_set, SES, HS\_job by SES 5 0.29000 6.17262 1.23452 HS\_job, ed\_set, SES, ed\_set by SES 0.65900 4.13113 6 0.68852 Two Relationships Among Predictors HS\_job, ed\_set, SES, HS\_job by ed\_set, 0.23300 4.27974 3 1.42658 HS\_job by SES HS job, ed set, SES, HS job by ed set, 0.69200 2.23825 4 0.55956 ed\_set by SES HS\_job, ed\_set, SES, HS\_job by SES, 0.39600 4.07227 4 1.01807 ed\_set by SES Three Sets of Relationships HS\_job, ed\_set, SES, HS\_job by ed\_set, 2 1.04338 0.35200 2.08675 HS\_job by SES, ed\_set by SES Saturated (df=0) Model HS\_job, ed\_set, SES, HS\_job by ed\_set, 0.00000 0 ---HS\_job by SES, ed\_set by SES, HS\_job by ed set by SES

Table I-15 Model Fit Statistics for all Possible Loglinear Models: HS Employment, Educational Setting and Socio-Economic Status

Table I-16

Test of the Effect of HS Employment by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Model / Effect		Statistic	
Model / Effect	$L^2$	df	pcalculated
HS Employment by Educational Setting			
HS_job, ed_set, gender, ed_set by gender	8.00711	6	
HS_job, ed_set, gender, HS_job by ed_set, ed_set by	5.91239	4	
gender	5.71257	4	
Difference	2.09472	2	0.35086
HS Employment by Gender			
HS_job, ed_set, gender, ed_set by gender	8.00711	6	
HS_job, ed_set, gender, HS_job by gender, ed_set by	5.00406	4	
gender		•	
Difference	3.00305	2	0.22279
HS Employment by Ethnicity			
HS_job, ed_set, ethnic, ed_set by ethnic	16.80815	10	
HS_job, ed_set, ethnic, HS_job by ethnic, ed_set by	11.61015	6	
ethnic	11.01015	0	
Difference	5.19800	4	0.26758
HS Employment by SES			
HS_job, ed_set, SES, ed_set by SES	4.13113	6	
HS_job, ed_set, SES, HS_job by SES, ed_set by SES	4.07227	4	
Difference	0.05886	2	0.97100

Table I-17

Educational Setting, Ethnicity, Gender and Socio-Economic Status by HS Employment

	HS Employment						
Variable	Not	Work	Work				
variable	Employed	Part-ime	Full-time				
		(20 hrs or less)	(21 hrs or more)				
Full Sample	36.5%	31.3%	22.6%				
Educational Setting							
General Education	32.1%	35.8%	19.8%				
Special Education	47.1%	20.6%	29.4%				
Ethnicity							
African-American	40.5%	29.7%	24.3%				
Hispanic	37.5%	32.5%	22.5%				
Anglo	30.8%	30.8%	23.1%				
Gender							
Male	38.2%	25.5%	25.5%				
Female	34.4%	36.1%	21.3%				
Socio-Economic Status							
High SES	32.8%	37.9%	15.5%				
Low SES	40.4%	24.6%	29.8%				
N=188							

Table I18

Model	Statistic				
Model	$p_{calculated}$	$L^2$	df	$L^2/df$	
Baseline					
Null, equiprobability model	0.00100	31.27411	11	2.84310	
Single Margins					
HS_prep	0.00100	31.27411	10	3.12741	
ed_set	0.00000	111.17175	10	11.11718	
ethnic	0.00000	137.46359	9	15.27373	
Two Margins					
HS_prep, ed_set	0.87200	4.90640	9	0.54510	
HS_prep, ethnic	0.00000	31.19823	8	3.89978	
ed_set, ethnic	0.00000	111.09588	8	13.8869	
Three Margins					
HS_prep, ed_set, ethnic	0.68100	4.83052	7	0.6900	
Relationship Between Two Variables					
HS_prep, ed_set, HS_prep by ed_set	0.98100	1.98619	8	0.2482	
HS_prep, ethnic, HS_prep by ethnic	0.00000	30.70706	6	5.1178	
ed_set, ethnic, ed_set by ethnic	0.00000	110.82590	6	18.4709	
Relationship and One Omitted Margin					
HS_prep, ed_set, ethnic, HS_prep by ed_set	0.92800	1.91031	6	0.3183	
HS_prep, ed_set, ethnic, HS_prep by ethnic	0.50200	4.33935	5	0.8678	
HS_prep, ed_set, ethnic, ed_set by ethnic	0.47200	4.56054	5	0.9121	
Two Relationships Among Predictors					
HS_prep, ed_set, ethnic, HS_prep by ed_set, HS_prep by ethnic	0.84100	1.41914	4	0.3547	
HS_prep, ed_set, ethnic, HS_prep by ed_set, ed_set by ethnic	0.80200	1.64033	4	0.4100	
HS_prep, ed_set, ethnic, HS_prep by ethnic, ed_set by ethnic	0.25400	4.06937	3	1.3564	
Three Sets of Relationships	0 5 4500	1 0000 5	•	0.0000	
HS_prep, ed_set, ethnic, HS_prep by ed_set, HS_prep by ethnic, ed_set by ethnic Saturated (df=0) Model	0.54700	1.20776	2	0.6038	
HS_prep, ed_set, ethnic, HS_prep by ed_set, HS_prep by ethnic, ed_set by ethnic, HS_prep by ed_set by ethnic		0.00000	0		

Model Fit Statistics for all Possible Loglinear Models: HS Preparation, Educational Setting and Ethnicity

Table I-19

Model		Statisti	c	
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	31.97269	7	4.5675
Single Margins				
HS_prep	0.00000	31.97269	6	5.3287
ed_set	0.00000	111.87034	6	18.6450
gender	0.00000	138.10290	6	23.0171
Two Margins				
HS_prep, ed_set	0.34700	5.60498	5	1.1210
HS_prep, gender	0.00000	31.83754	5	6.3675
ed_set, gender	0.00000	111.73519	5	22.3470
Three Margins				
HS_prep, ed_set, gender	0.24200	5.46983	4	1.3674
Relationship Between Two Variables				
HS_prep, ed_set, HS_prep by ed_set	0.61200	2.68477	4	0.6711
HS_prep, gender, HS_prep by gender	0.00000	31.81543	4	7.9538
ed_set, gender, ed_set by gender	0.00000	111.41534	4	27.8538
Relationship and One Omitted Margin				
HS_prep, ed_set, gender, HS_prep by ed_set	0.46600	2.54962	3	0.8498
HS_prep, ed_set, gender, HS_prep by gender	0.14200	5.44772	3	1.8159
HS_prep, ed_set, gender, ed_set by gender	0.16100	5.14998	3	1.7166
Γwo Relationships Among Predictors				
HS_prep, ed_set, gender, HS_prep by ed_set, HS_prep by gender	0.28300	2.52751	2	1.2637
HS_prep, ed_set, gender, HS_prep by ed_set, ed_set by gender	0.32800	2.22977	2	1.1148
HS_prep, ed_set, gender, HS_prep by gender, ed_set by gender	0.07700	5.12787	2	2.5639
Three Sets of Relationships	0 12600	2 22202	1	2 2220
HS_prep, ed_set, gender, HS_prep by ed_set, HS_prep by gender, ed_set by gender Saturated (df=0) Model	0.13600	2.22393	1	2.2239
HS_prep, ed_set, gender, HS_prep by ed_set, HS_prep by gender, ed_set by gender, HS_prep by ed_set by gender		0.00000	0	

Model Fit Statistics for all possible Loglinear Models: HS Preparation, Educational Setting and Gender

M. 1.1		Statistic	2	
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	32.95216	7	4.70745
Single Margins				
HS_prep	0.00000	32.95216	6	5.49203
ed_set	0.00000	112.39878	6	18.73313
SES	0.00000	136.74195	6	22.79033
Two Margins				
HS_prep, ed_set	0.20500	7.21593	5	1.44319
HS_prep, SES	0.00000	31.55910	5	6.31182
ed_set, SES	0.00000	111.00572	5	22.20114
Three Margins				
HS_prep, ed_set, SES	0.21300	5.82287	4	1.45572
Relationship Between Two Variables				
HS_prep, ed_set, HS_prep by ed_set	0.35900	4.36493	4	1.09123
HS_prep, SES, HS_prep by SES	0.00000	31.32913	4	7.83228
ed_set, SES, ed_set by SES	0.00000	108.95412	4	27.23853
Relationship and One Omitted Margin				
HS_prep, ed_set, SES, HS_prep by ed_set	0.39600	2.97187	3	0.99062
HS_prep, ed_set, SES, HS_prep by SES	0.13300	5.59290	3	1.86430
HS_prep, ed_set, SES, ed_set by SES	0.28700	3.77127	3	1.25709
Two Relationships Among Predictors				
HS_prep, ed_set, SES, HS_prep by ed_set, HS_prep by SES	0.25400	2.74190	2	1.37095
HS_prep, ed_set, SES, HS_prep by ed_set, ed_set by SES	0.63100	0.92027	2	0.46014
HS_prep, ed_set, SES, HS_prep by SES, ed_set by SES	0.17000	3.54130	2	1.77065
Three Sets of Relationships				
HS_prep, ed_set, SES, HS_prep by ed_set, HS_prep by SES, ed_set by SES Saturated (df=0) Model	0.49400	0.46777	1	0.46777
HS_prep, ed_set, SES, HS_prep by ed_set, HS_prep by SES, ed_set by SES, HS_prep by ed_set by SES		0.00000	0	

Model Fit Statistics for all possible Loglinear Models: HS Preparation, Educational Setting and Socio-Economic Status

Table I-20

Table I-21

Test of the Effect of HS Preparation by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Model / Effect		Statistic		
Model / Effect	$L^2$	df	pcalculated	
HS Preparation by Educational Setting				
HS_prep, ed_set, gender, ed_set by gender	5.14998	3		
HS_prep, ed_set, gender, HS_prep by ed_set, ed_set by gender	2.22977	2		
Difference	2.92021	1	0.08748	
HS Preparation by Gender				
HS_prep, ed_set, gender, ed_set by gender	5.14998	3		
HS_prep, ed_set, gender, HS_prep by gender, ed_set by gender	5.12787	2		
Difference	0.02211	1	0.88179	
HS Preparation by Ethnicity				
HS_prep, ed_set, ethnic, ed_set by ethnic	4.56054	5		
HS_prep, ed_set, ethnic, HS_prep by ethnic, ed_set by ethnic	4.06937	3		
Difference	0.49117	2	0.78225	
HS Preparation by Socio-Economic Stauts				
HS_prep, ed_set, SES, ed_set by SES	3.77127	3		
HS_prep, ed_set, SES, HS_prep by SES, ed_set by SES	3.54130	2		
Difference	0.22997	1	0.63155	

Table I-22

Educational Setting, Ethnicity, Gender and Socio-Economic Status by HS Preparation

Variable —	High School Preparation		
variable —	No	Yes	
Full Sample	17.65%	82.35%	
Educational Setting			
General Education	20.31%	79.69%	
Special Education	11.86%	88.14%	
Ethnicity			
African-American	14.29%	85.71%	
Hispanic	12.70%	87.30%	
Anglo			
Gender	26.23%	73.77%	
Male	16.85%	83.15%	
Female	18.37%	81.63%	
Socio-Economic Status			
High SES	25.88%	74.12%	
Low SES	10.89%	89.11%	
N=185			

