

**HOW SCHOOL-TO-CAREER INTERNSHIP PROGRAMS IMPACT HIGH  
SCHOOL PERCEPTIONS OF THE SENIOR YEAR EXPERIENCE AND POST  
SECONDARY TRANSITION**

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## ABSTRACT

With the federal School-to-Work Opportunities Act funding cut in 2000, the requirement for schools preparing students for a smooth transition into postsecondary education and the workforce remain a focused concern of administrators and employers. The purpose of this study was to determine if participation in the School-to-Career (STC) program had a more positive influence on perceptions of the senior year experience as compared to perceptions held by A+ Program participants. This study also sought to determine if the STC senior year experience had a more positive influence on perceptions of post-secondary transitions as compared to perceptions held by A+ Program participants. This quantitative research study was undertaken in a small rural public school district of Lawson, Missouri, comparing 114 alumni who met the same GPA and attendance criteria, with results supporting internships for high school students.

Results of multiple independent *t*-tests indicated a statistically significant difference between STC intern participant perceptions and A+ program participant perceptions of 1) the senior year's contribution to a positive work ethic and, 2) the development of realistic expectations required in post high school education and/or employment in the workplace. The study also examined perceptions of post high school experiences and/or choices, finding a significant difference between STC interns' and A+ participants' perceptions of the senior year helping with networking in the students' career of interest. Recommendations for further study include comparing similarly populated school districts with other districts offering the work-based programs, and surveying parents of the effect of an internship program on their student and STC business partners' of their experiences as a resource for district internship planning.

## DEDICATION

“Plans fail for lack of counsel, but with many advisers they succeed.” - Proverbs 15:22

To my parents, who always believed in me and instilled the value of cultivating a meaningful relationship with the Heavenly Father and working hard in our generous service to others. Both are a blessing to me with their example of how to live this life we are given with no regrets.

To my daughters, Quincy, Taylor, and Sydney, each a gift from God, who have grown to be beautiful, intelligent women, and friends who inspire me to be a better person. Their understanding during these last few years has meant more than they know.

To Steve Sellers, who with his empowering words will always be appreciated for being one of the first to encourage me to take this scholarly journey.

To my Heavenly Father who says, “I know the plans I have for you, plans to prosper you and not to harm you, plans to give you hope and a future.” - Jeremiah 29:11

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## CHAPTER ONE

### INTRODUCTION AND RATIONALE

People learn best when information is communicated in context. While career awareness programs have been implemented in school districts for more than 15 years, a disconnect remains for relevant application fostering future success. One way to bring relevancy into the classroom was to incorporate career education, supporting or leading to employment related to post secondary education based on students' needs and interests. The Missouri School Improvement Program, one of the Department of Elementary and Secondary Education (DESE) career education programs, offers a broad range of approved course curricula intended to meet the interest needs of high school students (2008).

To guide the state's efforts in the delivery of career education services, Steve Klein's report on *Delivering Career Education in Missouri* (2009) stated that, "To encourage students to find meaning in their studies, secondary and postsecondary educators should seek to establish a continuum of career focused learning opportunities that enable students to apply skills learned in their academic and career education classes" (2009, p. 6). Career learning opportunities may take many forms during a student's education, ranging from career exploratory options at the introductory level, with career fairs and job shadows, to more intensive hands-on experiences, such as work-based learning internships, which are offered late in a student's high school education program (Klein, 2009). "Offering high school students advanced, occupationally specific training is a viable option in an economy that offers graduates immediate employment and a living wage" (Klein, 2009, p.3).

## Problem Statement

“School-to-Work” began in 1994 with the federal School-to-Work Opportunities Act, administered jointly by the U.S. Departments of Education and Labor (D’Amico, 1999, p.1). Washington’s legislative goal was to use school-to-work programs as a catalyst to improve academic standards and expose students to the demands of the workplace. Diane D’Amico stated that, “workplace readiness is now one of the DESE core standards for what is expected of all students by the time they graduate from high school. Students should have an opportunity to learn about their career interests before graduating from high school” (1999, p.1).

As other districts in the state of Missouri were hesitant, the Lawson R-XIV School District approached the concept of workplace readiness differently and embraced the practical theory of students learning how to solve problems, work with others, and make decisions that affect their future. While the district started a School-to-Work program in 1998 that addressed the needs of the Missouri Special Education Department and Individuals with Disabilities Education Act (IDEA) mandates, an additional program was needed for college-bound, vocational, and students bound for the workforce. Therefore, in that same year (1998), the district implemented an additional DESE supported program named “School-to-Career.” This additional program had a slight modification in title, from school-to-work, to school-to-career, denoting the difference in the student populations served and emphasized the program’s role for college bound students (D’Amico, 1999).

The Missouri School-to-Career (STC) program offered secondary students’ job shadowing and career path internship experiences with employers in the community. In

the DESE report, *Student Pathways to Success* (2007), recommendations were given for improving student achievement in every Missouri public school. This DESE report stated that, “Student internship experiences were helpful in providing a smooth transition after high school graduation, by giving students a clear career direction for their postsecondary education, job training program, or the workforce in a family-sustaining career” (2007, p. 9). As noted in the Missouri published recommendation of *Student Pathways to Success*, the STC career path design also increases the school’s “ability to meet employer expectations for a high-skilled workforce that contributes to the economic vitality of our state” (2007, p. 1).

When Missouri STC programs began in 1998, most school districts were only marginally active in thinking how best to measure their effectiveness; instead they were working to get their programs started and building community partnership support (Kopp, 2002, p.1). If districts focused on data and evidence, it was not to demonstrate their program value to others outside of education, but instead to report to the Missouri School Improvement Plan (MSIP). MSIP reviewed and accredited the school districts in the state within a five-year review cycle. School district reviews cover the areas of resource, process, and performance. “The process of accrediting school districts is mandated by state law” (Student Pathways to Success, 2007, p. 13).

Congress phased out the School-to-Work program in 2001 and initiated the Workforce Investment Act and the United States Department of Education’s High School Reform Initiatives to meet the challenge of raising student achievement and preparing students for continued education and future careers (Kazis & Pennington, 1999, p. 1). Additional federal and state educational legislation were introduced to reshape the

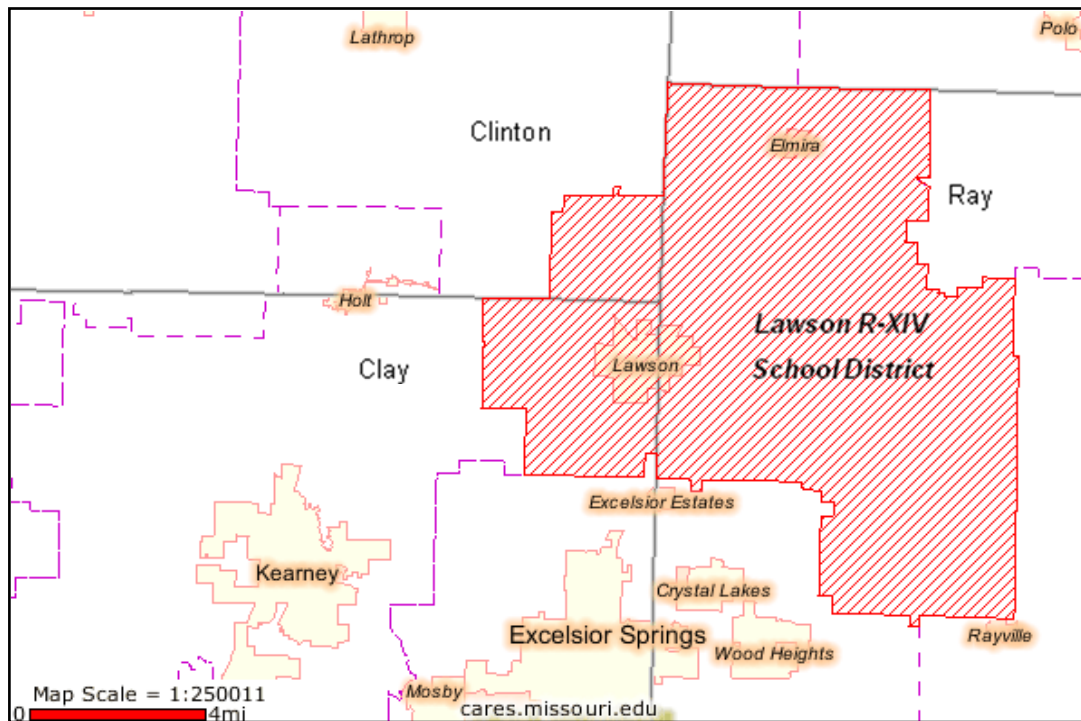
educational environment. One recent reform initiative was the Carl D. Perkins Career and Technical Educational Improvement Act of 2006 (U.S. Department of Education, 2007) which provided an increased focus of federal funding for career education services. The Perkins Act approach included rigorous content, aligned with academic standards, and relevant career content. The coordinated progression of courses aligned secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education. DESE's Division of Career Education stated in their *Student Pathways to Success* (2007), that the Perkins Act "contains the common thread of increased accountability as well as the realization that education is a true partner in economic development" (Missouri Department of Elementary and Secondary Education, 2007, p. 2). While the Perkins Act defined a comprehensive career education program as one that "leads to an industry recognized credential or certificate at the postsecondary level or to an associate's or bachelor's degree" (Klein, 2009, p. 3), the federal legislation did not provide specific details about the underlying characteristics of these content and standard career elements in the program of study nor described the manner in which they may be designed and implemented. DESE is committed to fulfilling the focus of the Perkins Act by delivering career education services linking accountability and economic development commitment in school districts and postsecondary institutions, by developing and/or implementing DESE's career education program at a varied pace, with differing levels of specificity (Klein, 2009, p.4).

DESE stated in the conclusion of their *Student Pathways to Success* (2007) that high schools and postsecondary institutions should collaborate to develop transition strategies to ensure all students will be successful at the next phase of their education

and/or career. STC exploration internship programs provided a foundation for students to gain knowledge about the world of work in a meaningful way while at the same time developing soft skills and workplace readiness in a context relevant to their educational and career goals (DESE, 2007, p.4). The STC program guided and motivated learning and ultimately provided direction for career success.

### *Background and Conceptual Framework*

Research for the study was conducted in the Lawson R-XIV School District. The Lawson School District is located at the intersection of Ray, Clay, and Clinton counties in the state of Missouri as shown in Figure 1.



*Figure 1.* Lawson R-XIV School District Boundries. Lawson R-XIV School District draws students from Ray, Clay, and Clinton Counties.

Table 1 presents that the Lawson R-XIV District enrollment has been steady for the past five years. The district has been comprised of approximately 98% White students, and fewer than 10% of Asian, Black, Hispanic, or Indian student ethnic enrollment.

Table 1

*Ethnicity enrollment*

Ethnicity	2005	2006	2007	2008	2009
Total	1,315	1,351	1,338	1,341	1,311
Asian	0.3%	0.3%	0.3%	0.3%	0.4%
Black	0.6%	0.4%	0.4%	0.2%	0.2%
Hispanic	0.5%	0.7%	0.7%	0.4%	0.9%
Indian	0.4%	0.6%	0.6%	0.7%	0.5%
White	98.3%	98.0%	98.0%	98.4%	98.1%

*Note.* Demographic Profile 3, 2000 Census website at [www.mc2dc@missouri.edu](http://www.mc2dc@missouri.edu). The district is comprised of three schools, one elementary school, one middle school, and one high school.

Table 2 describes the free and reduced lunch status on the rise increasing from 18.6 percent in 2005 to 21.6 percent in 2009. Compared to Missouri with a 2% increase of students eligible for free and reduced lunch, Lawson R-XIV has had a 3% increase in free and reduced lunch status from 18.6% to 21.6% between 2005-2009.



Table 2

*Students Eligible for Free or Reduced-Price Lunch*

	2005	2006	2007	2008	2009
<b>Missouri</b>					
Percent	41.7%	40.8%	41.8%	42.1%	43.7%
Number	364,441	367,462	366,547	367,720	380,376
<b>Lawson R-XIV</b>					
Percent	18.6%	19.2%	19.3%	19.8%	21.6%
Number	247	256	260	269	281

*Note.* From DESE Demographic Data 2005-2009 website at [www.dese.mo.gov](http://www.dese.mo.gov)

High school students in this Lawson R-XIV District had the opportunity to attend a career center, located in the neighboring city of Excelsior Springs, Missouri which serves six other school districts. The placement rates (Table 3) for career and technical education students were defined by DESE as “the graduates who complete a career-technical education program and are placed in a related occupation or training program” (2009). The percent of Lawson students placed in related occupational training programs increased from 76.5% in 2005 to 94.4% in 2009. This represented a 17.9% increase over a span of five years, as compared to a smaller 3.9% increase in placement rates for Missouri career-technical education students (DESE, 2009).

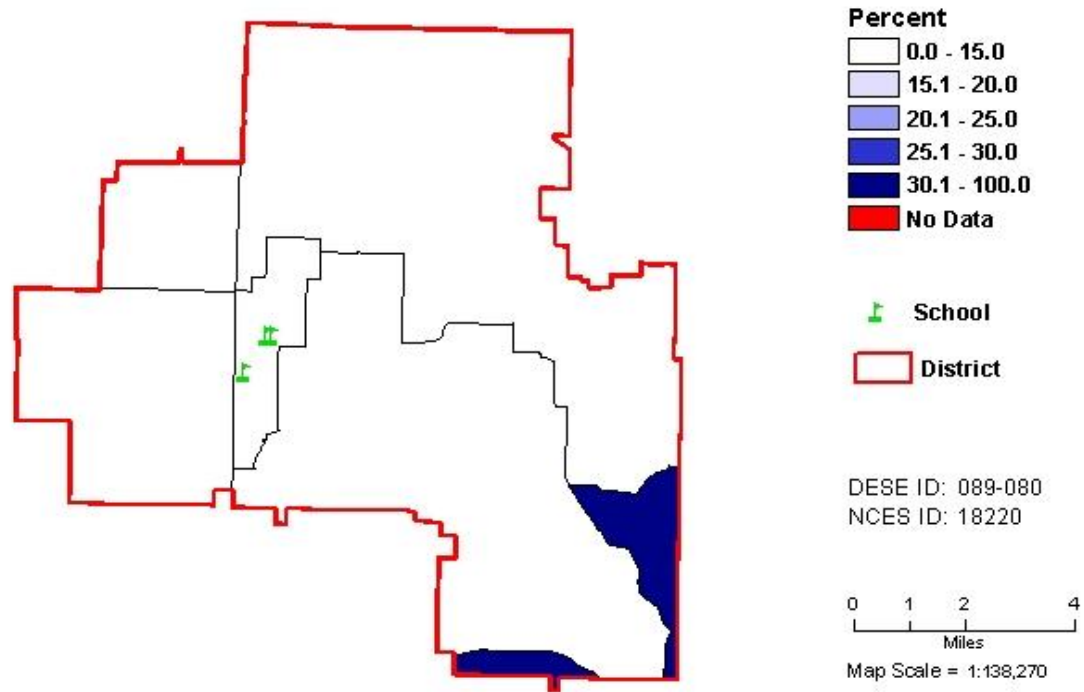
Table 3

*Career-Technical Education Student Placement Rates*

	2005	2006	2007	2008	2009
Missouri	81.3	81.5	84.1	84.5	85.2
Lawson R-XIV	76.5	81.8	80	86.7	94.4

*Note.* From DESE Demographic Data 2005-2009 website at [www.dese.mo.gov](http://www.dese.mo.gov)

Like other small town Missouri communities, Lawson has a diverse mix of education levels. Figure 2 refers to the percentage of the school district population without a high school degree in 2000. This figure shows that, with the exception of the two areas in the bottom right, 0-15% of persons 25 years or older who lived in the Lawson School District boundary did not have a high school diploma. 30.1-100% of people in two areas in the southeast corner of the district, did not have a high school diploma.

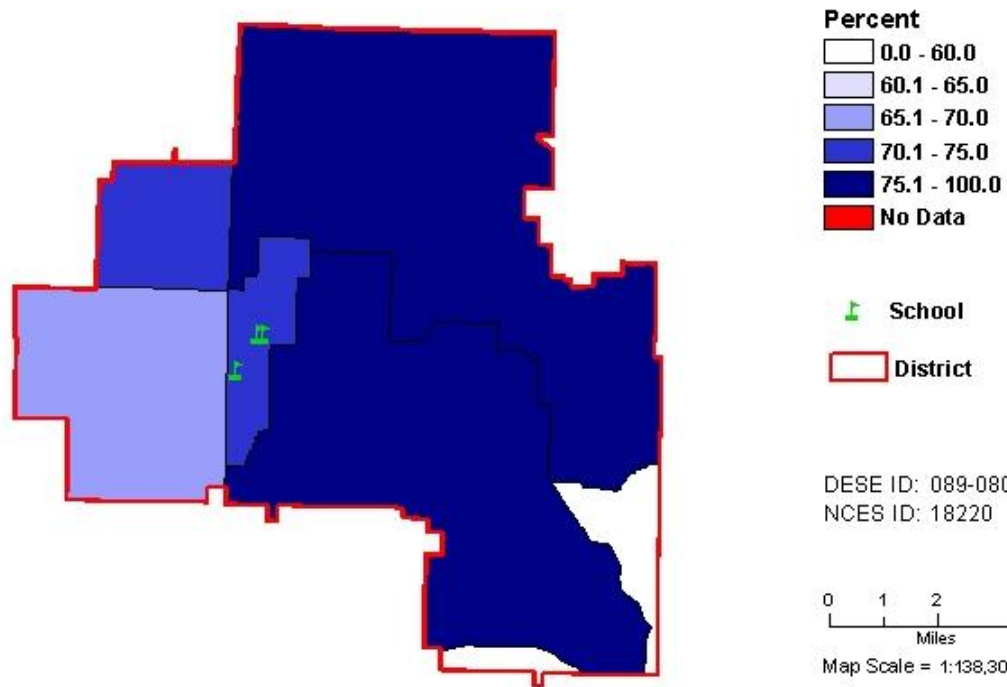


*Figure 2.* Lawson R-XIV Patrons without a high school diploma. Identifies the percentage of persons without a high school degree in the Lawson R-XIV School District.

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From DESE: Socio-Economic Indicator Resource – for 18220 Lawson R-XIV February 7, 2010.

Figure 3 refers to the demographic percentage of population with a high school diploma at the time of the 2000 census. With the exception to the two towns in the lower southeast corner of the district, over 65.1% of district residents 25 years or older had a high school diploma.

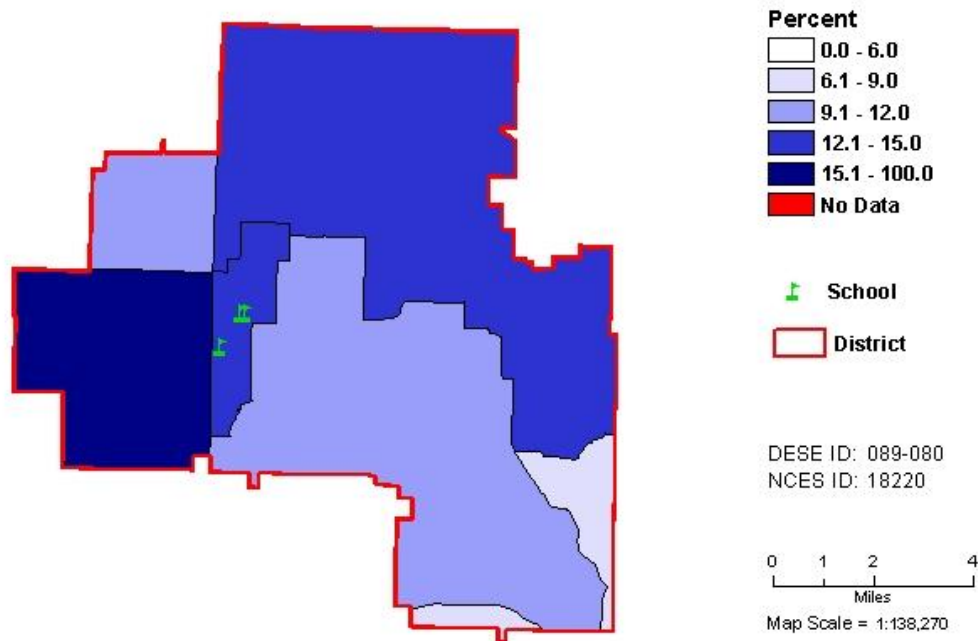


*Figure 3.* Lawson R-XIV Patrons with a high school diploma. Identifies the percentage of persons with only a high school degree in the Lawson R-XIV School District.

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From DESE: Socio-Economic Indicator Resource – for 18220 Lawson R-XIV February 7, 2010.

Figure 4 indicates the percentage of the district's resident population 25 years or older with at least one college degree at the time of the 2000 census. This figure shows that for the majority of district residents 25 years or older, less than 15% of the persons had a college degree.



*Figure 4.* Lawson R-XIV with a college degree. Identifies the percentage of persons with only a college degree or higher in the Lawson R-XIV School District.

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From DESE: Socio-Economic Indicator Resource for 18220 Lawson R-XIV February 7, 2010.

The data in Table 4 is relevant to this study because it includes differences found in the occupations for the area, which may be a result of educational achievement. Employment and occupational patterns provide important information to educational policy makers about current and future strengths of the local economy. At the time of this study, the most current information from the Missouri Census Data Center (2000) reported 4.0% of the labor force in the Lawson R-XIV District unemployed in the Census 2000. Of the 96% of persons employed in the civilian labor force, 27.2% were employed

in sales or office jobs, 24.5% in management of professional occupations, and 12.4% of the workforce were employed in the service sector.

Table 4

*DESE Demographic Profile – 2000 for Lawson R-XIV School District*

Work Force by Occupation	Number	Percent
Management, Professional & Related Occupations	670	24.5
Service Occupations	338	12.4
Sales & Office Occupations	743	27.2
Farming, Fishing & Forestry Occupations	2	0.1
Construction, Extractions & Maintenance Occupations	386	14.1
Production, Transportation, & Material Moving Occupations	591	21.6

*Note.* From Missouri Census Data Center web site at [www. mc2c2.missouri.edu](http://www.mc2c2.missouri.edu)

The school district began the implementation of the STC initiative in 1998. Because the Lawson School District created a STC program that was sustainable with local district funding, the program continued after the three years of federal funding ceased (Personal Interview, Marcia Petty, January 19, 2010). The sustainability of the Lawson STC program afforded the opportunity for the researcher to conduct a cross sectional study as Lawson High School (LHS) chose to implement both the STC and A+ Schools Programs. STC funding, which amounted to \$500,000 over the course of three years, came from the A+ Schools Program. The A+ Schools Program was created by the

Outstanding Schools Act of 1993 as an incentive for improving Missouri's high schools. *Facts About Missouri's A+ Schools Program* stated that, "The primary goal of the A+ Schools Program is to ensure that all students who graduate from Missouri high schools are well prepared to pursue advanced education and employment. Participating high schools are encouraged to reduce the dropout rate, raise academic expectations by eliminating general-track courses, provide career pathways for all students, and work closely with business and high-education leaders to better prepare students for their lives after graduation" (DESE, 2009, p.1). DESE supported Missouri Governor Mel Carnahan's economic push by giving A+ Program students access to two-year community college through an A+ Scholarship program.

Students who graduate from a designated A+ high school may qualify for a state-paid financial incentive to attend any public community college or career/technical school in Missouri if the students successfully meet the following requirements: enter into a written agreement with the high school prior to graduation, attend a designated school for three consecutive years immediately prior to graduation, graduate with an overall grade point average of 2.5 points or higher on a 4-point scale, have an overall attendance rate of 95% for grades 9-12, perform 50 hours of district-supervised unpaid tutoring or mentoring, and maintain a record of good citizenship and avoid the use of drugs and alcohol (DESE, 2009).

DESE's *Facts About Missouri's A+ Schools Program* article stated that more than 106,500 students in Missouri have qualified for the A+ Scholarship since the program began with many of those students having STC opportunities in their schools" (DESE,

2009). Since the program started at LHS during the 1998-1999 school year, 415 LHS students have participated in the A+ program. This researcher has chosen to compare STC students with A+ students who met the same GPA and attendance criteria as STC students.

### *Significance*

Career education courses and programs such as STC, are designed to equip students with the skills and credentials required for success in high-demand careers (Hirsch, 1994, p.113). Prior to implementing a STC program, districts might find certain aspects of STC internships advantageous to creating a stronger senior year experience and post secondary transition for their district. Data collected and analyzed in this study may assist other high schools that are deciding to pursue similar internship programs in order to see if STC programs accomplish what they are intended to do for students.

### *Purpose Statement*

This study had two main purposes. The first purpose was to determine if participation in the STC program had a more positive impact on perceptions of the senior year experience as compared to perceptions held by A+ Program participants. The A+ program participants met the STC GPA and attendance requirements but chose not to participate in the STC program. A+ students chosen for this study graduated with an A+ Certificate. In addition, this study was designed to determine if the STC senior year experience had a more positive impact on perceptions of post-secondary transitions as compared to perceptions held by A+ participants.



### Delimitations

Delimitations help narrow the focus of the research. There were two delimitations in this study:

1. The study was confined to young adults who graduated from Lawson High School.
2. Only data from the graduating classes of 2005 through 2009 were utilized.

### Assumptions

The following assumptions were made in this study:

1. Information retrieved from DESE came from a reliable and valid record system.
2. Information retrieved from the Lawson R-XIV School District came from a reliable and valid archived data record system.
3. Survey Monkey correctly collected and input the data into the downloadable Excel file.
4. Students who participated in the survey answered all questions honestly.
5. The study assumes that other controlling factors (i.e. participation in extra-curricular activities, domestic problems, etc.) did not impact the senior experience.

### Research Questions

Two questions were used to drive the research of a study. These questions served as focus for the research and also led to a better understanding of the importance of the research. The two research questions that guided this study were:

1. Did participation in the School-to-Career program have a more positive influence on perceptions of the senior year experience as compared to perceptions held by A+ program participants?
2. Did participation in the School-to-Career program have a more positive influence on perceptions of the impact of the senior year experience on postsecondary transitions as compared to A+ program participants?

#### Definition of Terms

The following terms were defined for the purpose of this study:

*Job Shadows.* Job shadows defined in this study are one day workplace experiences hosted by community businesses. Job shadowing students participate in daily tasks of the occupation, as a form of career exploration, to refine career interests based on “real life” exposure to the work environment (Job Shadow Coalition, 2009).

*Perception.* A perception is defined as a mental image or physical sensation interpreted in the light of experience (Merriam-Webster’s, 1980).

*Post Secondary Credential.* Post secondary credentials are defined as some form of certification, training, or education completed beyond the traditional high school graduation diploma (e.g., industry certificate, apprenticeship, Associate’s degree, Bachelor’s degree) (Pennington, 2004).

*Post Secondary Transition.* Post-secondary transition referred to students graduating from high school and moving toward a postsecondary experience, based on their career goals, interests, and abilities. DESE’s *Transition Coalition* defined this transition that reflected student movement toward a chosen career path with college

education, apprenticeship, military, on-the-job training program, or the workforce in a family sustaining career (DESE, 2010).

*School-to-Work.* School-to-Work referred to a systematic approach combining work-based learning, class-based learning, and connecting activities to provide students with the opportunity to begin the process of making educated career decisions while in school. As defined in the *21<sup>st</sup> Century Community Learning Center* acronym dictionary, some school districts chose to call their work-based programs School-to-Career instead of School-to-Work, thus denoting the positive wording of a “career” instead of a “job”. For this study the two phrases from literature were interchangeable (DESE, 2008)

*School-to-Career Intern.* A School-to-Career (STC) intern is defined in this study as a high school junior or senior student, who gained work experience in his/her career field of interest. Student interns earned course credit for their work internship experience (Lawson R-XIV School District, 1998).

*School-to-Career Program.* A School-to-Career (STC) program was defined as a program which integrated academic education and vocational skills training, seeking to improve the transitions of young people from school to work (Public Policy Institute of California, 2004).

*Soft Skills.* Soft skills were defined as the nontechnical skills, abilities, and traits that workers need to function in a specific employment environment. They included four sets of workplace competencies: Problem-solving and other cognitive skills, oral communication skills, personal qualities and work ethic, and interpersonal and teamwork skills (Welfare Information Network, 2000).

*Workplace Readiness.* Different stakeholder groups were surveyed by DESE to determine the most important components to the world of work. Based on the survey results, the committee identified work readiness components, which are cross-referenced with Missouri's Career Development Standards and Grade-Level Expectations within the Missouri Comprehensive Guidance Program. These components included: Career development and planning, professional and ethical behavior, personal accountability, interpersonal skills, self-direction and self-management, and lifelong learning (DESE, 2008).

### Overview Methodology

This study used a quantitative research designed to investigate the STC internship program and its impact on the two dependent variables: perceptions of the senior year experience and perceptions of postsecondary transition. The population of interest in this study was former high school students of the Lawson R-XIV School District. Two samples for this study consisted of STC interns and A+ students who were members in the graduating classes 2005 through 2009.

Evidence of the perceived effectiveness of the STC program was demonstrated by comparing the data of those who participated in STC with data of eligible A+ students who did not participate in STC. This experimental (purposive sampling) group participated in a volunteer survey with seventeen statements or questions set up on a Likert scale, and both groups were asked the same questions. The two research questions were addressed using an independent sample *t* test for each question comparing the perceptions of the two groups.

## Summary

The report of research for this study consists of five chapters. Chapter one includes the introduction, problem statement, background and conceptual framework, significance, purpose, delimitations, assumptions, research questions, definition of terms, and an overview of the methodology. Chapter two provides an overview of literature. Chapter three discusses the research design, population and sample, sampling procedures, data collection procedures, data analysis and hypothesis testing, and limitations. Chapter four discusses all data collected and presents the results of the statistical analysis conducted in the study. Chapter five includes findings related to the literature, implications for action, and recommendations for future research.

## CHAPTER TWO

### REVIEW OF LITERATURE

This chapter examined high school internship programs and factors relating to a positive senior year experience and the impact on postsecondary transitions. This study examined career awareness programs and their associated activities that have existed in school districts for the past 15 years. Student internship programs were researched for their educational opportunities, student and employer perceptions, and service outcomes to determine if career awareness programs were beneficial for high school students and should be included in the current educational system to guarantee a quality education for all students.

This chapter examined three topics. Factors examined in the first section focused on student internships and the senior year, attendance, discipline, drop-out rates, career awareness, work-based learning, and school-to-career program participation. Persistence to graduate, extra-curricular participation, and self-esteem were also examined. Second, the influence on postsecondary transition was studied. Factors examined in this section included impact on job placement, soft skills, mentor relationship, networking, employer needs/views, and socio-economic factors. Third, factors including conflicting views, state legislation, and the positive or negative effects on students who chose to intern while in high school, were examined.

#### *Student Internships and the Senior Year*

Prior to the industrial and technological age, juniors and seniors who were not successfully engaged in high school could drop out and find a job. Today, however, the workplace demands anyone entering the workforce to possess effective interpersonal

skills, basic foundation proficiency, technology expertise, and self direction (Hess & McLachlan, 2008).

Career awareness programs were designed to, in part, impact dropout rates. Research suggested that leaders in organizations throughout America were concerned with the increase in dropout rates of students in high school and are investigating ways to combat the issue (DESE, 2009). The Missouri Department of Elementary and Secondary Education (DESE) hosted a Dropout Prevention Summit in April of 2009 designed to increase awareness, encourage collaboration, and facilitate action in communities to improve graduation rates. At the Drop Prevention Summit, leaders were informed that while rural areas of Missouri have observed increased dropout rates over the past five years; their averages were not as high as urban areas (2009). American's Promise Alliance (2009) emphasized the costly effect on the American population with more than \$329 billion lost in wages, taxes, and productivity over the lifetime of a dropout from the class of 2006-07.