## APPENDIX J

**QUESTION 2: FULL RESULTS** 

Model	Statistic				
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df	
Baseline					
Null, equiprobability model	0.00000	62.71321	23	2.7266	
Single Margins					
exp_empl	0.05200	31.22977	20	1.5614	
ed_set	0.00000	59.54155	22	2.7064	
ethnic	0.00000	67.81723	21	3.2293	
Two Margins					
exp_empl, ed_set	0.24700	22.78582	19	1.1992	
exp_empl, ethnic	0.02800	31.06150	18	1.7256	
ed_set, ethnic	0.00000	59.37327	20	2.9686	
Three Margins					
exp_empl, ed_set, ethnic	0.16200	22.62755	17	1.3310	
Relationship Between Two Variables					
exp_empl, ed_set, exp_empl by ed_set	0.54600	14.71162	16	0.9194	
exp_empl, ethnic, exp_empl by ethnic	0.01200	25.62050	12	2.1350	
ed_set, ethnic, ed_set by ethnic	0.00000	55.77474	18	3.0986	
Relationship and One Omitted Margin					
exp_empl, ed_set, ethnic, exp_empl by ed_set	0.41000	14.54335	14	1.0388	
exp_empl, ed_set, ethnic, exp_empl by ethnic	0.10300	17.17655	11	1.5615	
exp_empl, ed_set, ethnic, ed_set by ethnic	0.21300	19.01902	15	1.2679	
<b>Fwo Relationships Among Predictors</b>					
exp_empl, ed_set, ethnic, exp_empl by ed_set, exp_empl by ethnic	0.33400	9.10235	8	1.1377	
exp_empl, ed_set, ethnic, exp_empl by ed_set, ed_set by ethnic	0.53400	10.94482	12	0.9120	
exp_empl, ed_set, ethnic, exp_empl by ethnic, ed_set by ethnic	0.13800	13.57802	9	1.5086	
exp_empl, ed_set, ethnic, exp_empl by ed_set, exp_empl by ethnic, ed_set by ethnic Saturated (df=0) Model	0.42800	5.95675	6	0.9927	
exp_empl, ed_set, ethnic, exp_empl by ed_set, exp_empl by ethnic, ed_set by ethnic, exp_empl by ed_set by ethnic		0.00000	0		

Table J-1 Model Fit Statistics for all Possible Loglinear Models: Employment Expectations, Educational Setting and Ethnicity

 Table J-2

 Model Fit Statistics for all Possible Loglinear Models: Employment Expectations, Educational

 Setting and Gender

N/ 11	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	59.00556	15	3.9337
Single Margins				
exp_empl	0.02800	22.99115	12	1.9159
ed_set	0.00000	51.30292	14	3.6644
gender	0.00000	59.15374	14	4.2252
Гwo Margins				
exp_empl, ed_set	0.20400	14.54720	11	1.3224
exp_empl, gender	0.02100	22.39801	11	2.0361
ed_set, gender	0.00000	50.70979	13	3.9007
Three Margins				
exp_empl, ed_set, gender	0.17500	13.95406	10	1.3954
Relationship Between Two Variables				
exp_empl, ed_set, exp_empl by ed_set	0.59400	6.47300	8	0.809
exp_empl, gender, exp_empl by gender	0.03300	16.75133	8	2.093
ed_set, gender, ed_set by gender	0.00000	50.52965	12	4.2108
Relationship and One Omitted Margin				
exp_empl, ed_set, gender, exp_empl by ed_set	0.55400	5.87986	7	0.8399
exp_empl, ed_set, gender, exp_empl by gender	0.30600	8.30738	7	1.186
exp_empl, ed_set, gender, ed_set by gender	0.13100	13.77393	9	1.5304
<b>Fwo Relationships Among Predictors</b>				
exp_empl, ed_set, gender, exp_empl by ed_set, exp_empl by gender	0.99400	0.23317	4	0.0582
exp_empl, ed_set, gender, exp_empl by ed_set, ed_set by gender	0.45800	5.69973	6	0.9499
exp_empl, ed_set, gender, exp_empl by gender, ed_set by gender Three Sets of Relationships	0.22900	8.12724	6	1.3545
exp_empl, ed_set, gender, exp_empl by ed_set, exp_empl by gender, ed_set by gender Saturated (df=0) Model	0.99900	0.02875	3	0.0095
exp_empl, ed_set, gender, exp_empl by ed_set, exp_empl by gender, ed_set by gender, exp_empl by ed_set by gender		0.00000	0	

Table J-3

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	57.27334	15	3.81822
Single Margins				
exp_empl	0.00300	29.83310	12	2.48609
ed_set	0.00000	58.96360	14	4.21169
SES	0.00000	61.77422	14	4.41244
Two Margins				
exp_empl, ed_set	0.02500	21.87411	11	1.98856
exp_empl, SES	0.00700	25.68473	11	2.33498
ed_set, SES	0.00000	53.81523	13	4.13963
Three Margins				
exp_empl, ed_set, SES	0.06000	17.72574	10	1.77257
Relationship Between Two Variables				
exp_empl, ed_set, exp_empl by ed_set	0.09300	13.58854	8	1.6985′
exp_empl, SES, exp_empl by SES	0.00300	23.05324	8	2.8816
ed_set, SES, ed_set by SES	0.00000	53.73907	12	4.4782
Relationship and One Omitted Margin				
exp_empl, ed_set, SES, exp_empl by ed_set	0.22300	9.44017	7	1.3486
exp_empl, ed_set, SES, exp_empl by SES	0.03500	15.09425	7	2.15632
exp_empl, ed_set, SES, ed_set by SES	0.03900	17.64957	9	1.9610
Two Relationships Among Predictors				
exp_empl, ed_set, SES, exp_empl by ed_set, exp_empl by SES	0.14600	6.80868	4	1.7021′
exp_empl, ed_set, SES, exp_empl by ed_set, ed_set by SES	0.15400	9.36400	6	1.5606
exp_empl, ed_set, SES, exp_empl by SES, ed_set by SES	0.02000	15.01808	6	2.5030
Three Sets of Relationships			-	
exp_empl, ed_set, SES, exp_empl by ed_set, exp_empl by SES, ed_set by SES Saturated (df=0) Model	0.09400	6.38087	3	2.1269
exp_empl, ed_set, SES, exp_empl by ed_set, exp_empl by SES, ed_set by SES, exp_empl by ed_set by SES		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: Employment Expectations, Educational Setting and Socio-Economic Status

Table J-4

Model / Effect		Statistic		
Model / Effect	$L^2$	df	pcalculated	
Employment Expectations by Educational Setting				
exp_empl, ed_set, gender, ed_set by gender	13.77393	9		
exp_empl, ed_set, gender, exp_empl by ed_set, ed_set by gender	5.69973	6		
Difference	8.07420	3	0.04450	
Employment Expecations by Gender				
exp_empl, ed_set, gender, ed_set by gender	13.77393	9		
exp_empl, ed_set, gender, exp_empl by gender, ed_set by gender	8.12724	6		
Difference	5.64669	3	0.13012	
Employment Expectations by Ethnicity				
exp_empl, ed_set, ethnic, ed_set by ethnic	19.01902	15		
exp_empl, ed_set, ethnic, exp_empl by ethnic, ed_set by ethnic	13.57802	9		
Difference	5.44100	6	0.48862	
Employment Expectations by Socio-Economic Status				
exp_empl, ed_set, SES, ed_set by SES	17.64957	9		
exp_empl, ed_set, SES, exp_empl by SES, ed_set by SES	15.01808	6		
Difference	2.63149	3	0.45200	

Test of the Effect of Employment Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Employment Expectations

	Employment Expectations				
Variable	Not Sure	Work Part time	Work Full time	Military	
Full Sample	7.41%	41.67%	35.19%	15.74%	
Educational Setting					
General Education	4.35%	42.03%	31.88%	21.74%	
Special Education	12.82%	41.03%	41.03%	5.13%	
Ethnicity					
African-American	5.41%	54.05%	32.43%	8.11%	
Hispanic	8.11%	37.84%	32.43%	21.62%	
Anglo	8.82%	32.35%	41.18%	17.65%	
Gender					
Male	10.00%	30.00%	40.00%	20.00%	
Female	5.17%	51.72%	31.03%	12.07%	
Socio-Economic Status					
High SES	11.63%	44.19%	32.56%	11.63%	
Low SES	4.69%	40.63%	35.94%	18.75%	

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	62.45126	23	2.7152
Single Margins				
exp_ed	0.00000	56.32163	20	2.81608
ed_set	0.00000	126.10234	22	5.73192
ethnic	0.00000	158.62358	21	7.55350
Two Margins				
exp_ed, ed_set	0.20500	23.76193	19	1.25063
exp_ed, ethnic	0.00000	56.28317	18	3.12684
ed_set, ethnic	0.00000	126.06387	20	6.30319
Three Margins				
exp_ed, ed_set, ethnic	0.12700	23.72347	17	1.39550
Relationship Between Two Variables				
exp_ed, ed_set, exp_ed by ed_set	0.36300	17.34719	16	1.08420
exp_ed, ethnic, exp_ed by ethnic	0.00000	50.70639	12	4.2255
ed_set, ethnic, ed_set by ethnic	0.00000	123.29718	18	6.84984
Relationship and One Omitted Margin				
exp_ed, ed_set, ethnic, exp_ed by ed_set	0.24000	17.30873	14	1.23634
exp_ed, ed_set, ethnic, exp_ed by ethnic	0.07800	18.13669	11	1.64879
exp_ed, ed_set, ethnic, ed_set by ethnic	0.13800	20.95677	15	1.39712
Two Relationships Among Predictors				
exp_ed, ed_set, ethnic, exp_ed by ed_set, exp_ed by ethnic	0.16400	11.73195	8	1.46649
exp_ed, ed_set, ethnic, exp_ed by ed_set, ed_set by ethnic	0.26700	14.54204	12	1.21184
exp_ed, ed_set, ethnic, exp_ed by ethnic, ed_set by ethnic	0.08100	15.38000	9	1.70889
Three Sets of Relationships				
exp_ed, ed_set, ethnic, exp_ed by ed_set, exp_ed by ethnic, ed_set by ethnic Saturated (df=0) Model	0.12600	9.96383	6	1.66064
exp_ed, ed_set, ethnic, exp_ed by ed_set, exp_ed by ethnic, ed_set by ethnic, exp_ed by ed_set by ethnic		0.00000	0	

 Table J-6

 Model Fit Statistics for all Possible Loglinear Models: Education Expectations, Educational

 Setting and Ethnicity

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	52.82407	15	3.5216
Single Margins				
exp_ed	0.00000	43.53255	12	3.6277
ed_set	0.00000	113.31325	14	8.0938
gender	0.00000	145.12149	14	10.3658
'wo Margins				
exp_ed, ed_set	0.44600	10.97285	11	0.9975
exp_ed, gender	0.00000	42.89108	11	3.8991
ed_set, gender	0.00000	112.67179	13	8.6670
hree Margins				
exp_ed, ed_set, gender	0.41200	10.33138	10	1.0331
elationship Between Two Variables				
exp_ed, ed_set, exp_ed by ed_set	0.80400	4.55811	8	0.5697
exp_ed, gender, exp_ed by gender	0.00000	41.63699	8	5.2046
ed_set, gender, ed_set by gender	0.00000	111.60489	12	9.3004
elationship and One Omitted Margin				
exp_ed, ed_set, gender, exp_ed by ed_set	0.78900	3.91664	7	0.5595
exp_ed, ed_set, gender, exp_ed by gender	0.24700	9.07728	7	1.2967
exp_ed, ed_set, gender, ed_set by gender	0.41300	9.26448	9	1.0293
wo Relationships Among Predictors				
exp_ed, ed_set, gender, exp_ed by ed_set, exp_ed by gender	0.61600	2.66255	4	0.6656
exp_ed, ed_set, gender, exp_ed by ed_set, ed_set by gender	0.82700	2.84975	6	0.4749
exp_ed, ed_set, gender, exp_ed by gender, ed_set by gender 'hree Sets of Relationships	0.23700	8.01038	6	1.3350
exp_ed, ed_set, gender, exp_ed by ed_set, exp_ed by gender, ed_set by gender aturated (df=0) Model	0.57600	1.98507	3	0.6616
exp_ed, ed_set, gender, exp_ed by ed_set, exp_ed by gender, ed_set by gender, exp_ed by ed_set by gender		0.00000	0	

 Table J-7

 Model Fit Statistics for all Possible Loglinear Models: Education Expectations, Educational

 Setting and Gender

	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	55.32668	15	3.6884
Single Margins				
exp_ed	0.00000	51.44116	12	4.2867
ed_set	0.00000	121.21302	14	8.6580
SES	0.00000	152.87249	14	10.9194
Two Margins				
exp_ed, ed_set	0.05100	19.62037	11	1.7836
exp_ed, SES	0.00000	51.27984	11	4.6618
ed_set, SES	0.00000	121.05170	13	9.3116
Three Margins				
exp_ed, ed_set, SES	0.03500	19.45905	10	1.9459
Relationship Between Two Variables				
exp_ed, ed_set, exp_ed by ed_set	0.10700	13.13711	8	1.6421
exp_ed, SES, exp_ed by SES	0.00000	48.73183	8	6.0914
ed_set, SES, ed_set by SES	0.00000	119.17241	12	9.9310
Relationship and One Omitted Margin				
exp_ed, ed_set, SES, exp_ed by ed_set	0.07300	12.97579	7	1.8536
exp_ed, ed_set, SES, exp_ed by SES	0.01800	16.91103	7	2.4158
exp_ed, ed_set, SES, ed_set by SES	0.04000	17.57976	9	1.9533
Two Relationships Among Predictors				
exp_ed, ed_set, SES, exp_ed by ed_set, exp_ed by SES	0.03400	10.42778	4	2.6069
exp_ed, ed_set, SES, exp_ed by ed_set, ed_set by SES	0.08500	11.09650	6	1.8494
exp_ed, ed_set, SES, exp_ed by SES, ed_set by SES	0.02000	15.03174	6	2.5052
Three Sets of Relationships				
exp_ed, ed_set, SES, exp_ed by ed_set, exp_ed by SES, ed_set by SES Saturated (df=0) Model	0.03200	8.77440	3	2.9248
exp_ed, ed_set, SES, exp_ed by ed_set, exp_ed by SES, ed_set by SES, exp_ed by ed_set by SES		0.00000	0	

Table J-8 Model Fit Statistics for all Possible Loglinear Models: Education Expectation, Educational Setting and Socio-Economic Status

Table J-9

Test of the Effect of Education Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Model / Effect		Statistic	
Model / Effect	$L^2$	df	pcalculated
Education Expectations by Educational Setting			
exp_ed, ed_set, gender, ed_set by gender	9.26448	9	
exp_ed, ed_set, gender, exp_ed by ed_set, ed_set by gender	2.84975	6	
Difference	6.41473	3	0.09309
Education Expectations by Gender			
exp_ed, ed_set, gender, ed_set by gender	9.26448	9	
exp_ed, ed_set, gender, exp_ed by gender, ed_set by gender	8.01038	6	
Difference	1.25410	3	0.74006
Education Expectations by Ethnicity			
exp_ed, ed_set, ethnic, ed_set by ethnic	20.95677	15	
exp_ed, ed_set, ethnic, exp_ed by ethnic, ed_set by ethnic	15.38000	9	
Difference	5.57677	6	0.47223
Education Expectations by Socio-Economic Status			
exp_ed, ed_set, SES, ed_set by SES	17.57976	9	
exp_ed, ed_set, SES, exp_ed by SES, ed_set by SES	15.03174	6	
Difference	2.54802	3	0.46668

	Educational Expectations				
Variable	Not Sure	Vocational/ Technical School	2-year College	4-year College	
Full Sample	3.21%	10.26%	36.54%	50.00%	
Educational Setting					
General Education	1.77%	7.96%	35.40%	54.87%	
Special Education	6.98%	16.28%	39.53%	37.21%	
Ethnicity					
African-American	1.89%	7.55%	35.85%	54.72%	
Hispanic	3.92%	17.65%	37.25%	41.18%	
Anglo	3.85%	5.77%	36.54%	53.85%	
Gender					
Male	4.11%	12.33%	36.99%	46.58%	
Female	2.41%	8.43%	36.14%	53.01%	
Socio-Economic Status					
High SES	4.00%	9.33%	30.67%	56.00%	
Low SES	2.50%	11.25%	41.25%	45.00%	

Table J-10

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Education Expectations

Table J-11

Model	Statistic			
Model	pcalculated	$L^2$	df	$L^2/df$
Baseline				
Null, equiprobability model	0.00000	56.40242	23	2.45228
Single Margins				
exp_live	0.00000	55.82615	20	2.7913
ed_set	0.00600	41.98044	22	1.90820
ethnic	0.00000	66.45305	21	3.1644
Two Margins				
exp_live, ed_set	0.03800	31.27886	19	1.6462
exp_live, ethnic	0.00000	55.75146	18	3.0973
ed_set, ethnic	0.00300	41.90576	20	2.0952
Three Margins				
exp_live, ed_set, ethnic	0.01900	31.20417	17	1.8355
Relationship Between Two Variables				
exp_live, ed_set, exp_live by ed_set	0.11700	22.88784	16	1.4304
exp_live, ethnic, exp_live by ethnic	0.00000	39.47096	12	3.2892
ed_set, ethnic, ed_set by ethnic	0.00100	41.81707	18	2.3231
Relationship and One Omitted Margin				
exp_live, ed_set, ethnic, exp_live by ed_set	0.06300	22.81315	14	1.6295
exp_live, ed_set, ethnic, exp_live by ethnic	0.18600	14.92367	11	1.3567
exp_live, ed_set, ethnic, ed_set by ethnic	0.00800	31.11548	15	2.0743
Two Relationships Among Predictors				
exp_live, ed_set, ethnic, exp_live by ed_set, exp_live by ethnic	0.58800	6.53265	8	0.8165
exp_live, ed_set, ethnic, exp_live by ed_set, ed_set by ethnic	0.03000	22.72446	12	1.8937
exp_live, ed_set, ethnic, exp_live by ethnic, ed_set by ethnic	0.09600	14.83498	9	1.6483
Three Sets of Relationships				
exp_live, ed_set, ethnic, exp_live by ed_set, exp_live by ethnic, ed_set by ethnic Saturated (df=0) Model	0.37400	6.45204	6	1.0753
exp_live, ed_set, ethnic, exp_live by ed_set, exp_live by ethnic, ed_set by ethnic, exp_live by ed_set by ethnic		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: Living Expectations, Educational Setting and Ethnicity

Table J-12

Madal	Statistic			
Model	pcalculate	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	39.40576	15	2.62705
Single Margins				
exp_live	0.00000	38.82949	12	3.23579
ed_set	0.03500	24.98378	14	1.78456
gender	0.00000	49.26898	14	3.51921
Two Margins				
exp_live, ed_set	0.21800	14.28220	11	1.29838
exp_live, gender	0.00000	38.56739	11	3.50613
ed_set, gender	0.02500	24.72169	13	1.9016
Three Margins				
exp_live, ed_set, gender	0.17200	14.02010	10	1.4020
Relationship Between Two Variables				
exp_live, ed_set, exp_live by ed_set	0.65900	5.89118	8	0.7364
exp_live, gender, exp_live by gender	0.00000	33.59538	8	4.1994
ed_set, gender, ed_set by gender	0.01700	24.59776	12	2.0498
Relationship and One Omitted Margin				
exp_live, ed_set, gender, exp_live by ed_set	0.58400	5.62908	7	0.8041
exp_live, ed_set, gender, exp_live by gender	0.24900	9.04809	7	1.2925
exp_live, ed_set, gender, ed_set by gender	0.12600	13.89618	9	1.5440
Two Relationships Among Predictors				
exp_live, ed_set, gender, exp_live by ed_set, exp_live by gender	0.95700	0.65707	4	0.1642
exp_live, ed_set, gender, exp_live by ed_set, ed_set by gender	0.48100	5.50516	6	0.9175
exp_live, ed_set, gender, exp_live by gender, ed_set by gender Three Sets of Relationships	0.17800	8.94160	6	1.4902
exp_live, ed_set, gender, exp_live by ed_set, exp_live by gender, ed_set by gender Saturated (df=0) Model	0.88700	0.63905	3	0.2130
exp_live, ed_set, gender, exp_live by ed_set, exp_live by gender, ed_set by gender, exp_live by ed_set by gender		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: Living Expectations, Educational Setting and Gender

and Socio-Economic Status	Statistic			
Model	pcalculated	$L^2$	df	$L^2/df$
Baseline				
Null, equiprobability model	0.00100	37.58804	15	2.50587
Single Margins				
exp_live	0.00000	37.09229	12	3.09102
ed_set	0.05700	23.20745	14	1.65768
SES	0.00000	46.09007	14	3.29215
Two Margins				
exp_live, ed_set	0.28300	13.15491	11	1.19590
exp_live, SES	0.00000	36.03752	11	3.27614
ed_set, SES	0.05300	22.15269	13	1.70405
Three Margins				
exp_live, ed_set, SES	0.27800	12.10015	10	1.21002
Relationship Between Two Variables				
exp_live, ed_set, exp_live by ed_set	0.77000	4.88582	8	0.61073
exp_live, SES, exp_live by SES	0.00000	35.52185	8	4.44023
ed_set, SES, ed_set by SES	0.06900	19.91048	12	1.65921
Relationship and One Omitted Margin				
exp_live, ed_set, SES, exp_live by ed_set	0.79900	3.83106	7	0.54729
exp_live, ed_set, SES, exp_live by SES	0.11500	11.58447	7	1.65492
exp_live, ed_set, SES, ed_set by SES	0.36200	9.85793	9	1.09533
Two relationships Among Predictors				
exp_live, ed_set, SES, exp_live by ed_set, exp_live by SES	0.50600	3.31539	4	0.82885
exp_live, ed_set, SES, exp_live by ed_set, ed_set by SES	0.95300	1.58885	6	0.26481
exp_live, ed_set, SES, exp_live by SES, ed_set by SES	0.15500	9.34226	6	1.55704
Three Sets of Relationships				
exp_live, ed_set, SES, exp_live by ed_set, exp_live by SES, ed_set by SES Saturated (df=0) Model	0.72000	1.33927	3	0.44642
exp_live, ed_set, SES, exp_live by ed_set, exp_live by SES, ed_set by SES, exp_live by ed_set by SES		0.00000	0	

Table J-13 Model Fit Statistics for all Possible Loglinear Models: Living Expectations, Educational Setting and Socio-Economic Status

Table J-14

Model / Effect	Statistic		2	
Model / Effect	$L^2$	df	pcalculated	
Living Expectations by Educational Setting				
exp_live, ed_set, gender, ed_set by gender	13.89618	9		
exp_live, ed_set, gender, exp_live by ed_set,	5.50516	6		
ed_set by gender	5.50510	0		
Difference	8.39102	3	0.03859	
Living Expectations by Gender				
exp_live, ed_set, gender, ed_set by gender	13.89618	9		
exp_live, ed_set, gender, exp_live by gender,	8.94160	6		
ed_set by gender		-		
Difference	4.95458	3	0.17515	
Living Expectations by Ethnicity				
exp_live, ed_set, ethnic, ed_set by ethnic	31.11548	15		
exp_live, ed_set, ethnic, exp_live by ethnic, ed_set	14.83498	9		
by ethnic	14.05470			
Difference	16.28050	6	0.01233	
Living Expectations by Socio-Economic Status				
exp_live, ed_set, SES, ed_set by SES	9.85793	9		
exp_live, ed_set, SES, exp_live by SES, ed_set by	9.34226	6		
SES	7.54220	0		
Difference	0.51567	3	0.91544	

Test of the Effect of Living Expectations by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

## Table J-15

Tests of the Effects of Educational Setting and Ethnicity Controlling for Each Other

Model / Effect		Statistic	
Model / Effect	$L^2$	df	pcalculated
Educational Setting Main Effect Controlling for			
Ethnicity			
exp_live, ed_set, ethnic, exp_live by ethnic, ed_set by ethnic	14.83498	9	
exp_live, ed_set, ethnic, exp_live by ed_set, exp_live by ethnic, ed_set by ethnic	6.45204	6	
Difference	8.38294	3	0.03873
Ethnicity Main Effect Controlling for Educational			
Setting			
exp_live, ed_set, ethnic, exp_live by ed_set, ed_set by ethnic	22.72446	12	
exp_live, ed_set, ethnic, exp_live by ed_set, exp_live by ethnic, ed_set by ethnic	6.45204	6	
Difference	16.27242	6	0.01236