Specifically, for Missouri's two largest school districts, Kansas City and St. Louis, the dropout rates were 21.1 percent and 18.7 percent respectively (DESE, 2009). In comparing *Missouri's Dropout Prevention Summit* data to national dropout rates of 2006, Missouri's dropout rate of 4.0 percent, was lower in comparison to the national average of 9.3 percent, respectively. Additionally, Missouri's dropout rate was 26<sup>th</sup> when ranked with all 50 states (DESE, 2009).

Patricia Hess and Joan McLachlan discussed in a 2008 article the importance of internships as an avenue toward graduation and a deterrent to dropping out of school. They stated, "Today's workplace does not have room for workers who do not have 21<sup>st</sup>

century skills. The at-risk student who is drifting toward dropping out will not be able to find a good job” (Hess & McLachlan, 2008). These authors focused on strategies developed to assist at-risk students, finding that at-risk students were often on the social fringe of the classroom and community. Many times these students did not participate in extra-curricular activities and had a history of discipline and attendance problems. Hess and McLachlan wrote at-risk students needed support and strategies that offer nurturing activities for these students, and it was in these school and community activities that students develop some of the skills required by today’s employers.

Hess and McLachlan suggested in their article *Internships: An Avenue to Graduation for Today’s At-Risk Students* that many schools have developed multiple strategies and programs in response to their dropout problem. The authors suggested that responses to the dropout problem could include mentoring programs that connect students who may be at-risk to adults, extended support by collaborating with parents, creating smaller instructional size groups, and offering work-based learning activities such as job shadowing and internships (2008, p. 2).

Joan Katz suggested that work-based learning appears to have had a positive correlation between improved graduation rates and students who are at-risk. Joan Katz conducted a research study in New York alternative schools and found internships focusing on a work-based learning program resulted in improved attendance, increased credits earned, and increased graduation rates (Katz, 1993).

The Bill and Linda Gates Foundation interviewed many students who had dropped out of school. Student dropouts interviewed reported that the major reason for dropping out of school was that classes were not interesting. Four out of five dropouts



interviewed for the report said that with more opportunities to real world learning, they would be able to see the connection between school and getting a good job, which supports the schools' need to provide opportunities for at-risk students as well as providing a path to graduation (Bridgeland, DiIulio, & Morison, 2006).

According to documents from *Missouri's Dropout Prevention Summit*, graduation rates were directly impacted by dropout rates. In 2008, Missouri had a total of 61,752 graduates, which represented a graduation rate of 85.2%. This was down from 86.3% reported in 2007 (DESE, 2008). DESE further reported that from 2004 to 2008, graduation rates fell somewhat for all minority student population sub-groups: Black from 85.6 to 85.2%; Asian from 93.7 to 92.2%; American Indian 84.8 to 83.4%; and Hispanic, 77.7 to 77.5% (DESE, 2009, p.22).

President Barack Obama shared his concern with the United States dropout and graduation rates as well. In his first address to Congress, he cited the nation's dropout rate as one of the highest in the industrialized world. President Barack Obama said that, "It will be a goal of this administration to ensure that every child has access to a complete and competitive education – from the date they are born to the day they begin a career" (Kondrake, 2009).

American's Promise Alliance (2009) launched a campaign to address the data available on dropouts stating the following:

Experts say that dropping out of high school affects not just students and their families, but the country overall – including businesses, government, and communities. The Alliance for Excellent Education estimates that high school dropouts from the Class of 2006-07 will cost the U.S. more than \$329 billion in

lost wages, taxes, and productivity over their lifetimes. Experts say that those who drop out are more likely to be incarcerated, rely on public programs and social services, and go without health insurance than those who graduate from high school (American's Promise Alliance, 2009, p.2).

The Alliance suggests that dropout and graduation rates of our high school students have a costly effect on the American population.

The authors of a 2001 research report on *School-to-Work: Making a Difference in Education* found that, “almost every study shows that students in School-to-Work (STW) have better attendance than comparable students. No studies indicated that they come to school less often” (Hughes, Bailey, & Mechur, 2001, p.19). This early study went on to report that students who participated in these STW initiatives earn grade point averages (GPA) equitable to non-participating students (2001).

Another strategy for promoting success for students, which has been widely adopted in the United States, is the Career Academy model. Career Academies, as defined in a report for The National High School Center (2008), are small learning communities established at the high school level that used career strands as an organized framework for learning and instruction, as well as for engaging the interest and energies of students. Career Academies are helpful for creating pathways to keep students engaged in their academic pursuits while encouraging attendance, and accountability, because the students’ interests are the focal point of Career Academies. Smith wrote in his article *Striking the Balance: Career Academies Combine Academic Rigor and Workplace Relevance*:

First established 35 years ago and geared toward restructuring large high schools into small learning communities and creating pathways between high school, further education, and the workplace, the approach of the Career Academy has expanded to an estimated 2,500 high schools across the country (Smith, 2008, p. 1).

Career academies typically offer health care, technology, hospitality industry, finance, and other specific career tracks that can be explored by the student. Usually operating in grades 9-12 or 10-12, a career academy included two or three academic subjects each year along with one career related subject. Career academies encouraged students to go to both two and four-year colleges and were usually offered through the high school, or the Regional Occupation Program system, but were sometimes offered at local community colleges as well (Smith, 2008).

Kemple and Snipes (2000) study involving career academy programs stated that career academy students were less likely to drop out of school. In this qualitative field research study, the researchers accessed school records for daily attendance rates, credits earned, and course-taking patterns. A sample for the study included 1,764 students of which 959 were in the career academy program group, and 805 in the control group. Those who participated in the career academy had substantially improved outcomes. This was especially true among students at high risk of dropping out. Participation in a career academy reduced the dropout rate by 34% for high-risk students, compared to the randomly selected control group. Participation in the career academy program also reduced the dropout rate, improved attendance, increased academic course-taking, and raised graduation rates. Kemple and Snipes (2000) stated that without access to career

academics, a high percentage of non-academy students in the high-risk subgroup became even more disengaged from school.

With the implementation of programs such as career academies, the transition from high school to post-secondary education has been the topic of extensive research. In Randall Glading's dissertation on *How high school mentoring and internship programs prepare students for success after high school* (2007), Glading stated that the inability of students to make a successful transition to college is a concern. Recent attention has focused on programs offered during the senior year of high school and addresses student behavior during their final year of secondary education. Glading's research suggested that one initiative entertained by districts is the implementation of programs to change the focus of the senior year of high school, such as the involvement of students in internships and mentoring opportunities.

#### *Internships and the Postsecondary Transition*

Most senior high school students have created an identity, often developing close friendships and bonds with classmates while moving through the educational system. This is particularly true for smaller rural school students who may have the same classes, and attend the same extra-curricular and recreational activities with the same friends since elementary school. This close bond between friends, parents, and community can make it difficult for seniors in their postsecondary transition (Brody, Brody, & King, 1986).

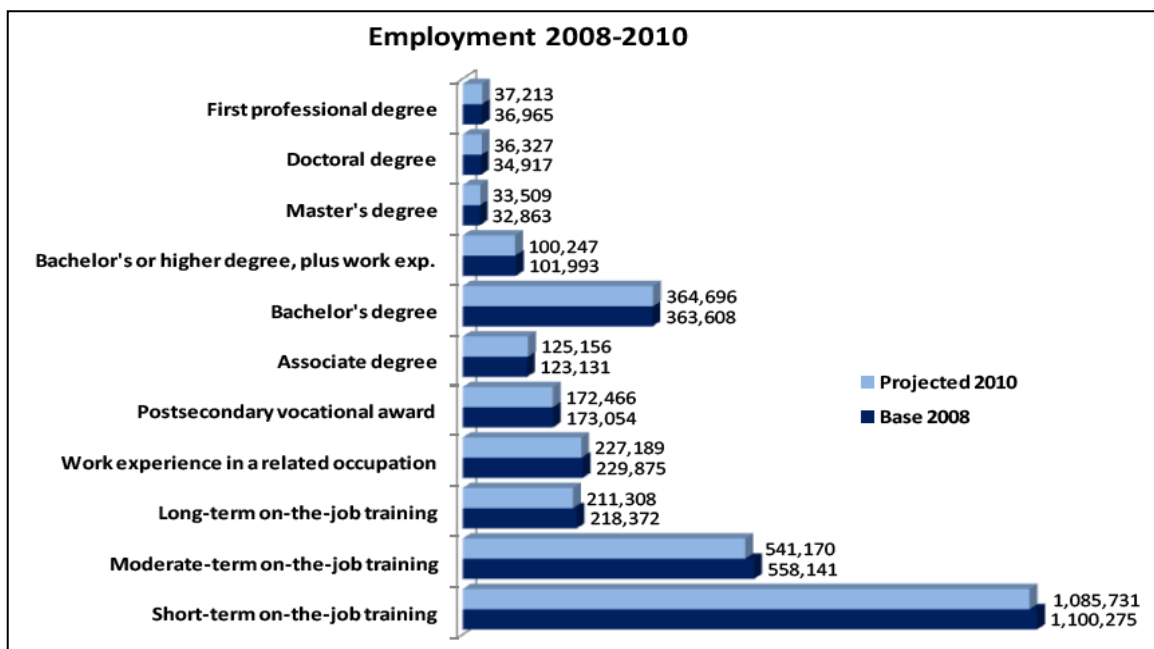
The Elkins, Braxton, and James (2000) journal article addressed this transition issue and echoed Glading's concern of student senior year behavior by stating, "A brief detour from the traditional educational setting would require the student to change

membership from one group to another and adjust to a new learning environment” (2000, p.253). The School-to-Career program aids in the post-secondary transition as students change their membership from high school to real world post-secondary experiences. Elkin’s statement goes along with Clinton (1996) who wrote “school mentoring and internship programs make learning relevant in the students lives by linking their schooling with real world experience” (Clinton, 1996, p. 266).

Thomas Smith’s research suggested that there is an expectation today for the majority of graduates to continue their postsecondary education. Evidence suggested that “investments in career related experiences during high school can produce substantial and sustained improvements in the employment prospects of students during their postsecondary years” (Smith, 2008, p. 5). Smith investigated the relationship between postsecondary and the workplace and stated, “Fifty years ago young people could enter the labor market with far more limited skills and limited academic credentials, and still succeed in finding remunerative, lifelong careers” (Smith, 2008, p.1). Smith’s research further suggested that options for students without a postsecondary education are vanishing as more careers are demanding postsecondary education, whether in technical schools, community colleges, or other settings. The successful transition from high school is therefore more challenging, complex, and critical for students today than ever before (Smith, 2008).

Predictions about employment in Missouri by the Missouri Economic Research and Information Center (MERIC) agree with Smith. In the *Education and Training Needs for Missouri’s Workforce 2010* (MERIC, 2008), occupations in Missouri typically requiring Associate’s, Bachelor’s, and Doctoral degrees were expected to experience the

highest employment increase from 2008-2010. Figure 5 indicates Associate's degree employment will increase 2,025; Bachelor's degree employment will 1,088 increase;



and occupations requiring a Doctoral degree will have a 1,410 increase.

*Figure 5.* 2008 Base and 2010 Projected Employment Increases by Degree Level.

Source: MERIC Occupational Employment: Occupational Studies,

[http://www.missourieconomy.org/pdfs/mo\\_st\\_education\\_training.pdf](http://www.missourieconomy.org/pdfs/mo_st_education_training.pdf)

Research conducted by MERIC showed that advanced degrees will provide a large share of new positions in the future, thereby providing better employment prospects and more favorable conditions for mobility and advancement. MERIC (2008) reports that, as a result of growth in health care and postsecondary education occupations, careers requiring a masters degree and doctoral degree are expected to experience the highest job growth rates between the years of 2008 and 2010. Figure 6 shows the anticipated

increases for the different degree levels and which supports the need for postsecondary education previously suggested by Smith (2008).

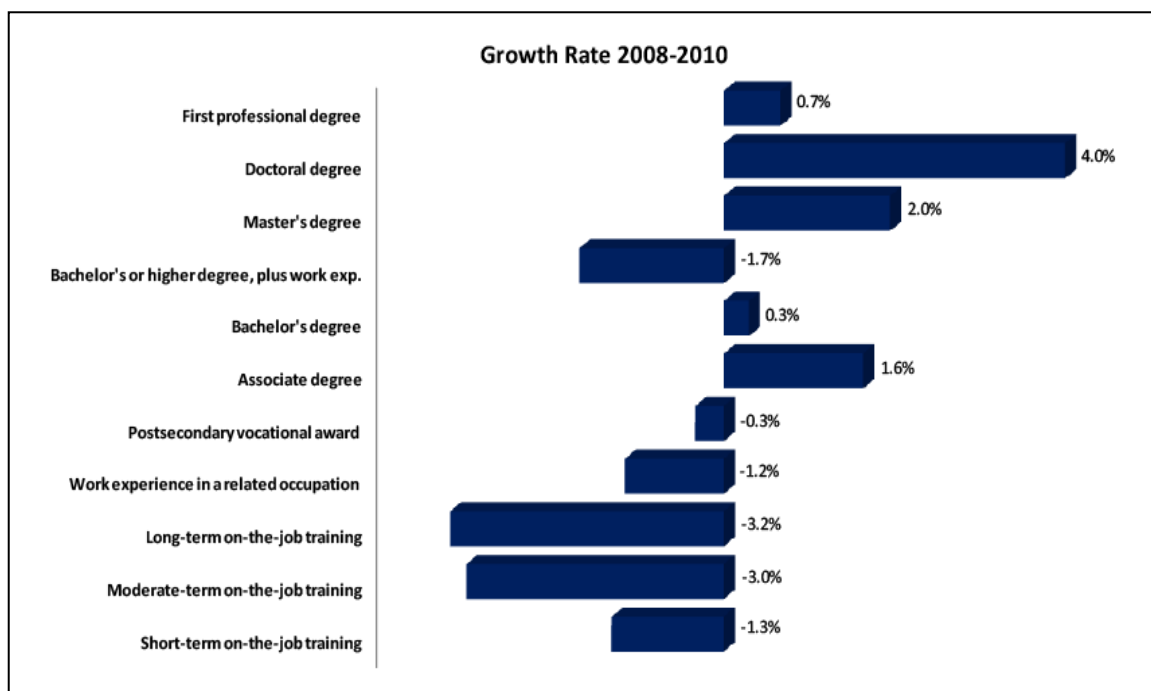


Figure 6. 2008 Base and 2010 projected growth rate by degree level.

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From MERIC Occupational Employment: Occupational Studies,  
[www.missourieconomy.org/pdfs/mo\\_st\\_education\\_training.pdf](http://www.missourieconomy.org/pdfs/mo_st_education_training.pdf)

Literature indicated state legislators are aware that the way we work is changing and believe that the educational system has to change as well. The National Conference of State Legislators (NCSL) guide (2001), made it clear that legislators currently believe the educational system is not adequately preparing young people for the changing demands and opportunities of modern society. Their guide stated that, “The traditional two-tiered system – placing college-bound students on an academic track and others on a vocational track – is no longer a successful model. Schools must offer all students

relevant, challenging academics and meaningful work-based experiences” (National Conference of State Legislatures, 2001, p. 1). The NCSL guide further reported that an educational system that is “out of sync” with changing workplace needs placed a heavy toll on American business. In 2001, NCSL reported the following:

First, more than 50% of the U.S. employers report they are not able to find qualified applicants for entry level positions. Next, high skill jobs are growing at three times the rate of other jobs. At the same time, of the 15 million young people between the ages of 16 and 24 who are currently not enrolled in school, about 90% do not have a college degree, and 70% only have a high school degree or less. Finally, American business spends an estimated \$30 billion on training and re-training its work force per year ( p. 1).