		Living Expectations				
Variable	Not Sure	Parent/ Family	Spouse/ Roommate	Independent/ Dorm		
Full Sample	18.18%	22.46%	24.60%	34.76%		
Educational Setting						
General Education	12.60%	22.83%	27.56%	37.01%		
Special Education	30.00%	21.67%	18.33%	30.00%		
Ethnicity						
African-American	19.35%	8.06%	29.03%	43.55%		
Hispanic	18.75%	35.94%	18.75%	26.56%		
Anglo	16.39%	22.95%	26.23%	34.43%		
Gender						
Male	24.44%	22.22%	21.11%	32.22%		
Female	12.37%	22.68%	27.84%	37.11%		
Socio-Economic Status						
High SES	16.28%	23.26%	24.42%	36.05%		
Low SES	20.00%	22.00%	25.00%	33.00%		

 Table J-16

 Educational Setting, Ethnicity, Gender and Socio-Economic Status by Living Expectations

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	58.96798	23	2.5638
Single Margins				
exp_RL	0.00000	47.69678	20	2.3848
ed_set	0.04700	34.16336	22	1.5528
ethnic	0.00000	59.25095	21	2.8214
Two Margins				
exp_RL, ed_set	0.25800	22.53453	19	1.1860
exp_RL, ethnic	0.00000	47.62212	18	2.6456
ed_set, ethnic	0.02600	34.08870	20	1.7044
Three Margins				
exp_RL, ed_set, ethnic	0.16800	22.45986	17	1.3211
Relationship Between Two Variables				
exp_RL, ed_set, exp_RL by ed_set	0.38900	16.94659	16	1.0591
exp_RL, ethnic, exp_RL by ethnic	0.00000	40.89252	12	3.4077
ed_set, ethnic, ed_set by ethnic	0.01300	33.95351	18	1.8863
Relationship and One Omitted Margin				
exp_RL, ed_set, ethnic, exp_RL by ed_set	0.26300	16.87193	14	1.2051
exp_RL, ed_set, ethnic, exp_RL by ethnic	0.15100	15.73026	11	1.4300
exp_RL, ed_set, ethnic, ed_set by ethnic	0.10000	22.32468	15	1.4883
Two Relationships Among Predictors				
exp_RL, ed_set, ethnic, exp_RL by ed_set, exp_RL by ethnic	0.25500	10.14232	8	1.2677
exp_RL, ed_set, ethnic, exp_RL by ed_set, ed_set by ethnic	0.16000	16.73674	12	1.3947
exp_RL, ed_set, ethnic, exp_RL by ethnic, ed_set by ethnic	0.07600	15.59508	9	1.7327
Three Sets of Relationships				
exp_RL, ed_set, ethnic, exp_RL by ed_set, exp_RL by ethnic, ed_set by ethnic Saturated (df=0) Model	0.19900	10.13658	6	1.6894
exp_RL, ed_set, ethnic, exp_RL by ed_set, exp_RL by ethnic, ed_set by ethnic, exp_RL by ed_set by ethnic		0.00000	0	

Table J-17 Model Fit Statistics for all Possible Loglinear Models: Recreation/Leisure Expectations, Educational Setting and Ethnicity

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	45.17758	15	3.0118
Single Margins				
exp_RL	0.00000	40.73308	12	3.3944
ed_set	0.01800	27.19966	14	1.9428
gender	0.00000	52.02139	14	3.7158
Two Margins				
exp_RL, ed_set	0.15800	15.57083	11	1.4155
exp_RL, gender	0.00000	40.39255	11	3.6720
ed_set, gender	0.01300	26.85913	13	2.0660
Three Margins				
exp_RL, ed_set, gender	0.12400	15.23030	10	1.5230
Relationship Between Two Variables				
exp_RL, ed_set, exp_RL by ed_set	0.26600	9.98289	8	1.2478
exp_RL, gender, exp_RL by gender	0.00000	36.14644	8	4.5183
ed_set, gender, ed_set by gender	0.00900	26.69933	12	2.2249
Relationship and One Omitted Margin				
exp_RL, ed_set, gender, exp_RL by ed_set	0.21000	9.64236	7	1.3774
exp_RL, ed_set, gender, exp_RL by gender	0.13900	10.98418	7	1.5691
exp_RL, ed_set, gender, ed_set by gender	0.08900	15.07050	9	1.6745
Two Relationships Among Predictors				
exp_RL, ed_set, gender, exp_RL by ed_set, exp_RL by gender	0.24900	5.39625	4	1.3490
exp_RL, ed_set, gender, exp_RL by ed_set, ed_set by gender	0.14800	9.49256	6	1.5820
exp_RL, ed_set, gender, exp_RL by gender, ed_set by gender	0.09400	10.82439	6	1.8040
Three Sets of Relationships	0 1 4 5 0 0	5 00050	2	1 5050
exp_RL, ed_set, gender, exp_RL by ed_set, exp_RL by gender, ed_set by gender Saturated (df=0) Model	0.14500	5.39353	3	1.7978
exp_RL, ed_set, gender, exp_RL by ed_set, exp_RL by gender, ed_set by gender, exp_RL by ed_set by gender		0.00000	0	

 Table J-18

 Model Fit Statistics for all Possible Loglinear Models: Recreation/Leisure Expectations,

 Educational Setting and Gender

N 11	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	38.76133	15	2.58409
Single Margins				
exp_RL	0.00100	34.75508	12	2.89626
ed_set	0.09500	21.26128	14	1.51866
SES	0.00000	44.60406	14	3.18600
Two Margins				
exp_RL, ed_set	0.51200	10.20779	11	0.92798
exp_RL, SES	0.00000	33.55058	11	3.05005
ed_set, SES	0.09400	20.05677	13	1.54283
Three Margins				
exp_RL, ed_set, SES	0.53200	9.00329	10	0.90033
Relationship Between Two Variables				
exp_RL, ed_set, exp_RL by ed_set	0.77400	4.84229	8	0.60529
exp_RL, SES, exp_RL by SES	0.00000	32.79453	8	4.09932
ed_set, SES, ed_set by SES	0.11700	17.95643	12	1.49637
Relationship and One Omitted Margin				
exp_RL, ed_set, SES, exp_RL by ed_set	0.82000	3.63779	7	0.51968
exp_RL, ed_set, SES, exp_RL by SES	0.31100	8.24724	7	1.17818
exp_RL, ed_set, SES, ed_set by SES	0.64700	6.90294	9	0.76699
Two Relationships Among Predictors				
exp_RL, ed_set, SES, exp_RL by ed_set, exp_RL by SES	0.57800	2.88174	4	0.72044
exp_RL, ed_set, SES, exp_RL by ed_set, ed_set by SES	0.95700	1.53744	6	0.25624
exp_RL, ed_set, SES, exp_RL by SES, ed_set by SES	0.40700	6.14689	6	1.02448
Three Sets of Relationships				
exp_RL, ed_set, SES, exp_RL by ed_set, exp_RL by SES, ed_set by SES Saturated (df=0) Model	0.93200	0.43982	3	0.14661
exp_RL, ed_set, SES, exp_RL by ed_set, exp_RL by SES, ed_set by SES, exp_RL by ed_set by SES		0.00000	0	

Table J-19

Model Fit Statistics for all Possible Loglinear Models: Recreation/Leisure Expectations, Educational Setting and Eocio-Economic Status

Table J-20

Model / Effect		Statistic	
Model / Effect	$L^2$	df	pcalculated
Recreation/Leisure Expectations by Educational Setting			
exp_RL, ed_set, gender, ed_set by gender	15.07050	9	
exp_RL, ed_set, gender, exp_RL by ed_set,	9.49256	6	
ed_set by gender	9.49230	0	
Difference	5.57794	3	0.13405
Recreation/Leisure Expectations by Gender			
exp_RL, ed_set, gender, ed_set by gender	15.07050	9	
exp_RL, ed_set, gender, exp_RL by gender,	10.82439	6	
ed_set by gender	10.82439	0	
Difference	4.24611	3	0.23609
Recreation/Leisure Expectations by Ethnicity			
exp_RL, ed_set, ethnic, ed_set by ethnic	22.32468	15	
exp_RL, ed_set, ethnic, exp_RL by ethnic, ed_set	15.59508	9	
by ethnic	15.59508	7	
Difference	6.72960	6	0.34658
Recreation/Leisure expectations by Socio-Economic			
Status			
exp_RL, ed_set, SES, ed_set by SES	6.90294	9	
exp_RL, ed_set, SES, exp_RL by SES, ed_set by	6.14689	6	
SES	0.14009	0	
Difference	0.75605	3	0.85995

Test of the Effect of Recreation/Leisure Status by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Table J-21

	Recreation/Leisure Expectations				
Variable	0-4	5-7	8-9	10+	
	Activities	Activities	Activities	Activities	
Full Sample	27.66%	33.51%	21.81%	17.02%	
Educational Setting					
General Education	22.66%	37.50%	22.66%	17.19%	
Special Education	38.33%	25.00%	20.00%	16.67%	
Ethnicity					
African-American	17.46%	36.51%	25.40%	20.63%	
Hispanic	32.81%	35.94%	18.75%	12.50%	
Anglo	32.79%	27.87%	21.31%	18.03%	
Gender					
Male	34.44%	28.89%	21.11%	15.56%	
Female	21.43%	37.76%	22.45%	18.37%	
Socio-Economic Status					
High SES	30.23%	33.72%	19.77%	16.28%	
Low SES	25.74%	32.67%	23.76%	17.82%	

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Recreation/Leisure Expectations

N = 188

## APPENDIX K

**QUESTION 3: FULL RESULTS** 

Setting and Ethnicity		Statistic	:	
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	99.80775	29	3.44165
Single Margins				
out_empl	0.05800	36.97657	25	1.47906
ed_set	0.00000	81.05632	28	2.89487
ethnic	0.00000	99.68745	27	0.00000
Two Margins				
out_empl, ed_set	0.79200	18.22422	24	0.75934
out_empl, ethnic	0.03400	36.85535	23	1.60241
ed_set, ethnic	0.00000	80.93511	26	3.11289
Three Margins				
out_empl, ed_set, ethnic	0.70000	18.10300	22	0.82286
Relationship Between Two Variables				
out_empl, ed_set, out_empl by ed_set				
out_empl, ethnic, out_empl by ethnic	0.01100	31.83686	16	1.98980
ed_set, ethnic, ed_set by ethnic	0.00000	80.75766	24	3.36490
Relationship and One Omitted Margin				
out_empl, ed_set, ethnic, out_empl by ed_set				
out_empl, ed_set, ethnic, out_empl by ethnic	0.59600	13.08451	15	0.87230
out_empl, ed_set, ethnic, ed_set by ethnic	0.59200	17.92556	20	0.89628
Two Relationships Among Predictors				
out_empl, ed_set, ethnic, out_empl by ed_set, out_empl by ethnic				
out_empl, ed_set, ethnic, out_empl by ed_set, ed_set by ethnic				
out_empl, ed_set, ethnic, out_empl by ethnic, ed_set by ethnic	0.45500	12.90706	13	0.99285
Three Sets of Relationships				
out_empl, ed_set, ethnic, out_empl by ed_set, out_empl by ethnic, ed_set by ethnic Saturated (df=0) Model				
out_empl, ed_set, ethnic, out_empl by ed_set, out_empl by ethnic, ed_set by ethnic, out_empl by ed_set by ethnic		0.00000	0	

 Table K-1

 Model Fit Statistics for all Possible Loglinear Models: Employment Outcome, Educational