Students meeting the challenges entering the job market today are introduced to employers’ requirements as well. DESE has many things to say about employers’ views and their needs in the workplace stating, “The most common shortcomings of recent job applicants, as reported by Missouri employers, involve the lack of soft skills” (DESE, 2008, p. 4). Soft skills are defined by DESE as non-technical skills, abilities, and traits that workers need to function in a specific employment environment (2008). The Missouri DESE report, *Soft Skills Give Students an Edge*, indicated that in today’s workforce employers are seeking employees who possess more than the “three Rs”. “Employers are requiring the “new basics” that include applied and people skills, such as communication, and critical thinking and problem-solving” (DESE, 2008, p.4).

Surveys of employers who hire entry-level workers reveal how important it is for job candidates to have soft skills. In a *Job Prospects for Welfare Recipients: Employers*



*Speak Out*, researchers found that a positive attitude and reliability are the two qualities that employers identify as most important when hiring someone for entry-level work (Regenstein, Meyer, & Hicks, 1998). Problems with interpersonal and other soft skills are a major barrier to employment that employers do not believe they can address on their own in the workplace (Welfare to Work Partnership, 2010).

DESE launched the Career Prep Certificate program in response to the 2006 Missouri state legislation that required the development of a “ready to work” endorsement program. Collaborating members of the business and education communities developed a range of skills for their voluntary program. Twenty-nine Missouri schools participated in the pilot program that offered a Career Prep Certificate in addition to the regular high school diploma (DESE, 2008). The first certificates were provided in May 2008. Career Prep Certification provided employers with documentation on individual behavior and performance with grade point average (GPA), attendance rate, academic skills and competency, work readiness skills and competency, hours of community service, mentoring, tutoring, and participation in extra-curricular organizations and activities. These graduates have written documentation of their academic and soft-skill proficiencies to show their prospective employers.

While schools have experience in assessing academic components, there are challenges in assessing all career prep components. DESE stated in their *Academic and Work Readiness Components* report that, “Given these challenges, there are ways to determine and document past experience as it relates to individual work readiness behaviors and characteristics. Ideally, desirable behaviors and characteristics displayed in the school setting should carry over to the workplace” (DESE, 2008, p. 1).

This Career Prep Certificate is just one example of educators paying attention to the importance employers are placing on soft skills by implementing programs to address the skill set needs. The exact requirements for the certificate will vary in each district as they are tailored to address the needs of area businesses. The Director of Employment Training at DESE stated in *Soft Skills Giving Students an Edge* that, “All certificates will include assessment of soft skills such as attendance habits, professional and ethical behavior, and interpersonal skills” (DESE, 2008, p. 3). Employers already recognize state and national credentials such as occupational licenses and professional-skill certificates. Through the network of Missouri Career Centers, the state-certified Missouri Career Preparatory Certificate program is available to job seekers and incorporates career readiness components meant to forge the skills gap.

In their report on the gap in skills, the Missouri Economic Research and Information Center (MERIC) analyzed the soft skills and hard skills that employers seek (MERIC, 2008). “Soft skills” complement “hard skills,” which are technical requirements of a job. Information from the *Missouri Skills Gap 2008* (MERIC, 2008) reported employers with vacancies in occupations requiring short to moderate-term, or on-the-job training, indicated that both interpersonal skills and habits of punctuality and good hygiene are important competencies. MERIC stated that “soft skills” such as these are clearly the most important competencies cited by employers. MERIC also suggests that “hard skills” like specific technical skills (52%) and computer literacy (48%) are the least important competencies for “now” occupations (2008).

Resources for Welfare Decisions (2000) research further indicated that there are different ways to provide soft skills training to individuals moving into the workforce. A

job readiness curriculum that emphasizes employability skills is one approach. Soft skills training can also be incorporated into vocational training and other program activities, as stated by the Resources for Welfare Decisions (Welfare Information Network, 2000).

“School-to-Career programs, which integrate academic education and vocational skills training, seek to improve the transitions of young people from school to work” (Neumark, 2004, p.1). In his report, *How Effective are School-to-Career Programs?* Neumark used a national dataset for his analysis, finding evidence that STC programs increase college enrollment and employment. He wrote in his report that, “With regard to postsecondary education, evidence from the national data indicates that, among the general STC programs, school-sponsored enterprises boost the probability of college enrollment in the immediate post-high school period by about 13 percentage points” (2004, p.1). Neumark continued that in regard to postsecondary employment, “the data indicates positive effects for the three types of STC programs that most closely combine high school education with work experience: co-op programs, internships, and apprenticeships” (2004, p. 2). Participation in internship and apprenticeship programs increased the probability of employment by approximately seven points.

While Missouri recognized that there are several paths students may take in their postsecondary career, Pennington’s (2004) research supported the idea that economic success and full participation in our democracy require education beyond high school. Pennington’s findings indicated:

Income and education are more closely linked today than at any time in our history. College graduates earn on average 70 percent more than high school graduates – a gap that has more than doubled in the past two decades even as the

number of college-educated workers has risen. Even one year of postsecondary education can increase lifetime earnings by as much as 15 percent. High school dropouts are four times more likely than college graduates to be unemployed. Higher levels of education produce civic benefits as well: better educated individuals are more civically engaged, voting in higher proportions than those with lower levels of education (Pennington, 2004, p.3).

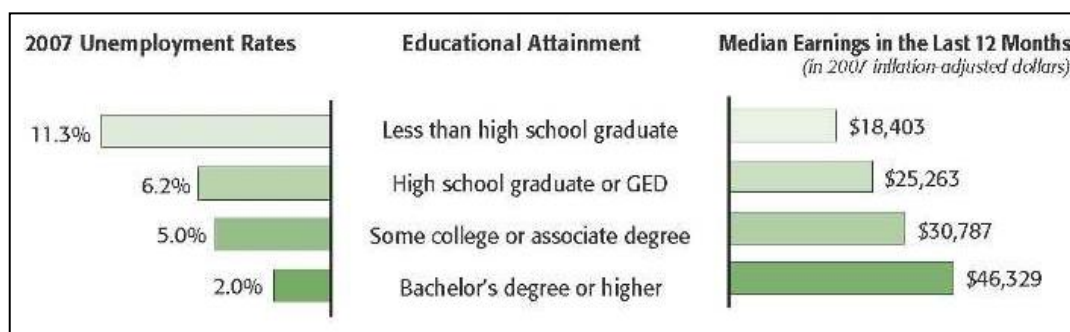
Joftus supported Pennington by stating, “Individuals with college degrees earn nearly \$ 1 million more over their lifetimes than those with only high school degrees” (Joftus, 2002). Additionally, research showed college degrees are enhanced by internships offered through STC programs. Stock wrote that within the last 20 years, internships had gone from something relatively few students did to something almost all students do. Stock stated, “They realize that it’s not only valuable but also vital to their future career. A 1998 survey from Vault Reports, Inc., found 77% of all college seniors had completed at least one internship by graduation – 25 times the 3% internship rate in 1980” (Stock, 2004, p.2).

Herlihy and Quint stated that earning impacts for young men in the Career Academies are linked to career awareness activities and work internships during high school. Herlihy and Quint suggest that:

Young men in the Career Academies group earned in excess of \$10,000 more than control group members during the four years following their high school graduation. Participation in career awareness sessions and work internships most clearly differentiated the in-school activities of career academy students from those of their counterparts who were not in the academies, thus providing them

with the experience and job references to give them a leg up in the labor market (2009).

Missouri Economic Research Information research data from 2007 showed that the road to riches is paved by education. In Figure 7, the median earnings increased with the educational attainment by Missourians age 25 to 64 years. While there is a substantial earnings differential from the highest to the lowest levels of attainment, the median earnings of workers who had a professional degree were more than 2.5 times those of high school dropouts. Figure 7 supports Neumark's conclusion that STC increases the probability that student internships and career exploration help to ensure career decisions based on experiences and knowledge of required educational requirements.



*Figure 7. Monetary success paid by education.*

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From MERIC Education Pays in Missouri, [www.missourieconomy.org](http://www.missourieconomy.org)

Marshall's longitudinal study of STC programs in the Boston Public Schools found, "Postsecondary results suggested that in some schools participation in School-to-Career increased the likelihood of enrolling in college. More importantly, compared to males, females who participated in the full model programs were likely to enroll in

college” (2000). Carnevale and Desrochers’ (2001) study of enrollment patterns and employers’ needs by 2020, overwhelmingly supported both Pennington’s, Marshall’s, and Joftus’ conclusions. Carnevale and Desrochers concluded that U.S. employers will need 14 million more college-educated workers than our educational institutions are likely to produce. In addition, Carnevale and Desrochers found that if current educational attainment levels persist, the majority of today’s youth will not complete a postsecondary credential – at a huge loss to themselves, the economy, and the country’s democracy (2001).

Stock’s article on *Internships: Stepping-Stones to Employment* (2004), related the proverbial chicken and the egg situation to the frustration students and recent graduates experienced when attempting to find employment. To get a job, one needs work experience. But to get work experience, one needs a job. She continues to write that “internships can be the bridge between zero experience and your future career” (2004, p. 22). In this article she stated that, according to the National Association of Colleges and Employers (NACE), the average employer offered about 44% of its interns full-time jobs after graduation.

#### *Additional Factors Impacted by Student Internships*

Educators must rethink what we already know about quality learning environments and about state policies that promote their successful practices and expansion. In connecting the STC program to the research conducted for Jobs for the Future (2003), it was found that:

Schools achieving outstanding results make it their missions to get their students to complete postsecondary credentials. By organizing themselves accordingly,

these schools blend the best of cognitive challenge and youth development approaches. They also align their expectations, curricula, and assessments with those of postsecondary institutions. Further, these schools help connect students to the world beyond the high school walls by STC internships, community service, and work experiences (Pennington & Vargas, 2004, p. 5).

Partnerships between high schools, postsecondary institutions, and businesses can play a powerful role in improving high school outcomes (Gehring, 2001). Partnerships promoted increased understanding among high school and college faculty and employers about how the three systems can share resources and create a better learning system for students. A prime example of educational partnering with strong backing from corporate leaders was recorded in an article in *Education Week* titled, *School-to-Work Seen as Route to More Than Just a Job* (Gehring, 2001). In the article, John Gehring detailed the practice of engaging employers in schools in an effort to change instructional practices. The districts' STW program became the centerpiece of its school improvement strategy with the initiative being seen as a way to engage students and make learning more hands-on and relevant. Gehring wrote that advocates are reported as understanding "the potential for bridging the gulf between what was happening in the nation's classrooms and the skills leaders said graduates were routinely lacking" (2001, p. 1).

Bailey, Hughes, and Barr (2000) examined the issue of employer involvement in the STC strategy by comparing the characteristics of participating employers to a comparison of nonparticipating employers. Bailey, Hughes, and Barr determined that employer participation in work-based learning falls into broad categories that included discussions regarding employer participation and finding strong incentives in which

employers participated. The authors suggested that employer participation in STC programs are three-fold: philanthropic, individual, and collective motivation. Bailey, Hughes, and Barr report that employers are pleased with intern experiences citing that their interns in many cases exceed their expectations (2000).

Starcevich stated that the optimistic, philanthropic incentive to participate in hosting a student internship relates to mentoring or coaching as a major commitment. Starcevich's research stated that mentoring includes much more than an experienced worker sharing knowledge with an apprentice. Starcevich (2009) made a distinction between mentoring and coaching, differentiating between a coach and a mentor when summarizing his research explaining, "The mentor has a deep personal interest, personally involved – a friend who cares about you and your long term development. The coach develops specific skills for the task, challenge and performance expectation at work" (2009, p.1). Moreover, Spear indicated that while coaching is always a part of mentoring, coaching does not always involve mentoring. Spear's study found that the internships experience "should help the student deepen his or her understanding of content and skills, through engaging in authentic leadership experiences while under the close supervision of the mentor and coordinator" (2005, p. 2).

Herlihy & Quint stated that the Career Academies study conducted by National High School Center suggested the need for structured partnerships in internships. The benefits of partnerships between high schools and employers can be more fully realized when these partnerships are structured and schools can designate a full-time staff member to serve as a liaison with employers. Students in Career Academies with more structured partnerships and full-time liaisons reported higher levels of participation in career



awareness and work-based learning activities than did students in academies where arrangements were less formal and where liaisons also had teaching responsibilities (2009).

### Summary

In the review of literature, it was generally believed that workers in today's job market must have a high school diploma to compete in the job market. Research also suggested that leaders throughout America are concerned with the increase in high school student dropout rates, and are investigating ways to combat the issue. Additionally, research indicated for students who were at-risk, work-based learning appeared to have a positive correlation with improved graduation rates. As early as 1993, Katz acknowledged that participation in STC programs can improve student attendance, grades, and graduation rates.

While the successful transition from high school is more challenging, complex, and critical for students today than ever before (Smith, 2008, p.1), literature suggested that there is an expectation today for graduates to continue their postsecondary education. The research further suggested that options for students without a postsecondary education are vanishing as more careers are demanding postsecondary education, whether in technical schools, community colleges, or other settings. Additionally, STC supporters tout "the potential for bridging the gulf between what was happening in the nation's classrooms and the skills leaders said graduates were routinely lacking" (Gehring, 2001).

Chapter three addresses the topics of research design, hypotheses, and research questions. Additionally, population and sample, data collection, and data analysis are discussed.

## CHAPTER THREE

### METHODS

This chapter examined if participation in School to Career (STC) programs positively impacted Lawson R-XIV graduate perceptions of the senior year experience and postsecondary transitions. Findings from this study could assist future educators in understanding the value of a work-based career exploration program. This chapter discusses the research design, population, sample, instrumentation, along with research questions, data collection, hypothesis testing, and limitations of the study.

#### Research Design

This study used a quantitative research design to investigate the School-to-Career internship program and its impact on graduates' perceptions of the senior year experience and postsecondary transition. The independent variable was the determination of whether or not eligible students participated in the School-to-Career student internship program between 2005-2009. Two dependent variables identified were: perceptions of the senior year experience and perceptions of the post secondary transition. The research design was chosen as a means to determine if participation in the STC program was related to the perceptions of Lawson R-XIV students' senior year experience and their postsecondary transition.

#### *Population and Sample*

The population of interest in this study were former high school students of the Lawson R-XIV School District. Two samples for the study involved graduates who participated as seniors in the STC program and a similar number of A+ students who met the STC grade point average (GPA) and attendance criteria but chose not to participate as

STC interns their senior year (2005-2009). STC program students had the prerequisite criteria of 95% attendance and 2.5 GPA before acceptance into the program, and A+ program students who agreed to and did meet the same attendance and GPA criteria. The A+ Program required high school students to complete 40 hours of peer tutoring, and 20 hours of community service to receive two years free tuition and textbooks from any Missouri Community College. The STC program offers senior internship credit hour experiences ranging from a full-time work-based internship (working away from the school building the entire day) to a one hour work-based internship and attendance in academic classes in school the remainder of the day. A+ students participated in a seven hour, in-school traditional course schedule.

#### *Sampling Procedures*

The sampling method used was the purposive sampling of 114 former LHS students using only eligible graduates who participated in either the STC or A+ program. The researcher used 2005-2009 data from A+ program files to find the same number of students in the A+ program as in the STC program. The researcher selected all STC participants during 2005-2009 where the participants could be located to minimize bias. There were 57 STC program students who participated and 57 A+ program students were chosen to participate.

#### *Instrumentation*

The instrument used to collect data was a 17-statement electronic survey (Appendix E) to obtain responses from former students of the STC and A+ programs. The researcher posed statements on which the graduates were to agree or disagree.

Statements 1 - 6: Senior Year Experience Perceptions – These statements used five-point Likert-type scale labels of strongly disagree, disagree, neutral, agree, and strongly agree. This first set of statements inquired about the alumni perceptions of their LHS senior year experience. Participants were asked to rate their level of agreement or disagreement with the following six items:

1. My senior year at LHS was a very positive experience.
2. Good attendance was important to me my senior year.
3. My senior year reinforced my desire to learn as much as possible and graduate from high school.
4. My senior year contributed to a positive work ethic.
5. My senior year helped me to develop realistic expectations required in my post high school education and/or employment in the workplace.
6. My senior year resulted in positive relationships with many adults.

Statements 7 - 12: Post High School Experiences - These statements used five-point Likert-type scale labels of strongly disagree, disagree, neutral, agree, and strongly agree. This second set of questions addressed alumni perceptions of the impact of the senior year on their post secondary transitions and/or choices. Participants were asked to rate their level of agreement or disagreement with the following six items:

7. My senior year had a positive impact on my post high school transition.
8. My senior year helped me develop “soft skills” (non-technical skills such as knowing how to work with situations and issues).
9. My senior year helped me develop a clear direction for my career decisions.

10. My senior year helped develop strategies to use in furthering my education or searching for a job.
11. My senior year enhanced my understanding of future education and/or employment opportunities.
12. My senior year helped me network in my career of interest.

Statement 13: Graduate Information - Alumni were asked to respond by a label rating of not related, somewhat related, definitely related, or extremely related to the following questions:

13. Since graduation, were they employed in, or pursuing additional education in a field related to their senior year career interests.

Statements 14 - 16: Demographic Information - Alumni were asked to respond to demographic information related to:

14. What gender are you?
15. What year did you graduate from Lawson High School? (2006, 2007, 2008, or 2009).
16. Immediately after graduation from LHS, what was your next postsecondary transitional move? (Community or four-year college/university, Vocational training, employment in the workforce, or other).

Statement 17: Defined School-to-Career Participation- Alumni were asked if during their senior year, they participated in the School-to-Career internship program. Alumni were asked to respond by either, “Yes, I did”; or “No, I did not”.

### *Measurement*

This study used an electronic survey to measure the two dependent variables and one independent variable. Statements 1-6 of the survey measured the first dependent variable (DV) of the perceptions of the senior year experience. Statements 7-12 of the survey measured the second dependent variable (DV) of perceptions of the post secondary transition. Question 17 measured the independent variable of participation in the STC program.

An electronic survey was appropriate for the specific population of alumni of LHS in that the initial phone contact verified that all persons had access to a computer and the internet for communication. The electronic survey allowed these individuals to take the study survey at a time convenient to them in their own private setting which was essential for convenience and increased participation of the sample.

### *Data Collection Procedures*

Permission to access the Lawson district's archived data for this study was granted by the Superintendent of Lawson R-XIV Schools (Appendix A). The Institutional Review Board of Baker University granted permission to conduct the research study using the Lawson sample of graduates (Appendix C). Each of the 114 former students received a telephone call from the researcher during the week of February 22-26, 2010, asking them if they would be willing to participate in an anonymous online survey (Appendix D telephone script). Respondents were assured that neither their personal identity would be released nor their individual survey responses identified. If they consented, they then texted back their email address so that the survey link could be emailed to that address. Data collection was conducted during March 2010.

During the week of March 1-4, 2010, 114 former STC and A+ students in the sample from a population of interest were notified and a link to the online survey was emailed. Seventy-five of these former STC and A+ students agreed to participate. An electronic cover letter was emailed, including the survey link, describing the purpose of the research and asking the participants to complete the survey within one week. By March 21, 2010, 75 former STC and A+ students had completed the survey, rendering a 65.8% response rate.

#### *Data Analysis and Hypothesis Tests*

This study focused on two research questions with accompanying hypotheses. The research questions and hypotheses guiding the study follow.

Research Question 1: Did participation in the School-to-Career program have a more positive influence on perceptions of the senior year experience as compared to perceptions held by A+ program participants?

*H1:* Students who participated in School-to-Career internships had a more positive perception of their senior year experience than perceptions held by A+ participants.

Independent sample *t* tests were used to conduct hypotheses tests using the first six survey items. STC students were compared with those students in the A+ program.

Research question 2: Did participation in the School-to-Career program have a more positive influence on perceptions of the impact of the senior year experience on postsecondary transitions as compared to perceptions held by A+ participants?

*H2*: Students who participated in the School-to-Career program perceived the senior year had a more positive impact on the transition than perceptions held by A+ participants.

Independent sample *t* tests were used to conduct hypotheses tests using 7-12 survey items. STC participants were compared with participants in the A+ program.

#### Limitations

This study had four limitations that could affect the outcomes of the study. The four limitations of this study included:

1. Potential for data manipulation error,
2. The researcher had no control over whether students chose or did not choose to participate in STC,
3. The participants' individual limitation of remembering what took place their senior year and the year immediately following,
4. There are other external factors that could have influenced their perceptions and transitions from school.

#### Summary

Chapter three described the research design, population and sample, hypotheses, data collection, and analysis used in this research study. Statistical analysis using *t* tests and three Likert type scales were used for measurement in determining if there was a relationship between the participation in School-to-Career internships and the student perceptions of the senior year experience and postsecondary transition.



## CHAPTER FOUR

### RESULTS

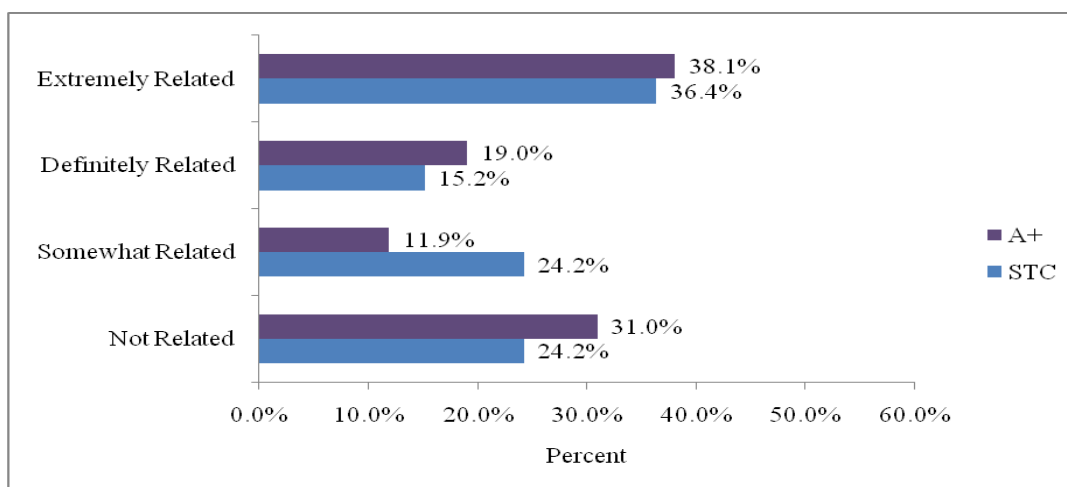
This study had two main purposes. The first purpose was to determine if participation in the STC program had a more positive impact on perceptions of the senior year experience as compared to perceptions held by A+ Program participants who met the same GPA and attendance requirements but chose not to participate. In addition, the study was designed to determine if participation in the STC program had a more positive impact on perceptions of the influence of senior year on postsecondary transitions as compared to perceptions held by A+ participants who met the same GPA and attendance requirements.

This chapter begins with the descriptive statistics for the sample: gender, graduation year, and high school participation in the School-to-Career program and the A+ Program. Using the two research questions for this study, results of the two research hypotheses tests were developed, and the results of statistical analysis used to test each hypothesis are presented.

#### Descriptive Statistics

Of 114 LHS alumni contacted for this study, 75 responded and were surveyed. Of the 75, 33 were STC program participants during their senior year and 42 were A+ program participants. Immediately after high school graduation 64 of the surveyed participants (23 STC participants and 41 A+ participants) attended Community College or a 4- year College/University, 2 STC participants attended vocational school, 5 STC participants sought employment in the workforce, and 4 ( 3 STC and 1 A+) responded with “other” as their next transitional move. Total population surveyed included 23 male,

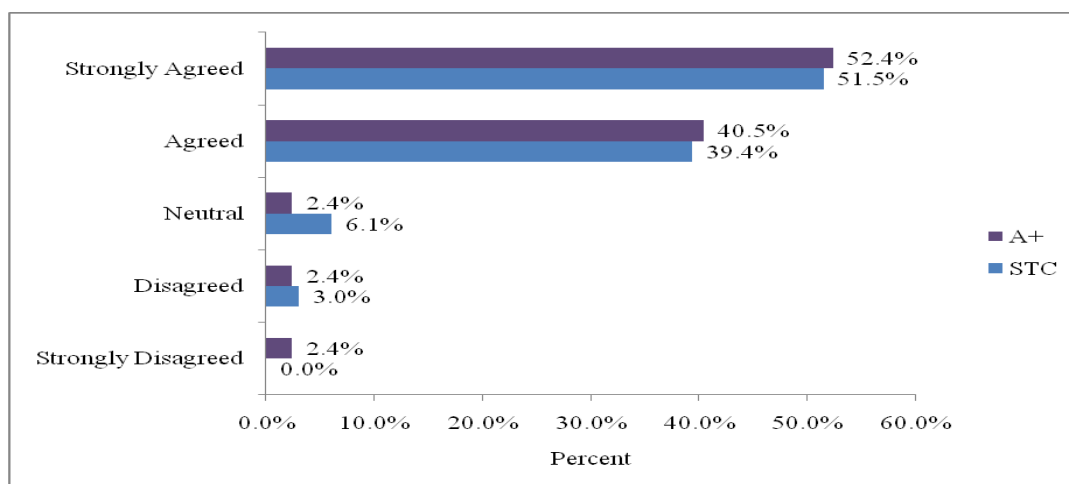
and 52 female. Statement 13 was, since graduation from LHS, I have been employed in, or pursuing additional education in a field of interest I had during my senior year. The survey results indicated that 21 (8 STC participants and 13 A+ participants) reported that since graduation from LHS, they had been employed in, or pursued additional education “not related” to the field of interest their senior year. Thirteen (8 STC and 5 A+) reported that since graduation from LHS, they had been employed in, or pursued additional education “somewhat related”, another 13 (5 STC and 8 A+) reported that since graduation from LHS, they had been employed in, or pursued additional education “definitely related”, and 28 (12 STC and 16 A+) responded that their employment or additional education was “extremely related” to the field of interest they held during their senior year. As presented in figure 8, 75.8% of STC participants believed that their employment or additional education was somewhat related, definitely



*Figure 8.* Percentage of STC and A+ Participants Responses to Item 13: Since graduation from LHS, I have been employed in, or pursuing additional education in a field of interest I had during my senior year.

related, or extremely related to their field of interest they had in their senior year. Of A+ participants, 69% believed that their employment or additional education was somewhat, definitely, or extremely related to their field of interest they had in their senior year.

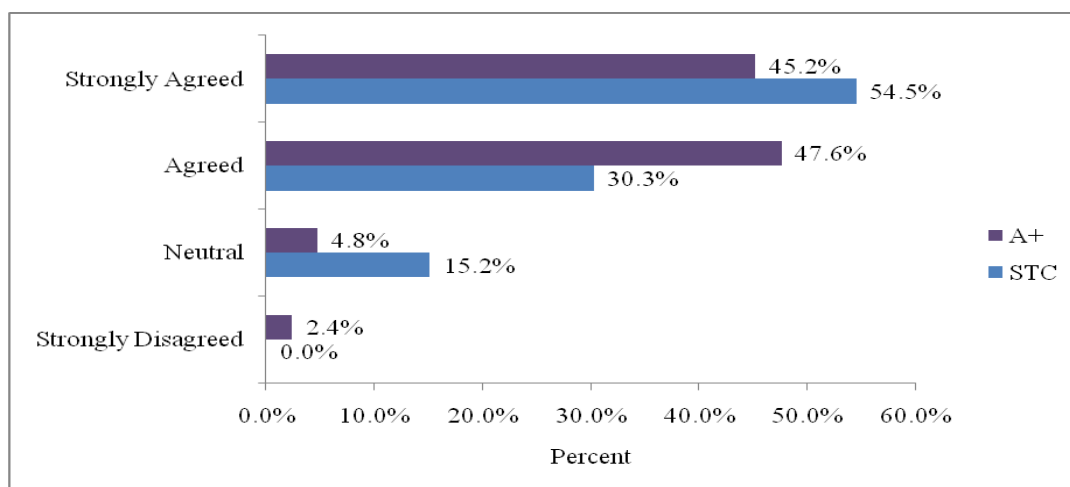
This next section includes figures which graphically present the percent of the responses to each of the first 12 survey items. Perceptions of the LHS senior year experience were measured using the first six items (See Figures 9-14 below). In figure 9, 90.9% of the STC participants and 92.9% of A+ participants agreed or strongly agreed their senior year was a very positive experience. For this question 3% of STC participants disagreed or strongly disagreed, and 4.8% of A+ participants either disagreed or strongly disagreed.



*Figure 9.* Percentage of STC and A+ Participant Responses to Item 1: My senior year at LHS was a very positive experience.

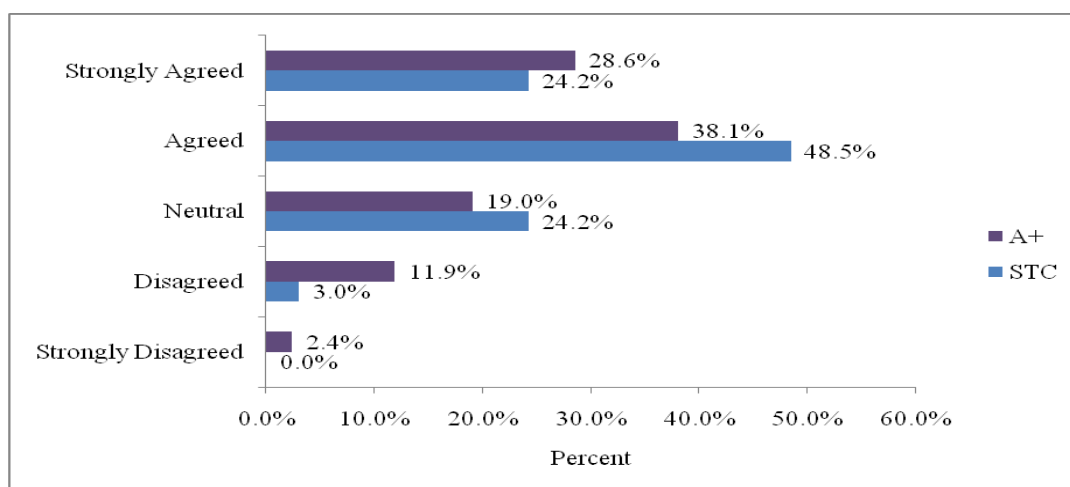
As shown in figure 10, 84.8% of the STC participants and 92.9% of A+ participants agreed or strongly agreed that attendance was important. For this question

0% of STC participants disagreed or strongly disagreed, and 2.4% of A+ participants strongly disagreed.



*Figure 10.* Responses to Item 2: Good attendance was important to me during my senior year.