 Setting and Ethnicity

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	98.67345	19	5.1933
Single Margins				
out_empl	0.00200	35.84754	15	2.3898
ed_set	0.00000	79.92730	18	4.4404
gender	0.00000	98.36916	18	5.4649
'wo Margins				
out_empl, ed_set	0.25100	17.09519	14	1.2210
out_empl, gender	0.00100	35.53706	14	2.5383
ed_set, gender	0.00000	79.61682	17	4.6833
Three Margins				
out_empl, ed_set, gender	0.20900	16.78471	13	1.2911
elationship Between Two Variables				
out_empl, ed_set, out_empl by ed_set	0.61200	9.10288	11	0.8275
out_empl, gender, out_empl by gender	0.00100	31.13386	11	2.8303
ed_set, gender, ed_set by gender	0.00000	79.55870	16	4.9724
elationship and One Omitted Margin				
out_empl, ed_set, gender, out_empl by ed_set	0.55200	8.79240	10	0.8792
out_empl, ed_set, gender, out_empl by gender	0.26000	12.38151	10	1.2381
out_empl, ed_set, gender, ed_set by gender	0.16000	16.72660	12	1.3938
wo Relationships Among Predictors				
out_empl, ed_set, gender, out_empl by ed_set, out_empl by gender				
out_empl, ed_set, gender, out_empl by ed_set, ed_set by gender	0.46200	8.73429	9	0.9704
out_empl, ed_set, gender, out_empl by gender, ed_set by gender hree Sets of Relationships	0.19600	12.32340	9	1.3692
out_empl, ed_set, gender, out_empl by ed_set, out_empl by gender, ed_set by gender	0.64200	4.25516	6	0.7091
aturated (df=0) Model				
out_empl, ed_set, gender, out_empl by ed_set, out_empl by gender, ed_set by gender, out_empl by ed_set by gender		0.00000	0	

 Table K-2

 Model Fit Statistics for all Possible Loglinear Models: Employment Outcome, Educational

 Setting and Gender

	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	103.13651	19	5.4282
Single Margins				
out_empl	0.00000	40.59508	15	2.7063
ed_set	0.00000	85.06458	18	4.7258
SES	0.00000	103.14397	18	5.7302
Two Margins				
out_empl, ed_set	0.06900	22.50699	14	1.6076
out_empl, SES	0.00000	40.58638	14	2.8990
ed_set, SES	0.00000	85.05589	17	5.0032
Three Margins				
out_empl, ed_set, SES	0.04800	22.49829	13	1.7306
Relationship Between Two Variables				
out_empl, ed_set, out_empl by ed_set	0.22400	14.16387	11	1.2876
out_empl, SES, out_empl by SES	0.00100	32.12693	11	2.9206
ed_set, SES, ed_set by SES	0.00000	83.89742	16	5.2435
Relationship and One Omitted Margin				
out_empl, ed_set, SES, out_empl by ed_set	0.16600	14.15518	10	1.4155
out_empl, ed_set, SES, out_empl by SES	0.17100	14.03884	10	1.4038
out_empl, ed_set, SES, ed_set by SES	0.04600	21.33983	12	1.7783
Two Relationships Among Predictors				
out_empl, ed_set, SES, out_empl by ed_set, out_empl by SES				
out_empl, ed_set, SES, out_empl by ed_set, ed_set by SES	0.16300	12.99671	9	1.4440
out_empl, ed_set, SES, out_empl by SES, ed_set by SES	0.16800	12.88038	9	1.4311
Three Sets of Relationships				
out_empl, ed_set, SES, out_empl by ed_set, out_empl by SES, ed_set by SES Saturated (df=0) Model	0.48000	5.51519	6	0.9192
out_empl, ed_set, SES, out_empl by ed_set, out_empl by SES, ed_set by SES, out_empl by ed_set by SES		0.00000	0	

Table K-3 Model Fit Statistics for all Possible Loglinear Models: Employment Outcome, Educational Setting and Socio-Economic Status

Table K-4

Model / Effect	Statistic		
Model / Effect	$L^2$	df	pcalculated
Employment Outcome by Educational Setting			
out_empl, ed_set, gender, ed_set by gender	16.72660	12	
out_empl, ed_set, gender, out_empl by ed_set, ed_set by gender	8.73429	9	
Difference	7.99231	3	0.04617
Employment Outcome by Gender			
out_empl, ed_set, gender, ed_set by gender	16.72660	12	
out_empl, ed_set, gender, out_empl by gender,	12.32340	9	
ed_set by gender Difference	4.40320	3	0.22109
Employment Outcome by Ethnicity			
out_empl, ed_set, ethnic, ed_set by ethnic	17.92556	20	
out_empl, ed_set, ethnic, out_empl by ethnic, ed_set by ethnic	12.90706	13	
Difference	5.01850	7	0.65771
Employment Outcome by Socio-Economic Status			
out_empl, ed_set, SES, ed_set by SES	32.12693	11	
out_empl, ed_set, SES, out_empl by SES, ed_set by SES	14.03884	10	
Difference	18.08809	1	0.00002

Test of the Effect of Employment Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

## Table K-5

Tests of the Effects of Educational Setting and Socio-Economic Status Controlling for Each Other

Model / Effect	Statistic		
Model / Effect	$L^2$	df	pcalculated
Educational Setting main effect controlling for Socio-			
Economic Status			
Empl Status, Ed Setting, SES, Empl Status by SES, Ed Setting by SES	14.03884	10	
Empl Status, Ed Setting, SES, Empl Status by Ed Setting, Empl Status by SES, Ed Setting by SES	5.51519	6	
Difference	8.52365	4	0.07417
Socio-Economic Status main effect controlling for			
Educational Setting			
Empl Status, Ed Setting, SES, Empl Status by Ed Setting, Ed Setting by SES	14.15518	10	
Empl Status, Ed Setting, SES, Empl Status by Ed Setting, Empl Status by SES, Ed Setting by SES	0.48000	6	
Difference	13.67518	4	0.00841

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Employment Outcome

		Emplo	yment Outco	omes	
Variable	Not	Work	Work	Military	Volunteer
	Employed	Part-time	Full-time	-	
Full Sample	36.5%	31.3%	22.6%	1.7%	7.8%
Educational Setting					
General Education	32.1%	35.8%	19.8%	2.5%	9.9%
Special Education	47.1%	20.6%	29.4%	0.0%	2.9%
Ethnicity					
African-American	40.5%	29.7%	24.3%	2.7%	2.7%
Hispanic	37.5%	32.5%	22.5%	0.0%	7.5%
Anglo	30.8%	30.8%	23.1%	2.6%	12.8%
Gender					
Male	38.2%	25.5%	25.5%	3.6%	7.3%
Female	34.4%	36.1%	21.3%	0.0%	8.2%
Socio-Economic Status					
High SES	32.8%	37.9%	15.5%	3.4%	10.3%
Low SES	40.4%	24.6%	29.8%	0.0%	5.3%
N=116					

APPENDIX L

**QUESTION 4: FULL RESULTS** 

Table L-1

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	42.77121	16	2.67320
Single Margins				
out_ed	0.00100	39.50090	15	2.63339
ed_set	0.03300	27.88567	16	1.74285
ethnic	0.00000	42.67466	15	2.84498
Two Margins				
out_ed, ed_set	0.04200	24.32730	14	1.73766
out_ed, ethnic	0.00000	39.11630	13	3.00895
ed_set, ethnic	0.01700	27.50107	14	1.96436
Three Margins				
out_ed, ed_set, ethnic	0.02100	23.94270	12	1.99523
Relationship Between Two Variables				
out_ed, ed_set, out_ed by ed_set	0.33100	13.54176	12	1.12848
out_ed, ethnic, out_ed by ethnic	0.00100	28.36738	9	3.15193
ed_set, ethnic, ed_set by ethnic	0.00700	27.28794	12	2.2740
Relationship and One Omitted Margin				
out_ed, ed_set, ethnic, out_ed by ed_set	0.21500	13.15717	10	1.3157
out_ed, ed_set, ethnic, out_ed by ethnic	0.10500	13.19379	8	1.64922
out_ed, ed_set, ethnic, ed_set by ethnic	0.00800	23.72957	10	2.3729
Two Relationships Among Predictors				
out_ed, ed_set, ethnic, out_ed by ed_set,				
out_ed by ethnic	0.87900	2.40825	6	0.4013
out_ed, ed_set, ethnic, out_ed by ed_set, ed_set by ethnic	0.11400	12.94403	8	1.61800
out_ed, ed_set, ethnic, out_ed by ethnic,	0.11400	12.94405	0	1.0180
ed_set by ethnic	0.04300	12.98066	6	2.1634
Three Sets of Relationships				
out_ed, ed_set, ethnic, out_ed by ed_set,				
out_ed by ethnic, ed_set by ethnic Saturated (df=0) Model	0.71700	2.10045	4	0.5251
out_ed, ed_set, ethnic, out_ed by ed_set, out_ed by ethnic, ed_set by ethnic, out_ed				
by ed_set by ethnic		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: Education Outcome, Educational Setting and Ethnicity

Table L-2

Model		Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df	
Baseline					
Null, equiprobability model	0.00000	64.90135	15	4.32676	
Single Margins					
out_ed	0.00100	32.30998	12	2.69250	
ed_set	0.00000	54.13314	14	3.8666	
gender	0.00000	70.48179	14	5.0344	
Two Margins					
out_ed, ed_set	0.16000	15.52742	11	1.4115	
out_ed, gender	0.00100	31.78608	11	2.8896	
ed_set, gender	0.00000	53.69923	13	4.1307	
Three Margins					
out_ed, ed_set, gender	0.12900	15.09352	10	1.5093	
Relationship Between Two Variables					
out_ed, ed_set, out_ed by ed_set	0.81700	4.42340	8	0.5529	
out_ed, gender, out_ed by gender	0.00000	30.24852	8	3.7810	
ed_set, gender, ed_set by gender	0.00000	53.67046	12	4.4725	
Relationship and One Omitted Margin					
out_ed, ed_set, gender, out_ed by ed_set	0.78100	3.98949	7	0.5699	
out_ed, ed_set, gender, out_ed by gender	0.06200	13.46596	7	1.9237	
out_ed, ed_set, gender, ed_set by gender	0.08900	15.06475	9	1.6738	
Two Relationships Among Predictors					
out_ed, ed_set, gender, out_ed by ed_set, out_ed by gender	0.67000	2.36194	4	0.5904	
out_ed, ed_set, gender, out_ed by ed_set, ed_set by gender	0.68200	3.96072	6	0.6601	
out_ed, ed_set, gender, out_ed by gender, ed_set by gender Three Sets of Relationships	0.03700	13.42719	6	2.2378	
out_ed, ed_set, gender, out_ed by ed_set, out_ed by gender, ed_set by gender Saturated (df=0) Model	0.54100	2.15265	3	0.7175	
out_ed, ed_set, gender, out_ed by ed_set, out_ed by gender, ed_set by gender, out_ed by ed_set by gender		0.00000	0		

Model Fit Statistics for all Possible Loglinear Models: Education Outcome, Educational Setting and Gender

N 11		Statistic		
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	76.38738	15	5.09249
Single Margins				
out_ed	0.00000	38.89111	12	3.24093
ed_set	0.00000	60.67596	14	4.33400
SES	0.00000	76.81758	14	5.48697
Two Margins				
out_ed, ed_set	0.01900	22.74948	11	2.06813
out_ed, SES	0.00000	38.89111	11	3.53556
ed_set, SES	0.00000	60.67596	13	4.66738
Three Margins				
out_ed, ed_set, SES	0.01200	22.74948	10	2.27495
Relationship Between Two Variables				
out_ed, ed_set, out_ed by ed_set	0.19700	11.07892	8	1.38487
out_ed, SES, out_ed by SES	0.00000	36.18685	8	4.52336
ed_set, SES, ed_set by SES	0.00000	59.63432	12	4.96953
Relationship and One Omitted Margin				
out_ed, ed_set, SES, out_ed by ed_set	0.13500	11.07892	7	1.58270
out_ed, ed_set, SES, out_ed by SES	0.00500	20.04523	7	2.86360
out_ed, ed_set, SES, ed_set by SES	0.01000	21.70785	9	2.41198
Two Relationships Among Predictors				
out_ed, ed_set, SES, out_ed by ed_set, out_ed by SES	0.07900	8.37467	4	2.09367
out_ed, ed_set, SES, out_ed by ed_set, ed_set by SES	0.12300	10.03728	6	1.67288
out_ed, ed_set, SES, out_ed by SES, ed_set by SES	0.00400	19.00359	6	3.16727
Three Sets of Relationships				
out_ed, ed_set, SES, out_ed by ed_set, out_ed by SES, ed_set by SES Saturated (df=0) Model	0.04600	7.99399	3	2.66466
out_ed, ed_set, SES, out_ed by ed_set, out_ed by SES, ed_set by SES, out_ed by ed_set by SES		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: Education Outcome, Educational Setting and Socio-Economic Status

Table L-3

Table L-4

Model / Effect	S	Statistic		
Model / Effect	$L^2$	df	pcalculated	
Education Outcome by Educational Setting				
out_ed, ed_set, gender, ed_set by gender	15.06475	9		
out_ed, ed_set, gender, out_ed by ed_set, ed_set by gender	3.96072	6		
Difference	11.10403	3	0.01118	
Education Outcome by Gender				
out_ed, ed_set, gender, ed_set by gender	15.06475	9		
out_ed, ed_set, gender, out_ed by gender, ed_set by gender	13.42719	6		
Difference	1.63756	3	0.65090	
Education Outcome by Ethnicity				
out_ed, ed_set, ethnic, ed_set by ethnic	23.72957	10		
out_ed, ed_set, ethnic, out_ed by ethnic, ed_set by ethnic	12.98066	6		
Difference	10.74891	4	0.02954	
Education Outcome by Socio-Economic Status				
out_ed, ed_set, SES, ed_set by SES	21.70785	9		
out_ed, ed_set, SES, out_ed by SES, ed_set by SES	19.00359	6		
Difference	2.70426	3	0.43950	

Test of the Effect of Education Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

## Table L-5

Tests of the Effects of Educational Setting and Ethnicity Controlling for Each Other

Model / Effect	S	tatistic	
Model / Effect	$L^2$	df	pcalculated
Educational Setting main effect controlling for Ethnic			
Out_ed, Ed_set, ethnic, Out_ed by ethnic, Ed_set	t		
by ethnic	12.98066	6	
Out_ed, Ed_set, ethnic, Out_ed by Ed_set,			
Out_ed by ethnic, Ed_set by ethnic	2.10045	4	
Difference	10.88021	2	0.00434
Ethnic main effect controlling for Educational Setting			
Out_ed, Ed_set, ethnic, Out_ed by Ed_set,			
Ed_set by ethnic	12.94403	8	
Out_ed, Ed_set, ethnic, Out_ed by Ed_set,			
Out_ed by ethnic, Ed_set by ethnic	2.10045	4	
Difference	10.84358	4	0.0283

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Education Outcome

	Education Outcomes						
Variable	None	2-year College	4-year College	Employment Related	Voc/ Tech School		
Full Sample	34.78%	35.65%	23.48%	4.35%	1.74%		
Educational Setting							
General Education	26.25%	36.25%	30.00%	5.00%	2.50%		
Special Education	54.29%	34.29%	8.57%	2.86%	0.00%		
Ethnicity							
African-American	35.14%	32.43%	24.32%	5.41%	2.70%		
Hispanic	48.72%	41.03%	10.26%	0.00%	0.00%		
Anglo	20.51%	33.33%	35.90%	7.69%	2.56%		
Gender							
Male	37.74%	37.74%	18.87%	5.66%	0.00%		
Female	32.26%	33.87%	27.42%	3.23%	3.23%		
Socio-Economic Status							
High SES	29.31%	34.48%	29.31%	3.45%	3.45%		
Low SES	39.29%	37.50%	17.86%	5.36%	0.00%		

Table L-7

Variable	Education Outcomes			
Variable	Part-Time	Full-Time		
Full Sample	20.59%	79.41%		
Educational Setting				
General Education	18.18%	81.82%		
Special Education	30.77%	69.23%		
Ethnicity				
African-American	18.18%	81.82%		
Hispanic	33.33%	66.67%		
Anglo	14.29%	85.71%		
Gender				
Male	21.43%	78.57%		
Female	20.00%	80.00%		
Socio-Economic Status				
High SES	18.42%	81.58%		
Low SES	23.33%	76.67%		

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Full-time Versus Parttime School Status

APPENDIX M

PRODUCTIVE ENGAGEMENT: FULL RESULTS

Madal	Statistic				
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df	
Baseline					
Null, equiprobability model	0.00400	43.87449	23	1.90759	
Single Margins					
prod_eng	0.00500	39.95114	20	1.99756	
ed_set	0.09900	30.85084	22	1.40231	
ethnic	0.00000	50.06968	21	2.38427	
Two Margins					
prod_eng, ed_set	0.36400	20.52708	19	1.08037	
prod_eng, ethnic	0.00200	39.74592	18	2.2081	
ed_set, ethnic	0.06000	30.64562	20	1.53228	
Three Margins					
prod_eng, ed_set, ethnic	0.25800	20.32186	17	1.1954(	
Relationship Between Two Variables					
prod_eng, ed_set, prod_eng by ed_set	0.65800	13.20578	16	0.82536	
prod_eng, ethnic, prod_eng by ethnic	0.00200	30.64732	12	2.55394	
ed_set, ethnic, ed_set by ethnic	0.03300	30.52789	18	1.69599	
Relationship and One Omitted Margin					
<pre>prod_eng, ed_set, ethnic, prod_eng by ed_set</pre>	0.52600	13.00056	14	0.92861	
prod_eng, ed_set, ethnic, prod_eng by ethnic	0.42500	11.22326	11	1.02030	
prod_eng, ed_set, ethnic, ed_set by ethnic	0.16400	20.20412	15	1.34694	
Two Relationships Among Predictors					
<pre>prod_eng, ed_set, ethnic, prod_eng by ed_set, prod_eng by ethnic</pre>	0.86600	3.90196	8	0.48775	
<pre>prod_eng, ed_set, ethnic, prod_eng by ed_set, ed_set by ethnic</pre>	0.37800	12.88282	12	1.07357	
prod_eng, ed_set, ethnic, prod_eng by ethnic, ed_set by ethnic	0.26900	11.10553	9	1.23395	
Three Sets of Relationships					
prod_eng, ed_set, ethnic, prod_eng by ed_set, prod_eng by ethnic, ed_set by ethnic Saturated (df=0) Model	0.70900	3.75918	6	0.62653	
prod_eng, ed_set, ethnic, prod_eng by ed_set, prod_eng by ethnic, ed_set by ethnic, prod_eng by ed_set by ethnic		0.00000	0		

 Table M-1

 Model Fit Statistics for all Possible Loglinear Models: Productive Engagement, Educational

 Setting and Ethnicity

 Madal	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	39.55577	15	2.6370
Single Margins				
prod_eng	0.00000	35.63243	12	2.9693
ed_set	0.02200	26.53213	14	1.8951
gender	0.00000	45.53714	14	3.2526
Swo Margins				
prod_eng, ed_set	0.13400	16.20837	11	1.4734
prod_eng, gender	0.00000	35.21337	11	3.2012
ed_set, gender	0.01600	26.11308	13	2.0087
Three Margins				
prod_eng, ed_set, gender	0.10600	15.78931	10	1.5789
Relationship Between Two Variables				
prod_eng, ed_set, prod_eng by ed_set	0.35200	8.88706	8	1.1108
prod_eng, gender, prod_eng by gender	0.00000	33.02678	8	4.1283
ed_set, gender, ed_set by gender	0.01000	26.07947	12	2.1732
elationship and One Omitted Margin				
prod_eng, ed_set, gender, prod_eng by ed_set	0.29300	8.46801	7	1.2097
prod_eng, ed_set, gender, prod_eng by gender	0.05900	13.60272	7	1.9432
prod_eng, ed_set, gender, ed_set by gender	0.07200	15.75571	9	1.7506
wo Relationships Among Predictors				
prod_eng, ed_set, gender, prod_eng by ed_set, prod_eng by gender	0.17900	6.28142	4	1.5703
prod_eng, ed_set, gender, prod_eng by ed_set, ed_set by gender	0.20800	8.43441	6	1.4057
prod_eng, ed_set, gender, prod_eng by gender, ed_set by gender 'hree Sets of Relationships	0.03500	13.56911	6	2.2615
prod_eng, ed_set, gender, prod_eng by ed_set, prod_eng by gender, ed_set by gender	0.10100	6.21865	3	2.0728
aturated (df=0) Model prod_eng, ed_set, gender, prod_eng by ed_set, prod_eng by gender, ed_set by gender, prod_eng by ed_set by gender		0.00000	0	

Table M-2 Model Fit Statistics for all Possible Loglinear Models: Productive Engagement, Educational Setting and Gender

	Statistic			
Model	pcalculated	$L^2$	df	$L^2/df$
Baseline				
Null, equiprobability model	0.00000	76.38737	15	5.09249
Single Margins				
prod_eng	0.00000	38.89111	12	3.24093
ed_set	0.00000	60.67596	14	4.33400
SES	0.00000	76.81758	14	5.48697
Two Margins				
prod_eng, ed_set	0.01900	22.74948	11	2.06813
prod_eng, SES	0.00000	38.89111	11	3.53556
ed_set, SES	0.00000	60.67596	13	4.66738
Three Margins				
prod_eng, ed_set, SES	0.01200	22.74948	10	2.27495
Relationship Between Two Variables				
prod_eng, ed_set, prod_eng by ed_set	0.19700	11.07892	8	1.38487
prod_eng, SES, prod_eng by SES	0.00000	36.18685	8	4.52336
ed_set, SES, ed_set by SES	0.00000	59.63432	12	4.96953
Relationship and One Omitted Margin				
prod_eng, ed_set, SES, prod_eng by ed_set	0.13500	11.07892	7	1.58270
prod_eng, ed_set, SES, prod_eng by SES	0.00500	20.04523	7	2.86360
prod_eng, ed_set, SES, ed_set by SES	0.01000	21.70785	9	2.41198
Two Relationships Among Predictors				
<pre>prod_eng, ed_set, SES, prod_eng by ed_set, prod_eng by SES</pre>	0.07900	8.37467	4	2.09367
prod_eng, ed_set, SES, prod_eng by ed_set, ed_set by SES	0.12300	10.03728	6	1.67288
<pre>prod_eng, ed_set, SES, prod_eng by SES, ed_set by SES</pre>	0.00400	19.00359	6	3.16727
Three Sets of Relationships				
prod_eng, ed_set, SES, prod_eng by ed_set, prod_eng by SES, ed_set by SES Saturated (df=0) Model	0.04600	7.99399	3	2.66466
prod_eng, ed_set, SES, prod_eng by ed_set, prod_eng by SES, ed_set by SES, prod_eng by ed_set by SES		0.00000	0	

Table M-3 Model Fit Statistics for all Possible Loglinear Models: Productive Engagement, Educational Setting and Socio-Economic Status

Table M-4

Madal / Effect	Statistic		
Model / Effect	$L^2$	df	pcalculated
Productive Engagement by Educational Setting			
prod_eng, ed_set, gender, ed_set by gender	15.75571	9	
<pre>prod_eng, ed_set, gender, prod_eng by ed_set, ed_set by gender</pre>	8.43441	6	
Difference	7.32130	3	0.06233
Productive Engagement by Gender			
prod_eng, ed_set, gender, ed_set by gender	15.75571	9	
<pre>prod_eng, ed_set, gender, prod_eng by gender, ed_set by gender</pre>	13.56911	6	
Difference	2.18660	3	0.53459
Productive Engagement by Ethnicity			
prod_eng, ed_set, ethnic, ed_set by ethnic	20.20412	15	
prod_eng, ed_set, ethnic, prod_eng by ethnic, ed_set by ethnic	11.10553	9	
Difference	9.09859	6	0.16811
Productive Engagement by Socio-Economic Status			
prod_eng, ed_set, SES, ed_set by SES	21.70785	9	
prod_eng, ed_set, SES, prod_eng by SES, ed_set by SES	19.00359	6	
Difference	2.70426	3	0.43950