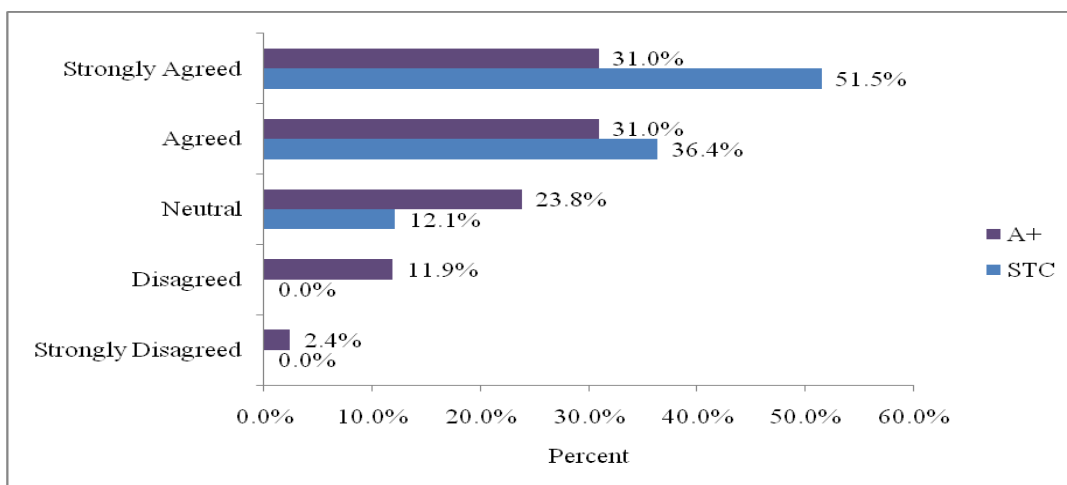
As shown in figure 11, 72.7% of the STC participants and 66.7% of A+ participants agreed or strongly agreed that they desired to learn as much as possible during their senior year and graduate from high school.



*Figure 11.* Responses to Item 3: My senior year my desire to learn as much as possible and graduate from high school.

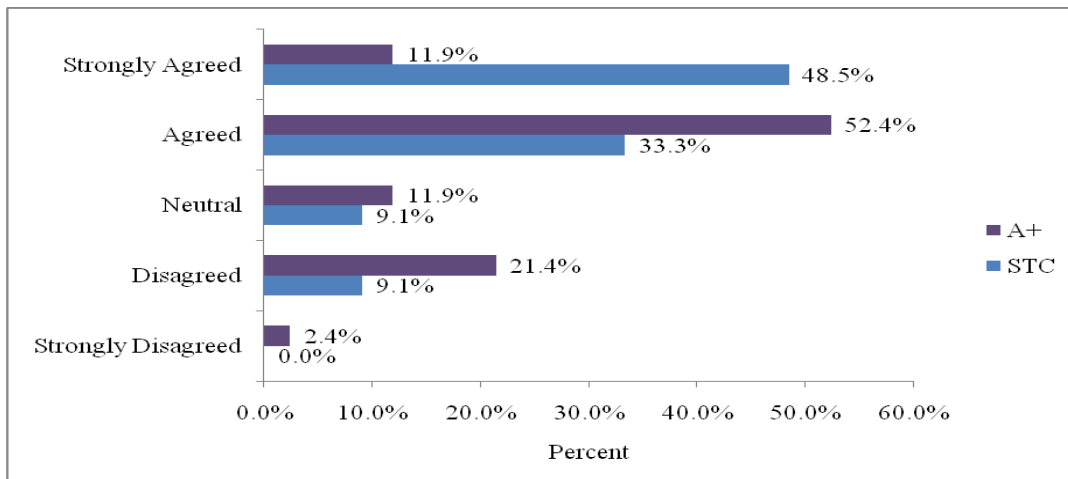
For this question 3% of STC participants disagreed, and 14.3% of A+ participants either disagreed or strongly disagreed.

As shown in figure 12, 87.9% of the STC participants and 61.9% of A+ participants agreed or strongly agreed their senior year contributed to a positive work ethic. For this question 0% of STC participants disagreed or strongly disagreed, and 14.3% of A+ participants either disagreed or strongly disagreed.



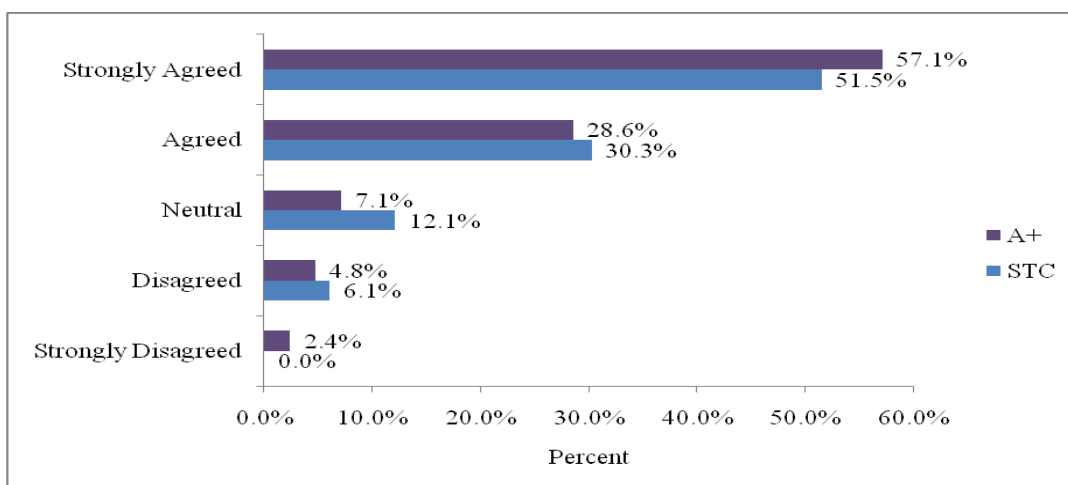
*Figure 12.* Responses to Item 4: My senior year contributed to a positive work ethic.

In figure 13, 81.8% of the STC participants and 64.3% of A+ participants agreed or strongly agreed their senior year helped develop realistic expectations required in post high school education and/or the workplace. For this question 9.1% of STC participants disagreed, and 23.8% of A+ participants either disagreed or strongly disagreed.



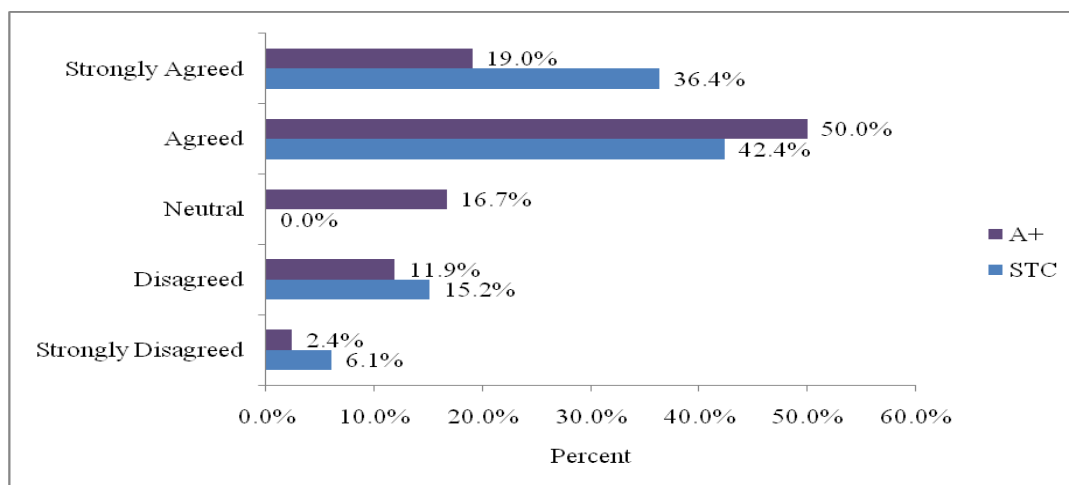
*Figure 13.* Responses to Item 5: My senior year helped me develop realistic expectations required in my post high school education and/or employment in the workplace.

As shown in figure 14 below, 81.8% of the STC participants and 85.7% of A+ participants agreed or strongly agreed their senior year resulted in positive relationships with adults. For this question 6.1% of STC participants disagreed, and 7.2% of A+ participants either disagreed or strongly disagreed.



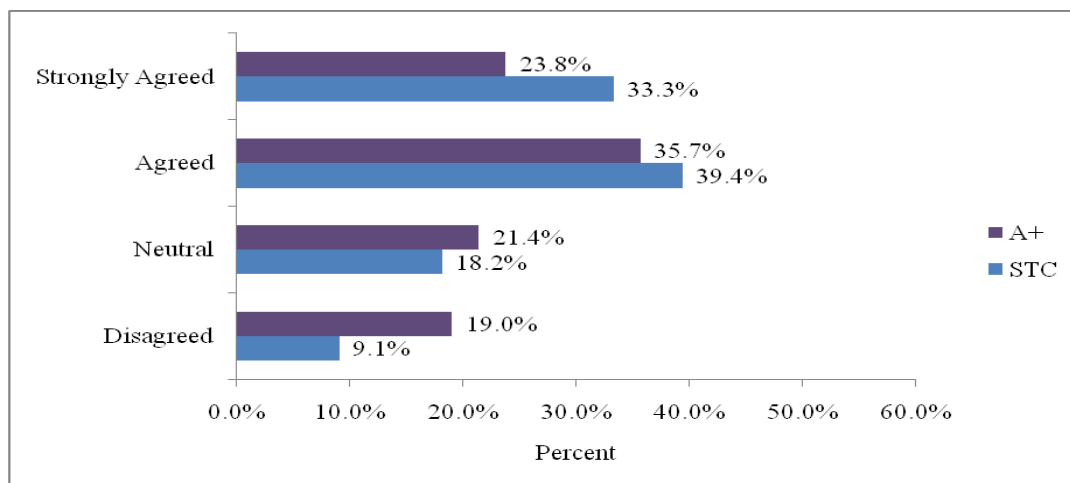
*Figure 14.* Responses to Item 6: My senior year resulted in positive relationships with many adults (faculty, staff, parents, etc.).

Perceptions of the effect of the senior year on post high school experience and/or choices were measured using the next six surveyed items 7-12 (See figures 15-20). In figure 15, 78.8% of the STC participants and 69% of A+ participants agreed or strongly agreed their senior year had a positive impact on their post high school transition. For this question 21.2% of STC participants disagreed or strongly disagreed, and 14.3% of A+ participants either disagreed or strongly disagreed.



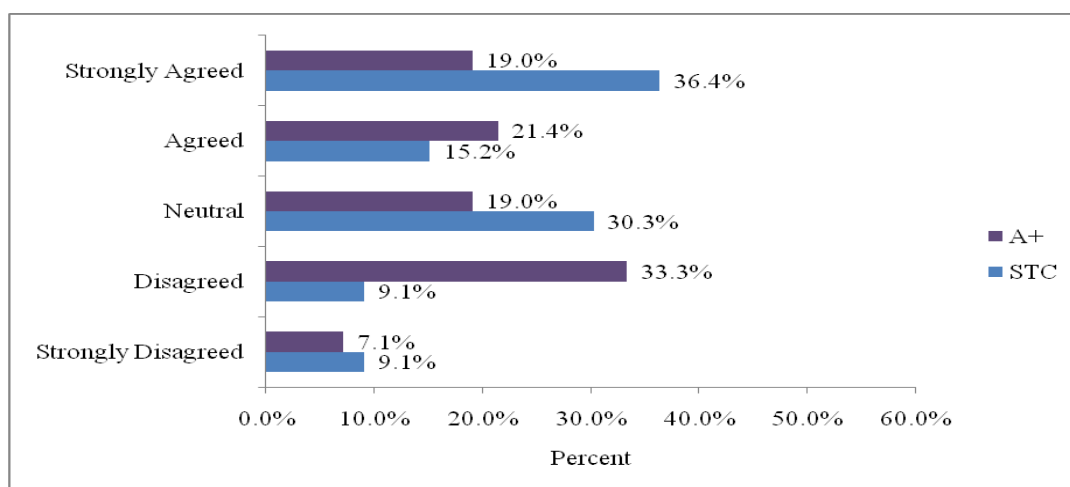
*Figure 15.* Responses to Item 7: My senior year had a positive impact on my post high transition (i.e. college/university, vocational training, employment in the workforce,...).

As presented in figure 16, 73% of the STC participants and 60% of A+ participants agreed or strongly agreed their senior year helped them develop “soft skills”. For this question 9% of STC participants disagreed, and 19% of A+ participants disagreed.



*Figure 16.* Responses to Item 8: My senior year helped me develop “soft skills” (non-technical skills such as knowing how to work with situations and issues).

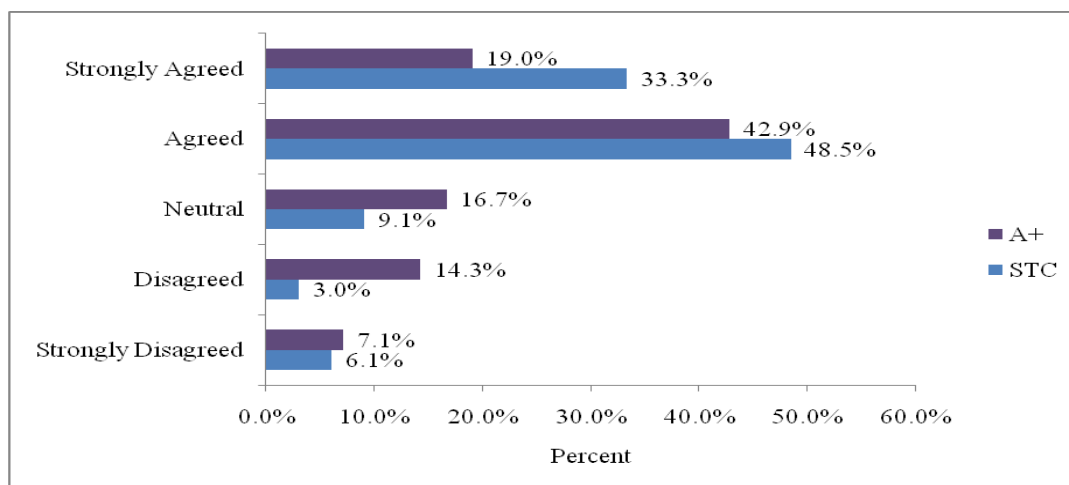
In figure 17, 51.5% of the STC participants and 40.5% of A+ participants agreed or strongly agreed their senior year helped develop a clear direction for their career decisions. For this question 18.2% of STC participants disagreed or strongly disagreed, and 40.5% of A+ participants either disagreed or strongly disagreed.



*Figure 17.* Responses to Item 9: My senior year helped me develop a clear direction for my career decisions.

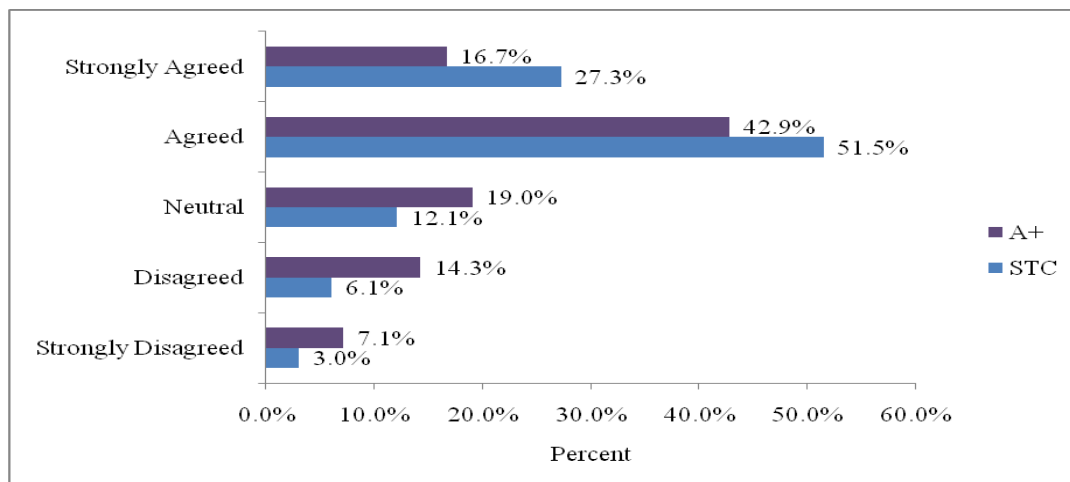


In figure 18, 81.8% of the STC participants and 61.9% of A+ participants agreed or strongly agreed their senior year helped develop strategies to use in furthering their education or searching for a job. For this question 9.1% of STC participants disagreed or strongly disagreed, and 21.4% of A+ participants either disagreed or strongly disagreed.



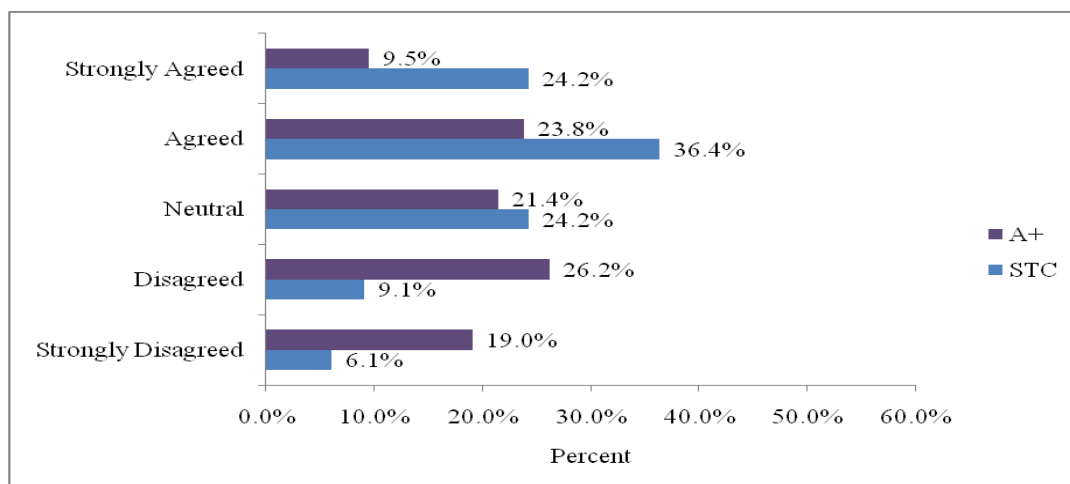
*Figure 18.* Responses to Item 10: My senior year helped me develop strategies to use in furthering my education or searching for a job.

As presented in figure 19, 78.8% of the STC participants and 59.5% of A+ participants agreed or strongly agreed their senior year enhanced their understanding of future education and/to employment opportunities. For this question 9.1% of STC participants disagreed or strongly disagreed, and 21.4% of A+ participants either disagreed or strongly disagreed.



*Figure 19.* Responses to Item 11: My senior year enhanced my understanding of future education and/or employment opportunities.

As shown in figure 20, 60.6% of the STC participants and 33.3% of A+ participants agreed or strongly agreed their senior year helped with networking in their career of interest. For this question 15.2% of STC participants disagreed or strongly disagreed, and 45.2% of A+ participants either disagreed or strongly disagreed.



*Figure 20.* Responses to Item 12: My senior year helped my network in my career of interest.

## Hypothesis Testing

This section contains the results of the hypothesis testing used to address the research questions. Six hypothesis tests addressed the first question; six hypothesis tests addressed the second question.

The first hypothesis, which addressed the first research question that guided this study, was:

*H1*: Students who participated in School-to-Career internships had a more positive perception of their senior year experience than perceptions held by A+ participants.

Statements 1-6 of the survey measured the first dependent variable (DV), perceptions of the senior year experience. An independent samples *t*-test was used to determine if a statistically significant difference existed for each statement. The statistics for the hypothesis testing for statements 1-6 are summarized in Table 5.

The mean rating for item number one for STC participants was 4.39 ( $s = .747$ ). The mean rating for item number one for A+ participants was 4.38 ( $s = .854$ ). An independent sample *t*-test determined the difference was not statistically significant ( $t = .07, df = 73, p = .945$ ). There is not enough evidence to state there is a difference between STC participants' and A+ participants' rating.

The mean rating for item number two for STC participants was 4.39 ( $s = .747$ ). The mean rating for item number two for A+ participants was 4.33 ( $s = .786$ ). An independent sample *t*-test determined the difference was not statistically significant ( $t = .03, df = 73, p = .736$ ). There is not enough evidence to state there is a difference between STC participants' and A+ participants' rating.

The mean rating for item number three for STC participants was 3.93 ( $s = .788$ ). The mean rating for item number three for A+ participants was 3.79 ( $s = 1.071$ ). An independent sample  $t$ -test determined the difference was not statistically significant ( $t = .07$ ,  $df = 73$ ,  $p = .492$ ). There is not enough evidence to state there is a difference between STC participants' and A+ participants' rating.

The mean rating for item number four for STC participants was 4.39 ( $s = .704$ ). The mean rating for item number four for A+ participants was 3.76 ( $s = 1.100$ ). An independent sample  $t$ -test determined that the difference was statistically significant ( $t = 3.00$ ,  $df = 73$ ,  $p = .005$ ). STC participants agreed more strongly that their senior year contributed to a positive work ethic than A+ participants.

The mean rating for item number five for STC participants was 4.21 ( $s = .960$ ). The mean rating for item number five for A+ participants was 3.50 ( $s = 1.042$ ). An independent sample  $t$ -test determined that the difference was statistically significant ( $t = 3.804$ ,  $df = 73$ ,  $p = .003$ ). STC participants agreed more strongly that their senior year helped them develop realistic expectations required in their post high school education and/or employment in the workplace than A+ participants.

The mean rating for item number six for STC participants was 4.27 ( $s = .910$ ). The mean rating for item number six for A+ participants was 4.33 ( $s = .979$ ). An independent sample  $t$ -test determined that the difference was not statistically significant ( $t = -.27$ ,  $df = 73$ ,  $p = .785$ ). There is not enough evidence to state there is a difference between STC participants' and A+ participants' rating.

Table 5

*Statistics for the Hypothesis Testing for Questions 1-6*

	<i>t</i>	df	<i>p</i> -value	Mean STC	Mean A+	Difference
Q1	.069	73	.945	4.394	4.381	.013
Q2	.339	73	.736	4.394	4.333	.061
Q3	4.312	73	.690	3.939	3.786	.154
Q4	2.868	73	.005	4.394	3.762	.632
Q5	3.040	73	.003	4.212	3.500	.712
Q6	-.274	73	.785	4.273	4.333	-.061

*Note.* Statistics are based on independent sample *t*-test analysis using SPSS software version 16.0.

The second hypothesis, which addressed the second research question that guided this study, was:

*H2:* Students who participated in School-to-Career program perceived the senior year had a more positive impact on the transition than perceptions held by A+ participants.

Statements 7-12 of the survey measured the second dependent variable (DV), perceptions of the post secondary transition. The statistics for the hypothesis testing for statements 7-12 are summarized in Table 6.

The mean rating for item number seven for STC participants was 3.88 ( $s = 1.243$ ). The mean rating for item number seven for A+ participants was 3.71 ( $s = .995$ ). An independent sample *t*-test determined the difference was not statistically significant ( $t = .637$ ,  $df = 73$ ,  $p = .526$ ). There is not enough evidence to state there is a difference between STC participants' and A+ participants' rating.

The mean rating for item number eight for STC participants was 3.97 ( $s = .951$ ). The mean rating for item number eight for A+ participants was 3.64 ( $s = 1.055$ ). An independent sample  $t$ -test determined the difference was not statistically significant ( $t = 1.390$ ,  $df = 73$ ,  $p = .169$ ). There is not enough evidence to state there is a difference between STC participants' and A+ participants' rating.

The mean rating for item number nine for STC participants was 3.61 ( $s = 1.321$ ). The mean rating for item number nine for A+ participants was 3.12 ( $s = 1.273$ ). An independent sample  $t$ -test determined the difference was not statistically significant ( $t = 1.618$ ,  $df = 73$ ,  $p = .110$ ). There is not enough evidence to state there is a difference between STC participants' and A+ participants' rating.

The mean rating for item number ten for STC participants was 4.00 ( $s = 1.061$ ). The mean rating for item number ten for A+ participants was 3.523 ( $s = 1.174$ ). An independent sample  $t$ -test determined that the difference was marginally significant ( $t = 1.819$ ,  $df = 73$ ,  $p = .073$ ). Although the difference was not statistically significant, it was in the right direction and the p-value was .073. STC participants tended to agree more strongly than A+ participants that their senior year helped to develop strategies to use in furthering their education or searching for a job.

The mean rating for item number eleven for STC participants was 3.94 ( $s = .966$ ). The mean rating for item number eleven for A+ participants was 3.48 ( $s = 1.153$ ). An independent sample  $t$ -test determined that the difference was marginally significant ( $t = 1.852$ ,  $df = 73$ ,  $p = .068$ ). Although the difference was not statistically significant, it was in the right direction and the p-value was .068. STC participants tended to agree

more strongly than A+ participants that their senior year enhanced their understanding of future education and/or employment opportunities.

The mean rating for item number twelve for STC participants was 3.64 ( $s = 1.141$ ). The mean rating for item number twelve for A+ participants was 2.79 ( $s = 1.279$ ). An independent sample  $t$ -test determined that the difference was statistically significant ( $t = 3.00$ ,  $df = 73$ ,  $p = .004$ ). STC participants agreed more strongly than A+ participants that their senior year helped them network in their career of interest.

Table 6

*Statistics for the Hypothesis Testing for Questions 7-12*

	$t$	df	$p$ -value	Mean STC	Mean A+	Difference
Q7	.637	73	.526	3.879	3.714	.165
Q8	1.390	73	.169	3.970	3.643	.327
Q9	1.618	73	.110	3.606	3.119	.487
Q10	1.819	73	.073	4.000	3.524	.476
Q11	1.852	73	.068	3.939	3.476	.463
Q12	2.997	73	.004	3.636	2.786	.851

*Note.* Statics are based on independent sample  $t$ -test analysis using SPSS software version 16.0.

### Summary

This chapter presented the results of the descriptive statistics and hypotheses testing. A statistically significant difference was found for three of the 12 questioned items. STC participants more strongly agreed than A+ participants with statement four

that measured the positive impact on work ethics, statement five that measured realistic expectations required in post high school education and/or employment in the workplace, and statement 12 that measured networking in career of interest. There was a marginal difference between STC participants and A+ participants in two additional items. The two items with a marginal difference were item ten that questioned the development of strategies to use in furthering future education and/or employment, and item 11 that surveyed the understanding of future education and/or employment opportunities enhanced by the senior year. Chapter five provides a summary of the study, discussion of the findings in relationship to the literature, implications for practice, recommendations for further research, and conclusions.



## CHAPTER FIVE

### INTERPRETATION AND RECOMMENDATIONS

#### Introduction

In the preceding chapter, the results of the analysis were reported. Chapter Five consists of a summary of the study, an overview of the problem, purpose statement and research questions, and a review of the methodology. This chapter includes the major findings from this study and concludes with implications for further action, recommendations for further research, and a summary of the study's major points.

#### Study Summary

This research was conducted in the Lawson R-XIV District and investigated the perceptions held by STC and A+ program graduates of their senior year experience and post secondary transition.

#### *Overview of Problem*

The participation in student internship experiences in post secondary education has been the subject of career exploration conversation since 1994 with the Legislation of the School to Work Act to improve academic standards and expose students to the demands of the workplace. As federal funding of the School to Work Act ended in 2001, districts with STC programs worked to keep alive their local programs that many educators and employers credit with making academics more relevant for students and increasing business involvement in schools. "At their best, STC programs connect what students learn in their academic subjects with the knowledge and skills they acquire from on the job experiences in school-related internships" (Gehring, 2001, p.1). The present study agrees with Gehring's research indicating there is a significant difference in the

STC program having a positive impact on perceptions held of the senior year experience and post secondary transition as compared to perceptions held by A+ students who agreed to meet the same GPA and attendance criteria but chose not to participate.

More than 50 percent of U.S. employers report that they are not able to find qualified applicants for entry-level positions (National Conference of State Legislators, 2001). DESE addressed this need to stay in sync with the changing needs of the workplace and included in their core standards workplace readiness for all high school graduates which would offer students an opportunity to learn about their career interests. DESE stated in the conclusion of their *Student Pathways to Success (2007)* that STC exploration internship programs “provide a foundation for students to gain knowledge about the world of work in a meaningful way while at the same time developing soft skills and workplace readiness in a context relevant to their educational and a career goals” (DESE, 2007, p.4). Hirsch reported that career education courses and programs, such as STC, are “designed to better equip students with the skills and credentials required for success in high-demand careers” (1994, p.113). DESE’s report, *Student Pathways to Success (2007)*, stated that, “Student internship experiences were helpful in providing a smooth transition after high school graduation, by giving students a clear career direction for their postsecondary education, job training program, or the workforce in a family-sustaining career” (2007, p. 9).

However, the recent reform initiative No Child Left Behind Act (NCLB) has reshaped the educational environment. NCLB mandates that all secondary students achieve statewide skill standards prior to graduation. NCLB has caused school districts in Missouri to increase the number of academic course requirements which in turn has

diminished students' capacity to participate in elective coursework programs such as STC (U.S. Department of Education, 2004). With workplace readiness is one of DESE's core standard requirements for all students to have met upon high school graduation, school districts are grappling with how to meet this requirement. Increasing credits required to graduate, decreasing federal funding, and partnering with the community in logistically creating internship opportunities creates challenges for school administrators.

#### *Purpose Statement and Research Questions*

The Lawson R-XIV District, which was involved in this research, participated in the STC program. The purpose of this study was to determine if participation in the School-to-Career program positively impacted perceptions of the senior year experience and post secondary transition. Two research questions were used to guide this study. Did participation in the STC program have a more positive influence on perceptions of the senior year experience than perceptions held by A+ participants? The second research question guiding this study was: Did participation in the STC program have a more positive influence on perceptions of postsecondary transition than perceptions held by A+ participants?

#### *Review of Methodology and Major Findings*

The research design was a quantitative study investigating the STC internship program and its impact on the two independent variables of perceptions of the senior year experience and postsecondary transition of 114 former high school students of the Lawson R-XIV School District. Two population samples were used consisting of 33 STC interns and 42 A+ participants who were members of the graduating classes of 2005 through 2009. The perceived effectiveness of the STC program was made possible by

comparing the data from STC participants with data from A+ participants. Two groups participated in purposive sampling by volunteering to be surveyed with seventeen statements or questions set up on a five point Likert scale. Both groups were asked to respond to the same statements or questions. Multiple independent sample *t*-tests were used to determine if a significant difference existed in the *p*-value of the STC and A+ participants perceptions of the LHS senior year experience in regards to: a positive experience, good attendance, desire to learn and graduate, positive work ethic, realistic expectations required, and positive relationships with adults in surveyed items 1-6 (Research Question 1).

Multiple independent sample *t*-tests were used to determine there was a significant difference in the STC and A+ participants' perceptions of the post high school experience and/or choices in regards to: a positive impact of post high school transition, developing soft skills, developing clear direction for career decisions, developing strategies in furthering education or job searches, enhanced understanding of education and opportunities, and networking in career of interest in surveyed items 7-12 (Research Question 2).

The research hypothesis testing received mixed results. A statistically significant difference was found for three of the 12 questioned items. STC interns more strongly agreed than A+ participants with statement four that measured the positive impact on work ethics, question five that measured realistic expectations required in post high school education and/or employment in the workplace, and statement 12 that measured networking in career of interest. There was a marginal difference in two items between STC interns and A+ participants. The first marginal difference was with statement ten

that measured strategies developed to use in furthering education, and the second with statement 11 that measured enhanced understanding of future education and employment opportunities. The results indicated no statistically significant difference in perceptions held by STC interns, as compared to perceptions held by A+ participants relating to: the senior year being a very positive experience, good attendance being important, a reinforced desire to learn as much as possible and graduate, or the senior year experience resulting in positive relationships with adults. The results also found no significant difference in STC and A+ participants' perceptions of their post high school experiences and/or choices senior year having a positive impact on post high school transition, developing soft skills, or developing a clear direction for career decisions. The implication of these results compared to current literature is discussed in the next section.