Test of the Effect of Productive Engagement by Educational Setting, Gender, Ethnicity, and Eocio-Economic Status

	Productive Engagement				
Variable	No working/ No School	School Only	Working Only	School & Work	
Full Sample	15.38%	28.21%	21.37%	35.04%	
Educational Setting					
General Education	10.98%	32.93%	18.29%	37.80%	
Special Education	25.71%	17.14%	28.57%	28.57%	
Ethnicity					
African-American	13.51%	27.03%	24.32%	35.14%	
Hispanic	26.83%	21.95%	21.95%	29.27%	
Anglo	5.13%	35.90%	17.95%	41.03%	
Gender					
Male	14.55%	30.91%	25.45%	29.09%	
Female	16.13%	25.81%	17.74%	40.32%	
Socio-Economic Status					
High SES	13.79%	25.86%	17.24%	43.10%	
Low SES	17.24%	31.03%	24.14%	27.59%	

Table M-5 Educational Setting, Ethnicity, Gender and Socio-Economic Status by Productive Engagement

## APPENDIX N

**QUESTION 5: FULL RESULTS** 

	Statistic			
Model	pcalculated	$L^2$	df	$L^2/df$
Baseline				
Null, equiprobability model	0.00000	110.48287	23	4.80360
Single Margins				
out_live	0.00100	44.67802	20	2.23390
ed_set	0.00000	93.36663	22	4.24394
ethnic	0.00000	112.58547	21	5.3612
Two Margins				
out_live, ed_set	0.15200	25.25396	19	1.32910
out_live, ethnic	0.00000	44.47281	18	2.4707
ed_set, ethnic	0.00000	93.16141	20	4.6580
Three Margins				
out_live, ed_set, ethnic	0.09400	25.04875	17	1.4734
Relationship Between Two Variables				
out_live, ed_set, out_live by ed_set	0.30100	18.39398	16	1.1496
out_live, ethnic, out_live by ethnic	0.00200	31.76686	12	2.6472
ed_set, ethnic, ed_set by ethnic	0.00000	93.04368	18	5.1690
Relationship and One Omitted Margin				
out_live, ed_set, ethnic, out_live by ed_set	0.19800	18.18877	14	1.2992
out_live, ed_set, ethnic, out_live by ethnic	0.33800	12.34280	11	1.1220
out_live, ed_set, ethnic, ed_set by ethnic	0.05100	24.93101	15	1.6620
Two Relationships Among Predictors				
out_live, ed_set, ethnic, out_live by ed_set, out_live by ethnic	0.70500	5.48282	8	0.6853
out_live, ed_set, ethnic, out_live by ed_set, ed_set by ethnic	0.11400	18.07103	12	1.5059
out_live, ed_set, ethnic, out_live by ethnic, ed_set by ethnic	0.20100	12.22507	9	1.3583
Three Sets of Relationships				
out_live, ed_set, ethnic, out_live by ed_set, out_live by ethnic, ed_set by ethnic	0.49000	5.42567	6	0.9042
Saturated (df=0) Model		0.00000	~	
out_live, ed_set, ethnic, out_live by ed_set, out_live by ethnic, ed_set by ethnic, out_live by ed_set by ethnic		0.00000	0	

Table N-1Model Fit Statistics for all Possible Loglinear Models: Independent Living Outcome,Educational Setting and Ethnicity

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	108.26286	15	7.21752
Single Margins				
out_live	0.00000	40.97283	12	3.4144
ed_set	0.00000	89.66143	14	6.4043
gender	0.00000	108.66644	14	7.7618
Two Margins				
out_live, ed_set	0.02800	21.54877	11	1.9589
out_live, gender	0.00000	40.55377	11	3.6867
ed_set, gender	0.00000	89.24238	13	6.8648
Three Margins				
out_live, ed_set, gender	0.02000	21.12971	10	2.1129
Relationship Between Two Variables				
out_live, ed_set, out_live by ed_set	0.06500	14.68879	8	1.8361
out_live, gender, out_live by gender	0.00000	34.13001	8	4.2662
ed_set, gender, ed_set by gender	0.00000	89.20878	12	7.4340
Relationship and One Omitted Margin				
out_live, ed_set, gender, out_live by ed_set	0.04700	14.26973	7	2.0385
out_live, ed_set, gender, out_live by gender	0.04000	14.70595	7	2.1008
out_live, ed_set, gender, ed_set by gender	0.01200	21.09611	9	2.3440
Two Relationships Among Predictors				
out_live, ed_set, gender, out_live by ed_set, out_live by gender	0.09700	7.84597	4	1.9614
out_live, ed_set, gender, out_live by ed_set, ed_set by gender	0.02700	14.23613	6	2.3726
out_live, ed_set, gender, out_live by gender, ed_set by gender	0.02300	14.67235	6	2.4453
Three Sets of Relationships out_live, ed_set, gender, out_live by ed_set, out_live by gender, ed_set by gender Saturated (df=0) Model	0.05800	7.50010	3	2.5000
out_live, ed_set, gender, out_live by ed_set, out_live by gender, ed_set by gender, out_live by ed_set by gender		0.00000	0	

Table N-2 Model Fit Statistics for all Possible Loglinear Models: Independent Living Outcome, Educational Setting and Gender

-	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	101.10916	15	6.7406
Single Margins				
out_live	0.00100	33.84059	12	2.8200
ed_set	0.00000	84.59619	14	6.0425
SES	0.00000	103.34854	14	7.3820
Two Margins				
out_live, ed_set	0.17800	15.08824	11	1.3716
out_live, SES	0.00000	33.84059	11	3.0764
ed_set, SES	0.00000	84.59619	13	6.5074
Three Margins				
out_live, ed_set, SES	0.12900	15.08824	10	1.5088
Relationship Between Two Variables				
out_live, ed_set, out_live by ed_set	0.44600	7.87392	8	0.9842
out_live, SES, out_live by SES	0.00100	27.78413	8	3.4730
ed_set, SES, ed_set by SES	0.00000	83.57062	12	6.9642
Relationship and One Omitted Margin				
out_live, ed_set, SES, out_live by ed_set	0.34400	7.87392	7	1.1248
out_live, ed_set, SES, out_live by SES	0.25000	9.03178	7	1.2902
out_live, ed_set, SES, ed_set by SES	0.12000	14.06267	9	1.5625
Two Relationships Among Predictors				
out_live, ed_set, SES, out_live by ed_set, out_live by SES	0.76900	1.81746	4	0.4543
out_live, ed_set, SES, out_live by ed_set, ed_set by SES	0.33500	6.84835	6	1.1413
out_live, ed_set, SES, out_live by SES, ed_set by SES	0.23800	8.00620	6	1.3343
Three Sets of Relationships				
out_live, ed_set, SES, out_live by ed_set, out_live by SES, ed_set by SES	0.92300	0.48210	3	0.1607
Saturated (df=0) Model		0.00000	0	
out_live, ed_set, SES, out_live by ed_set, out_live by SES, ed_set by SES, out_live by ed_set by SES		0.00000	0	

Table N-3 Model Fit Statistics for all Possible Loglinear Models: Independent Living Outcome, Educational Setting and Socio-Economic Status

Table N-4

Model / Effect	<u> </u>		
Model / Effect	$L^2$	df	pcalculated
Independent Living Outcome by Educational Setting			
out_live, ed_set, gender, ed_set by gender	21.09611	9	
out_live, ed_set, gender, out_live by ed_set, ed_set by gender	14.23613	6	
Difference	6.85998	3	0.07650
Independent Living Outcome by Gender			
out_live, ed_set, gender, ed_set by gender	21.09611	9	
out_live, ed_set, gender, out_live by gender, ed_set by gender	14.67235	6	
Difference	6.42376	3	0.09272
Independent Living Outcome by Ethnicity			
out_live, ed_set, ethnic, ed_set by ethnic	24.93101	15	
out_live, ed_set, ethnic, out_live by ethnic, ed_set by ethnic	12.22507	9	
Difference	12.70594	6	0.04795
Independent Living Outcome by Socio-Economic			
Status			
out_live, ed_set, SES, ed_set by SES	14.06267	9	
out_live, ed_set, SES, out_live by SES, ed_set	8.00620	6	
by SES			
Difference	6.05647	3	0.10889

Test of the Effect of Independent Living Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Table N-5

	Independet Living Outcomes			
Variable	Independent	Parent/ Family	Spouse/ Roommate	College Dorm
Full Sample	10.26%	60.68%	12.82%	16.24%
Educational Setting				
General Education	12.20%	56.10%	10.98%	20.73%
Special Education	5.71%	71.43%	17.14%	5.71%
Ethnicity				
African-American	8.11%	67.57%	2.70%	21.62%
Hispanic	7.32%	68.29%	17.07%	7.32%
Anglo	15.38%	46.15%	17.95%	20.51%
Gender				
Male	7.27%	72.73%	9.09%	10.91%
Female	12.90%	50.00%	16.13%	20.97%
Socio-Economic Status				
High SES	10.34%	53.45%	18.97%	17.24%
Low SES	10.34%	68.97%	5.17%	15.52%

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Independent Living Outcome

N=117

X7	Same Livin	g Placement
Variable	No	Yes
Full Sample	33.33%	66.67%
Educational Setting		
<b>General Education</b>	36.59%	63.41%
Special Education	25.71%	74.29%
Ethnicity		
African-American	37.84%	62.16%
Hispanic	14.63%	85.37%
Anglo	48.72%	51.28%
Gender		
Male	25.45%	74.55%
Female	40.32%	59.68%
Socio-Economic Status		
High SES	36.21%	63.79%
Low SES	29.31%	70.69%

Table N-6 Educational Setting, Ethnicity, Gender and Socio-Economic Status by Same Living Placement during High School

APPENDIX O

**QUESTION 6: FULL RESULTS** 

Table O-1

Model	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	53.94934	23	2.34562
Single Margins				
out_RL	0.00000	48.41058	20	2.42053
ed_set	0.04100	34.73216	22	1.57873
ethnic	0.00000	53.95100	21	2.56910
Two Margins				
out_RL, ed_set	0.06600	28.98652	19	1.52561
out_RL, ethnic	0.00000	48.20536	18	2.67808
ed_set, ethnic	0.02300	34.52694	20	1.72635
Three Margins				
out_RL, ed_set, ethnic	0.03700	28.78130	17	1.69302
Relationship Between Two Variables				
out_RL, ed_set, out_RL by ed_set	0.75800	11.79431	16	0.73714
out_RL, ethnic, out_RL by ethnic	0.00000	43.25101	12	3.60425
ed_set, ethnic, ed_set by ethnic	0.01100	34.40921	18	1.91162
Relationship and One Omitted Margin				
out_RL, ed_set, ethnic, out_RL by ed_set	0.63900	11.58909	14	0.82779
out_RL, ed_set, ethnic, out_RL by ethnic	0.01300	23.82695	11	2.16609
out_RL, ed_set, ethnic, ed_set by ethnic	0.01800	28.66357	15	1.91090
Two Relationships Among Predictors				
out_RL, ed_set, ethnic, out_RL by ed_set, out_RL by ethnic	0.57700	6.63474	8	0.82934
out_RL, ed_set, ethnic, out_RL by ed_set, ed_set by ethnic	0.48900	11.47136	12	0.95595
out_RL, ed_set, ethnic, out_RL by ethnic, ed_set by ethnic	0.00500	23.70922	9	2.63436
Three Sets of Relationships				
out_RL, ed_set, ethnic, out_RL by ed_set, out_RL by ethnic, ed_set by ethnic Saturated (df=0) Model	0.40600	6.15745	6	1.02624
out_RL, ed_set, ethnic, out_RL by ed_set, out_RL by ethnic, ed_set by ethnic, out_RL by ed_set by ethnic		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: Recreation/Leisure Outcome, Educational Setting and Ethnicity

Statistic Model  $L^2$  $L^2/df$ df pcalculated Baseline Null, equiprobability model 0.00000 52.07239 15 3.47149 Single Margins out\_RL 0.00000 46.53362 12 3.87780 ed\_set 0.00300 32.85520 14 2.34680 gender 0.00000 51.86021 14 3.70430 **Two Margins** out\_RL, ed\_set 0.00400 27.10956 11 2.46451 out\_RL, gender 0.00000 46.11457 11 4.19223 ed set, gender 0.00200 32.43615 13 2.49509 Three Margins out\_RL, ed\_set, gender 10 0.00300 26.69051 2.66905 **Relationship Between Two Variables** out\_RL, ed\_set, out\_RL by ed\_set 0.27100 9.91735 8 1.23967 out\_RL, gender, out\_RL by gender 0.00000 43.45011 8 5.43126 ed\_set, gender, ed\_set by gender 0.00100 32.40255 12 2.70021 Relationship and One Omitted Margin out RL, ed set, gender, out RL by ed set 7 0.21900 9.49830 1.35690 out\_RL, ed\_set, gender, out\_RL by gender 7 0.00100 24.02605 3.43229 out\_RL, ed\_set, gender, ed\_set by gender 0.00200 9 2.96188 26.65690 **Two Relationships Among Predictors** out\_RL, ed\_set, gender, out\_RL by ed\_set, 0.14500 6.83384 4 1.70846 out\_RL by gender out RL, ed set, gender, out RL by ed set, 0.14900 9.46469 1.57745 6 ed\_set by gender out\_RL, ed\_set, gender, out\_RL by gender, 0.00100 23.99245 6 3.99874 ed\_set by gender Three Sets of Relationships out\_RL, ed\_set, gender, out\_RL by ed\_set, 0.07800 3 2.27150 6.81450 out\_RL by gender, ed\_set by gender Saturated (df=0) Model out\_RL, ed\_set, gender, out\_RL by ed\_set, out\_RL by gender, ed\_set by gender, out\_RL 0 0.00000 by ed set by gender

Model Fit Statistics for all Possible Loglinear Models: Recreation/Leisure Outcome, Educational Setting and Gender

Table O-2

Table O-3

Madal	Statistic			
Model	pcalculated	$L^2$	df	L <sup>2</sup> /df
Baseline				
Null, equiprobability model	0.00000	46.29060	15	3.08604
Single Margins				
out_RL	0.00000	40.18046	12	3.34837
ed_set	0.01500	27.87629	14	1.99116
SES	0.00000	46.62864	14	3.33062
Two Margins				
out_RL, ed_set	0.02900	21.42811	11	1.94801
out_RL, SES	0.00000	40.18046	11	3.65277
ed_set, SES	0.00900	27.87629	13	2.14433
Three Margins				
out_RL, ed_set, SES	0.01800	21.42811	10	2.14281
Relationship Between Two Variables				
out_RL, ed_set, out_RL by ed_set	0.90600	3.41149	8	0.42644
out_RL, SES, out_RL by SES	0.00000	38.69975	8	4.83747
ed_set, SES, ed_set by SES	0.00800	26.85072	12	2.23756
Relationship and One Omitted Margin				
out_RL, ed_set, SES, out_RL by ed_set	0.84500	3.41149	7	0.48736
out_RL, ed_set, SES, out_RL by SES	0.00600	19.94740	7	2.84963
out_RL, ed_set, SES, ed_set by SES	0.01600	20.40254	9	2.26695
Two Relationships Among Predictors				
out_RL, ed_set, SES, out_RL by ed_set, out_RL by SES	0.74800	1.93078	4	0.48270
out_RL, ed_set, SES, out_RL by ed_set, ed_set by SES	0.88100	2.38592	6	0.39765
out_RL, ed_set, SES, out_RL by SES, ed_set by SES	0.00400	18.92182	6	3.15364
Three Sets of Relationships				
out_RL, ed_set, SES, out_RL by ed_set, out_RL by SES, ed_set by SES Saturated (df=0) Model	0.73600	1.27123	3	0.42374
out_RL, ed_set, SES, out_RL by ed_set, out_RL by SES, ed_set by SES, out_RL by ed_set by SES		0.00000	0	

Model Fit Statistics for all Possible Loglinear Models: Recreation/Leisure Outcome, Educational Setting and Socio-Economic Status

Table O-4

Model / Effect		Statistic	
Model / Effect	$L^2$	df	pcalculated
Recreation/Leisure Outcome by Educational Setting			
out_live, ed_set, gender, ed_set by gender	26.65690	9	
out_live, ed_set, gender, out_live by ed_set, ed_set by gender	9.46469	6	
Difference	17.19221	3	0.00065
Recreation/Leisure Outcome by Gender		-	
out_live, ed_set, gender, ed_set by gender	26.65690	9	
out_live, ed_set, gender, out_live by gender,	23.99245	6	
ed_set by gender	23.99243	0	
Difference	2.66445	3	0.44630
Recreation/Leisure Outcome by Ethnicity			
out_live, ed_set, ethnic, ed_set by ethnic	28.66357	15	
out_live, ed_set, ethnic, out_live by ethnic, ed_set by ethnic	23.70922	9	
Difference	4.95435	6	0.54968
Recreation/Leisure Outcome by Socio-Economic Status			
out_live, ed_set, SES, ed_set by SES	20.40254	9	
out_live, ed_set, SES, out_live by SES, ed_set by SES	18.92182	6	
Difference	1.48072	3	0.68673

Test of the Effect of Recreation/Leisure Outcome by Educational Setting, Gender, Ethnicity, and Socio-Economic Status

Table O-5

	Recreation/leisure Outcome			
Variable	0-10	11-14	15-17	18+
	Activities	Activities	Activities	Activities
Full Sample	17.95%	30.77%	29.91%	21.37%
Educational Setting				
General Education	12.20%	24.39%	36.59%	26.83%
Special Education	31.43%	45.71%	14.29%	8.57%
Ethnicity				
African-American	8.11%	32.43%	37.84%	21.62%
Hispanic	24.39%	26.83%	26.83%	21.95%
Anglo	20.51%	33.33%	25.64%	20.51%
Gender				
Male	14.55%	34.55%	25.45%	25.45%
Female	20.97%	27.42%	33.87%	17.74%
Socio-Economic Status				
High SES	17.24%	27.59%	29.31%	25.86%
Low SES	17.24%	34.48%	31.03%	17.24%

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Recreation/Leisure Outcome

N=117

Social Acitivites /Week Variable Yes No Full Sample 8.55% 91.45% **Educational Setting General Education** 6.10% 93.90% Special Education 14.29% 85.71% Ethnicity African-American 5.41% 94.59% Hispanic 7.32% 92.68% Anglo 12.82% 87.18% Gender Male 7.27%92.73% Female 9.68% 90.32% Socio-Economic Status High SES 10.34% 89.66% Low SES 6.90% 93.10%

Table O-6
Educational Setting, Ethnicity, Gender and Socio-Economic Status by Experiencing Social
Acitivities Once/week

N=117

Table O-7

¥7	Preferred Population for Free-time				
Variable	Self	Family	Friends	Multiple	
Full Sample	5.98%	22.22%	25.64%	46.15%	
Educational Setting					
General Education	8.54%	20.73%	25.61%	45.12%	
Special Education	0.00%	25.71%	25.71%	48.57%	
Ethnicity					
African-American	2.70%	27.03%	24.32%	45.95%	
Hispanic	4.88%	26.83%	19.51%	48.78%	
Anglo	10.26%	12.82%	33.33%	43.59%	
Gender					
Male	5.45%	21.82%	34.55%	38.18%	
Female	6.45%	22.58%	17.74%	53.23%	
Socio-Economic Status					
High SES	8.62%	8.62%	31.03%	51.72%	
Low SES	3.45%	34.48%	20.69%	41.38%	

Educational Setting, Ethnicity, Gender and Socio-Economic Status by Prefered Population for Free-time

## APPENDIX P

**QUESTION 7: FULL RESULTS** 

Table P-1

Frequency Count of Discrepancy Analysis of Skill Inventory between Students and Teachers

Chill Item	Discrepancy Analysis				
Skill Item	-2	-1	0	1	2
Read and understand printed technical instruction	1	5	26	12	0
Read newspapers, book and/or magazines	2	4	34	6	0
Apply math at home and work	1	5	26	13	1
Use study skills to learn new things	1	10	26	5	2
Follow a schedule	1	4	38	3	0
Report to work or school on time	0	1	43	1	0
Get along with other at work and school	1	4	41	0	0
Make good decisions	0	5	35	5	0
Monitor own progress on assignments at school or	_			_	-
work	0	10	29	7	0
Ask for help when needed at school or work	0	9	35	2	0
Teach others new skills	2	9	24	8	2
Work with others on a team	0	3	41	1	0
Get along with others at work and school	1	4	38	1	0
Work with others who are different	1	4	37	3	0
Use a computer to write letters/reports	2	7	30	5	1
Use a computer for Internet/email	1	6	34	4	0
Budget own money	0	8	25	11	0
Cook food for self	1	3	37	3	0
Do own laundry	2	3	37	2	0
Find a place to live	1	10	25	9	0
Take care of health needs	0	10	30	4	0
Find help in the community if needed	1	9	23	11	0
Find own job	0	3	37	2	0
Apply for admission to a community college,					
University or Technical College	0	9	26	9	0
Make a plan for his/her future		5	28	9	0

Note. Negative numbers indicate the teacher provided a higher assessment of ability

APPENDIX Q

SPSS SYNTAX FOR LOGLINEAR ANALYSIS

Table Q-1

SPSS Syntax for Employment Outcome by Educational Setting by Ethnicity value labels out\_empl 1 'Unemployed' 2 'Work Part-time (29 hrs or <)' 3 'Work Full-time (30 hrs or >)' 4 'Military' 5 'Volunteer' / ed\_set 0 'general education' 1 'special education' / ethnic 1 'African-American' 2 'Hispanic' 3 'Anglo'. frequencies variables=out\_empl/ ed\_set/ ethnic. crosstabs tables=out\_empl by ed\_set/out\_empl by ed\_set by ethnic/statistics=all. COMMENT Test the equiprobability model by creating a constant, used as a covariate. compute constant = out empl. loglinear out empl (1,5) ed set (0,1) ethnic (1,3) with constant/print=default/ DESIGN=constant. loglinear out\_empl (1,5) ed\_set (0,1) ethnic (1,3)/print=default/ design=out empl/ design=ed set/ design=ethnic/ design=out empl, ed set / design=out empl, ethnic / design=ed\_set, ethnic / design=out\_empl, ed\_set, ethnic / design=out empl, ed set, out empl by ed set / design=out empl, ethnic, out empl by ethnic / design=ed set, ethnic, ed set by ethnic / design=ethnic, out empl, ed set, out empl by ed set / design=ed\_set, out\_empl, ethnic, out\_empl by ethnic / design=out\_empl, ed\_set, ethnic, ed\_set by ethnic / design=out\_empl, ed\_set, ethnic, out\_empl by ed\_set, out\_empl by ethnic / design=out empl, ed set, ethnic, out empl by ed set, ed set by ethnic / design=out\_empl, ed\_set, ethnic, out\_empl by ethnic, ed\_set by ethnic / design=out\_empl, ed\_set, ethnic, out\_empl by ed\_set, out\_empl by ethnic, ed\_set by ethnic / design=out empl, ed set, ethnic, out empl by ed set, out empl by ethnic, ed set by ethnic, out\_empl by ed\_set by ethnic .

## VITA

Name:	Kendra Lea Williams Diehm
Address:	Department of Educational Psychology, 4225 Texas A&M University, College Station, Texas 77843-4225
Email Address:	kwilliams@coe.tamu.edu
Education:	B.S., Interdisciplinary Studies, Texas A&M University, 1999 M.Ed., Educational Psychology, Texas A&M University, 2002 Ph.D., Educational Psychology, Texas A&M University, 2006
Emerging Expertise:	Comprehensive Transition Services Developmental & Low-Incidence Disabilities Teacher Preparation