#### Findings Related to the Literature

The workplace demands anyone entering the workforce possess effective interpersonal skills, basic foundation proficiency, technology expertise, and self direction (Hess & McLachlan, 2008). Work-based programs, such as STC, have become relevant strategies in secondary education to provide career exploration opportunities to students. Missouri's efforts to delivery career education were guided by Steve Klein's report on *Delivering Career Education in Missouri* (2009), which stated, "To encourage students to find meaning in their studies, secondary and postsecondary educators should seek to establish a continuum of career focused learning opportunities that enable students to apply skills learned in their academic and career education classes" (p. 6).

The present study supported research conducted by Clinton (1996) where he wrote that “school mentoring and internship programs make learning relevant in the students lives by linking their schooling with real world experience” (p. 266). The present study found a significant difference between students who participated in a STC internship and those who did not in the senior year helping to develop realistic expectations required in the post high school education and/or employment in the workplace. Because this present study compared two groups, to some extent this research also supports previous research conducted by the Welfare Information Network (2000) and Spear (2005) indicating experience with career exploration internships deepen the student’s understanding of content and skills, and offer students exposure to what employers reveal as important.

The present study found no significant difference in the senior year having a positive impact on the post high school transition (i.e. college/university, vocational training, employment in the workplace). These results are contrary to the conclusion reached by Gehring’s (2001) and Marshall’s (2000) postsecondary longitudinal studies that suggested in some schools participation in School-to-Career increased the likelihood of enrolling in college.

The present study found a significant difference in STC internships in the senior year helping STC student interns to network in the career of interest. Although Stock (2004) did not compare two groups as in this present study, these results agree with the findings of Stock (2004) that internships can be the bridge between experience and a future career. The present study supports previous research by Pennington and Vargas (2004) who wrote that schools aligning their expectations and curricula to postsecondary

institutions connect STC internship students to the world beyond the high school walls with networking.

### Conclusions

The present study suggests that the STC program has a positive impact on perceptions held by STC participants as compared to A+ participants who met the same GPA and attendance requirements. The results of multiple independent *t*-tests indicated that there was a statistically significant difference of STC participant perceptions, as compared to A+ participant perceptions, of the senior year contributing to a positive work ethic and the ability to develop realistic expectations required in post high school education and/or employment in the workplace. These findings agree with the findings of Stock (2004), and with Pennington and Vargas (2004) indicating schools that align their expectations and curricula to postsecondary institutions can be the bridge between experience and future careers connecting STC internship students to the world beyond the high school walls. In the following sections, implications for action, recommendations for research, and concluding remarks are addressed.

As Missouri administrators grapple with budget cuts in their school districts, many have examined issues of complying with DESE's requirements of workplace readiness for all students considering career exploration and student internships for their students. As a result of comparing STC participants with A+ participants, this study's findings suggest that the STC program can have a positive impact on the senior year experience by introducing realistic performance expectations of future employers and curtailing work ethic problems.

The study also examined perceptions of post high school experiences and/or transitional choices, finding several areas where significant differences exist between STC and A+ participants. The findings of the study support that, in comparing the two groups, STC had a positive influence on post secondary transition in helping to network in the students' career of interest. The findings suggest that students benefit from a work-based learning experience in which business partner mentors build a relationship with the student while sharing their knowledge and expertise. This personal involvement with persons in the workplace can be a tremendous asset in networking to secure a position.

Additionally, the study examined the perceptions of the senior year helping to develop strategies to use in furthering education or searching for a job. The present study found a marginal significant difference between the STC intern's perceptions of the post high school experience compared to that of A+ participants. Likewise, the study found that the STC senior year showed a marginal significant difference in participant understanding of future education and employment opportunities. The findings demonstrate the STC participants perceptions related to their ability to make transitions. STC participant perceptions were stronger related to their post high school statements with three marginal and one significant difference, compared to the senior year experience statements with only two significant differences.

#### *Recommendations for Future Research*

This quantitative study revealed several aspects of student internship and work-based experience programs which justify the need for additional research. Further studies should be conducted to determine if STC programs impact perceptions of the high school experience and postsecondary transition. Using this research information would help



school administrators know how to build on the strengths of the STC initiatives, and this present study could have been expanded to compare STC programs in districts having different population sizes. Further recommendations for research could be made in the comparisons of different regions or sections of the state to find if work-based learning is a significant contribution in schools.

Although children may not communicate everything that is important to them while in high school to parents, surveying parents could provide valuable insight into the effect of an internship program on their children during high school. The effect that the internship program had on their child could be shared through observation regarding growth and changes the parents witnessed. This parental perspective could prove to be a useful resource for districts.

It is also recommended that future researchers conduct qualitative studies involving individuals who served as STC business partners who employed STC interns. In a qualitative study, insight into interviewed business partners' experiences, disappointments, and successes would be a helpful resource for school districts planning an internship program. This type of feedback would also be helpful for evaluation of existing programs in the districts strategic planning.

One of the focuses of this study was to investigate the contributions that internship experiences in high school made to the successful post secondary student transition. Improving the level of high school preparation so that students graduate ready for college has become an increasingly critical focus of DESE, but the transition between these two separate systems is still difficult. Stronger influence and partnership with postsecondary institutions would send clearer signals to secondary schools and their

students about standards and expectations. To ensure academic success in college or the workplace, future research is recommended to connect secondary and postsecondary institutions in a program to enhance transition strategies.

### *Concluding Remarks*

The results of this study provide a foundation for expanding student internships, career exploration, and work-based learning programs for secondary school districts. By addressing the perceptions of the senior year experience and post secondary transition for STC student interns, the study results allow high school student internship programs to benefit from data-driven decision-making. To meet the demands of the 21<sup>st</sup> century knowledge base, school districts must address the use of research to ensure that programs are effective and economically sound. School districts striving to prepare their students with the skills and abilities required for the workforce should use data to examine student internships and work-based learning program data.

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APPENDIX A: LAWSON R-XIV ARCHIVED DATA ACCESS APPROVAL LETTER



## Lawson R-XIV School District



**Craig Barker, Superintendent**

4<sup>th</sup> Street & Allison

P.O. Box 157

Lawson, Missouri 64062

District Office (816) 580-7277 Fax (816) 296-7723

**Scott Harrold**

MS Assistant Principal/AD

(816) 580-7279

Fax (816) 296-3164

**Tammy Dunn**

Middle School Principal

(816) 580-7279

Fax (816) 296-3164

**Don Edwards**

High School Principal

(816) 580-7270

Fax (816) 296-3048

**Clint Ross**

HS Assistant Principal/A+

(816) 580-7270

Fax (816) 296-3048

February 24, 2010

To: Dissertation Advisory Committee – School of Education, Baker University

Permission is granted for Suzanne Cotton to access the District's archived data from the high school A+ School files for her dissertation entitled *How Student Internship Programs Impact High School Perceptions of the Senior Year Experience and Postsecondary Transition*.

The following is a condition for the study to be conducted in this school district: all student data must remain confidential. Upon completion of the dissertation defense, findings and conclusions of the study will be reported in an executive summary to the District's Board of Education for their review.

Feel free to contact me if I may assist you further.

Sincerely,

Craig Barker

Superintendent of Lawson Schools

APPENDIX B: BAKER UNIVERSITY IRB APPLICATION



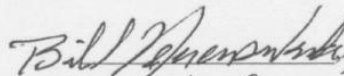
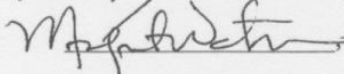
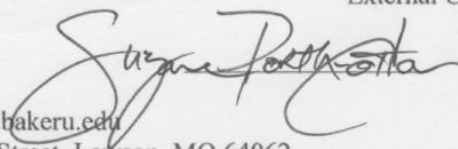
SCHOOL OF EDUCATION  
GRADUATE DEPARTMENT  
(IRB USE ONLY)

Date: March 4, 2010  
IRB PROTOCOL NUMBER

IRB REQUEST  
**Proposal for Research**  
Submitted to the Baker University Institutional Review Board

**I. Research Investigator(s)** (Students must list faculty sponsor first)

**Department(s)** School of Education Graduate Department

Name	Signature	
1. Bill Neuenswander		Major Advisor
2. Margaret Waterman		Research Analyst
3.		University Committee Member
4.		External Committee Member
Principal Investigator:		Suzanne Cotton
Phone: 816-580-3211		
Email: <a href="mailto:suzannelcotton@stu.bakeru.edu">suzannelcotton@stu.bakeru.edu</a>		
Mailing address: 615E. 6 <sup>th</sup> Street, Lawson, MO 64062		

Expected Category of Review: \_\_\_ Exempt X Expedited \_\_\_ Full

**II: Protocol Title**

HOW STUDENT INTERNSHIP PROGRAMS IMPACT HIGH SCHOOL PERCEPTIONS OF THE SENIOR YEAR EXPERIENCE AND POST SECONDARY TRANSITION

**Summary**

The following summary must accompany the proposal. Be specific about exactly what participants will experience, and about the protections that have been included to safeguard participants from harm. Careful attention to the following may help facilitate the review process:

**In a sentence or two, please describe the background and purpose of the research.**

The Lawson School District began the implementation of the School-to career initiative in 2000. Student internship programs have not been analyzed in depth for long range post secondary student impact. The purpose of this study was to determine if participation in the School-to-Career program positively impacted perceptions of the

senior year experience and postsecondary transition based on alumni perceptions for a period of four years, 2006-2009.

**Briefly describe each condition or manipulation to be included within the study.**

The condition of this study will involve collecting data from alumni who participated in the School-to-Career student internship program at Lawson High School during their senior year; and comparing it to the data collected from Lawson High School alumni, with comparable grade point averages during their senior year, who did not participate in the School-to-Career program.

**What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy.**

**Will the subjects encounter the risk of psychological, social, physical or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.**

Participants in this study will be asked to complete a questionnaire with 17 questions relating to the perceptions of their senior year experience.

**Will any stress to subjects be involved? If so, please describe.**

There is no stress to the subjects involved. Subjects of the study will not be identified from their survey.

**Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.**

It is not the intent to deceive or mislead the participants of this study in any way, therefore no debriefing is planned or seen as necessary.

**Will there be a request for information that subjects might consider to be personal or sensitive? If so, please include a description.**

No personal or sensitive information will be requested.

**Will the subjects be presented with materials that might be considered to be offensive, threatening, or degrading? If so, please describe.**

No material will be presented which might be considered offensive, threatening, or degrading.

**Approximately how much time will be demanded of each subject?**

A total of 15 minutes will be spent by each participant for the on-line survey questionnaire given once during the data collection in this study.

**Who will be the subjects in this study? How will they be solicited or contacted?**

**Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.**

The subjects for the study are alumni who were either in the A+ Program, or the School-to-Career interns, or both during their senior year at Lawson High School (LHS) between

2006-2009. The subjects were first contacted by phone to assess their interest in participating in an LHS alumni survey. If interested, study participants will offer an email address where the on-line questionnaire would be forwarded.

**What steps will be taken to ensure that each subject's participation is voluntary?**

**What if any inducements will be offered to the subjects for their participation?**

Study participants will be asked if they were willing to participate when contacted by phone. No inducements will be offered with their permission to send an emailed questionnaire.

**How will you ensure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.**

Verbal consent during the initial the phone contact ensures the subjects' prior consent. Additional consent is given with the subjects offering a valid email address to which the questionnaire can be sent.

**Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.**

No aspect of the data will be made a part of a permanent record that will individually identify any subject participating in this study.

**Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher or employer? If so, explain.**

No information pertaining to a subject's participation, or lack thereof, will be made a part of any permanent record that will be available to a supervisor, teacher, or employer.

**What steps will be taken to ensure the confidentiality of the data?**

No names of subjects will be included in the study or any other identifying aspects that reveal the privacy of said subject.

**If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?**

No risks have been identified within the study pertaining to any offsetting benefits that might accrue to either the subjects or society.

**Will any data from files or archival data be used? If so, please describe.**

It is anticipated that certain data may be obtained from the administrative office(s) with the school districts, including records relating to attendance, academic performance, and participation in school related programs.

Respectfully submitted for your review this 4th day of March, 2010 by:

Suzanne L. Cotton  
 Doctoral Student  
 Graduate School of Education

APPENDIX C: BAKER UNIVERSITY IRB APPROVAL LETTER



March 31, 2010

Dr. Bill Neuenswander  
Baker University School of Education  
Baldwin City KS 66006



1858  
**BAKER**  
UNIVERSITY  
*Own Confidence*

Dear Dr. Neuenswander:

The Baker University IRB has reviewed Suzanne Cotton's research project application (M-0091-0308-0312) and approved this project under Exempt Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

The Baker University IRB requires that your consent form must include the date of approval and expiration date (one year from today). Please be aware of the following:

1. At designated intervals (usually annually) until the project is completed, a Project Status Report must be returned to the IRB.
2. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
3. Notify the OIR about any new investigators not named in original application.
4. Any injury to a subject because of the research procedure must be reported to the IRB Chair or representative immediately.
5. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity. If you use a signed consent form, provide a copy of the consent form to subjects at the time of consent.
6. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.

Please inform Office of Institutional Research (OIR) or myself when this project is terminated. As noted above, you must also provide OIR with an annual status report and receive approval for maintaining your status. If your project receives funding which requests an annual update approval, you must request this from the IRB one month prior to the annual update. Thanks for your cooperation. If you have any questions, please contact me.

Sincerely,

Charmaine Henry, PhD  
Chair, Baker University IRB

P.O. Box 65  
Baldwin City, KS 66006  
785.594.6451 | 785.594.2522 fax  
[www.bakerU.edu](http://www.bakerU.edu)

## APPENDIX D: TELEPHONE SCRIPT

**Telephone Script used with initial contact of Lawson R-XIV alumni STC student interns and A+ students:**

“Hello, this is Ms. Cotton. I’m working on a study of LHS alumni regarding their perceptions of their senior year. Would you be interested in participating in an anonymous electronic survey that would take around 5-10 minutes of your time?”

[If alumni answered, no:] “No problem. Thank you for your time.”

[If alumni answered yes:] “Great! Since you are interested in participating, do you have access to a computer and the internet?”

[If alumni answered no to access to a computer:] “Would you be able to make arrangements to use the services at your closest Library within the next week?”

[If alumni answered yes:] “Would you please offer an email address for me to forward the survey to you? The online survey uses *Survey Monkey*, and all of your responses will be completely confidential. Instructions for the survey will be included in the email with the survey link. Thank you again for your help with this study.”

APPENDIX E: ELECTRONIC SURVEY

## LHS Alumni Survey

1. The first set of questions inquires about your perceptions of your LHS senior year experience.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My senior year at LHS was a very positive experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good attendance was important to me during my senior year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My senior year reinforced my desire to learn as much as possible and graduate from high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My senior year contributed to a positive work ethic.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My senior year helped me develop realistic expectations required in my post high school education and/or employment in the workplace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My senior year resulted in positive relationships with many adults (faculty, staff, parents,...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2. The next set of questions inquires about your perceptions of your post high school experiences and/or choices.**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>My senior year had a positive impact on my post high school transition(i.e. college/university, vocational training, employment in the workforce,...).</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>My senior year helped me develop "soft skills" (non-technical skills such as knowing how to work with situations an issues).</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>My senior year helped me develop a clear direction for my career decisions.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>My senior year helped develop strategies to use in furthering my education or searching for a job.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>My senior year enhanced my understanding of future education and/or employment opportunities.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>My senior year helped me network in my career of interest.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3. Since graduation from LHS, I have been employed in, or pursuing additional education in a field of interest I had during my senior year.**

- Not Related       Somewhat Related       Definitely Related       Extremely Related

**4. What gender are you?**

- Male  
 Female

**5. What year did you graduate from Lawson High School?**

- 2006       2007       2008       2009

**6. Immediately after graduation from LHS, what was your next transitional move?**

- Community or 4-year College/University  
 Vocational Training  
 Employment in the workforce  
 Other

**7. During your senior year at LHS, did you participate in the School-to-Career internship (work based) program?**

- Yes, I did.  
 No, I did not.

Optional Comments:

