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Examining the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy: A Study of Key Stakeholder Involvement Using a Multiple Case Study Approach

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EXAMINING THE SIMILARITIES AND DIFFERENCES IN BENEFITS OF
SCHOOL-TO-WORK AS A WORKFORCE DEVELOPMENT STRATEGY:
A STUDY OF KEY STAKEHOLDER INVOLVEMENT USING
A MULTIPLE CASE STUDY APPROACH

by

Alton Leon Alford

A Dissertation
Submitted to the
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Western Michigan University
Kalamazoo, Michigan
December 2002

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Western Michigan University, 2002

As we enter the new millennium, there is considerable evidence which indicates that in the 1990's many U.S. businesses were experiencing rapid growth and expansion resulting from a robust American economy. As a result, business activity in most employment sectors has shown many signs of future growth with projections of continued growth well into the 21st century. This growth in the new economy has resulted in a critical need for highly skilled entrants into the workforce whose working life times will extend toward the mid-twenty-first century (Judy & D'Amico, 1997).

With an identified skills shortage looming over many U.S. corporations and businesses, companies are facing the prospect of finding new ways to staff themselves with qualified workers. In that businesses must be aware of and contemplate numerous factors that contribute to the implementation of successful workforce development strategies, the use of other seemingly plausible approaches such as school-to-work (STW) warrant investigation to determine its value in addressing future workforce development challenges. Therefore, from the perspective of employers hosting STW experiences, students involved in STW

experiences, and the parents of those students, this study provides insight on intricate relationships between these key stakeholder groups, and the similarities and benefits that they identified through their involvement. Data were gathered through questionnaires and interviews given to (a) representatives from a large, mid-sized, and small manufacturer involved in West Michigan's furniture industry; (b) participating high school students in STW activities at those businesses, and; (c) their parents. Insight was offered into: (1) the effectiveness of STW activities in addressing the workforce development needs, (2) STW activities of greatest benefit to workforce development efforts, (3) obstacles to employer involvement, (4) stakeholder views on the most beneficial activities, (5) student benefits, and (6) the impact of parental involvement.

The study revealed that: (1) in general STW activities benefited workforce development efforts of businesses and enhanced student education, (2) issues that hinder businesses involvement are not always seen clearly by stakeholders, (3) visual and contextual learning enhance student school-to-work learning, and (4) increase information flow to parents by businesses can maximize benefits from parental involvement.

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CHAPTER I

INTRODUCTION

Statement of the Problem

As we enter the new millennium, there is considerable evidence which indicates that many U.S. businesses are experiencing rapid growth and expansion. Moreover, new and constantly changing technologies coupled with fast growing markets provide businesses with the capabilities to globally deal at a speed that is unparallel to any other time in our history.

Such developments have increased productivity and have driven our nation's growth rate to its highest levels achieved since the 1960s (Malott, 1998). Consequently, business activity in most employment sectors is robust with many signs of future growth. With projections of continued growth well into the 21st century by many job sectors, and with unemployment rates being reported at their lowest levels in over 30 years, the U.S. economy appears to be showing unyielding strength (National Alliance of Business, October, 1998).

Because of this sustained economic growth and improved productivity, U.S. businesses are changing how they operate in the 21st century. With unprecedented growth, many American businesses are increasingly faced with a multitude of

problems that are being posed by an increasingly unskilled workforce. It is evident that in America's fast-paced, rapidly changing, technology-driven, globally competitive economy, the demand for highly skilled employees is growing (Judy and D'Amico, 1997). In addition, it is predicted that unskilled and poorly educated workers will face multiple threats in future labor markets stemming from modern technology, and particularly information technology. Those threats include the reduced demand for unskilled labor, and a rapidly changing and more entrepreneurial economy that places a premium on both adaptability and flexibility. In this new economy, workers who are able to master technology and cope with change will have an advantage over low-skilled and poorly educated workers who cannot adapt to changes in the workplace (Workforce 2000, 1987).

In Workforce 2000 published by the Hudson Institute, a shortage of skilled workers in the American economy was foreseen with a projected gap in the qualifications of workers in the changing job mix of the American economy (1987). Because of this dynamic, an alarm was sounded as far back as the early 1980's, noting that the skills and education of the American workforce was on the decline. As these predictions came to fruition, a notable "skills gap" in the American workforce emerged. Furthermore, if the rapid pace of change in the American economy continues at its current rate, the skills of today's workforce will be obsolete early in the 21st century (Judy and D'Amico, 1997). To this end, there is a growing sense that the need for increased skills among new entrants into the workforce is becoming even more critical, and that "all workers, and particularly new ones whose

working life times will extend toward the mid-twenty-first century, will need to improve their education and skill levels” (Judy and D’Amico, 1997).

As noted by Judy and D’Amico (1997), it is felt by many that in the 21st century, technological changes will affect workplaces and the workforce in multiple and contradictory ways. Many of these technological changes will alter productive processes by creating more output with less people. However, these technological changes will require more workers who are highly skilled, and fewer ones who have low skills (Judy and D’Amico, 1997). In fact, as indicated in an article by the National Association of Manufacturers entitled the Skilled Workforce Shortage (NAM, 2000), it is written that “For the United States to remain a technological superpower and world class competitor, we need a workforce that can process complex information, analyze problems and make effective decisions. To accomplish this requires that we narrow the gap between the speed of process and the urgency at which we prepare more workers for today’s technological challenges”. To further emphasize this point, an article in the Washington Post by Engibous and Rusk (September 7th, 2000) stated that “Today America’s robust economy is described as going through a second industrial revolution—one powered by the free flow of information based on science, math and engineering. The problem is that we have a critical need for employees with the expertise to sustain the economic momentum”. Without enough highly trained people, our nation’s prosperity could conceivably be put at risk. Hence, the need to develop and better prepare our nation’s youth for the needed skills of the new workforce is increasingly seen as an imperative by many of

our nation's businesses with a great number of them seeking unconventional ways to better develop a skilled workforce into the 21st century.

Gray and Herr (1998) argue that all formal education beyond that necessary to achieve literacy and exercise responsible citizenship is workforce education. The authors go on to state that:

Workforce education is that form of pedagogy that is provided at the prebaccalaureate level by educational institutions, by private businesses and industry, or by government-sponsored, community-based organizations where the objective is to increase individual opportunity in the labor market or to solve human performance problems in the workplace (Gray and Herr, 1998, p. 4).

The concept of workforce development or workforce education is not a new one, but one that dates back to early periods in history. Although it is impossible to know when in human evolution workforce development came into being, some historians speculate that as soon as there was a division of labor between food gatherers and those who provided other goods and services, skills had to be passed down to the next generation, and that required some level of formal training (Gray and Herr, 1998). As far back as ancient Greece some historical records suggest that crafts such as stone masonry were highly developed which resulted from the preparation of skilled craftsman (Barlow, 1990).

In tracing the progression of workforce development through the middle ages, skilled craftsmen became an important economic and social step between the upper strata who were nobility, priest and warriors and serfs (Gray and Herr, 1998).

Owning a set of tools and knowing how to use them became an important alternative to agriculture and domestic service, and allowed the individual to “journey” to various jobs. These “journeymen” gained a sense of status, and their trade became viewed as a key to gaining a position or occupational niche that would ensure economic security (Gray and Herr, 1998).

The concept of workforce development evolved further during the colonial period in this country, where individuals who wanted to learn a craft sought out master craftsman who would take them on as apprentices. The apprenticeship was a written, formalized agreement, regulated by the government and enforced by the legal system, and was possibly the first time the relationship between academic skills (reading and math) and occupational skills were institutionalized (Gray and Herr, 1998).

As suggested by historian Melvin Barlow (1990), the period between 1807 and 1906 roughly marks the transition of the nation from an agrarian society to an industrial one. It was during this time that both the public and private sectors started developing their workforce development systems. Moreover, it was at the turn of the century when a national consensus developed recognizing that a workforce education system of some sort was needed if the nation’s economic growth was to continue (Gray and Herr, 1998).

Historians point to several important ideologies that shaped the workforce development systems of the twentieth century. Those ideologies are (1) Social

Darwinism, which taught that the survival of the fittest was a matter of evolutionary scientific fact (“Survival of the fittest” capitalism where social or occupational hierarchy was inevitable, and employers determined where employees fit for maximum organizational success); (2) Dualist nature of intelligence, which taught that intelligence was of two mutually exclusive types: manual dexterity (“hand mindedness”), and conventional intellect (“book knowledge”); (3) Taylorism, which focused on efficiency assigning individuals to unique process steps to gain efficiency. Taylorism also concentrated all decision making at the managerial level, leaving workers with few if any decisions to make; (4) Progressivism, which taught that government had a role in providing workforce education to the general public thus allowing them equal access to skilled jobs and other occupational opportunities, and; (5) Modernity, which taught that through faith in government and science, many workforce problems could be solved, such as through the use of intelligence test, aptitude tests, and other psychological tests (Gray and Herr, 1998).

At the turn of the century, large firms were more likely to be in mass-production modes with the majority of their workers performing relatively low-skilled jobs. Labor contracts often provided access to various jobs based on seniority, and if other skills were necessary, they could be taught through on the job training (OJT) (Gray and Herr, 1998).

Moreover, because they lacked the training budgets, the development of the workforce in small and midsize firms (500 employees or less) was different from

large firms. They were (and still are in many cases) dependent upon on the job training, or training provided in the public sector at public expense (Gray and Herr, 1998).

Some feel that modern day workforce training and development efforts in the private sector have evolved from the unprecedented labor demands created by the two World Wars (Gray and Herr, 1998). The shortage of skilled workers during these periods resulted in a consensus among manufacturers at all levels that most training would have to be provided by employers (Miller, 1996). Hence, a major focus was launched through the creation of positions within organizations and through the creation of national organizations (e.g. the American Society of Training Directors and The National Society for Performance and Instruction) to aid in the area of human resource development.

In the time leading up to 1980's, the U. S. had the largest number of high wage/low skilled jobs in the world (Gray and Herr, 1998). However, by the late 1980's the realities of the new global economic competition set in. Some felt that by historical standard, the portion of the workforce having low skills declined, and even with the rising skill levels, it has not been enough to keep up with the rising skill demand (Matton and Testa, 1996).

Most effective organizations began to feel that in order to produce high-quality goods and services at competitive prices, work teams would have to be formed, workers needed to possess new and different types of skills, and the Taylorist

model would need to be abandoned. Human resources available to organizations were being viewed as a form of “human capital” where the knowledge that people had, their skills, attitudes, and social skills were seen as assets to any human enterprise (Owens, 1998).

New skill demands being placed on the workforce have resulted in several identifiable changes. For the most part, the educational infrastructure is not currently geared to meet the below college skill needs of employers. Since the 1990’s, a growing and yet still unconventional way to develop the workforce being touted by some in business and industry is the use of a concept known as school-to-work (STW). As defined by the National School-to-Work Office (1997), STW is a new approach to learning in America’s schools that links students, schools and workplaces. A joint initiative sponsored by the U.S. Departments of Education and Labor, school-to-work was enacted as a new way to prepare young people for their ultimate entry into the workplace.

A major component of STW is work-based learning (WBL), which is defined by the National School-to-Work Office (1997) as experiences or activities at the high school level that involve actual work, thus connecting classroom learning to work. These experiences or activities usually occur at a particular work site. Proponents of STW argue that by engaging high school students in real work with hands on experiences relating to an area of interest or study, learning is enhanced and valuable workforce skills are developed. Moreover, those involved in the STW movement feel

that by connecting classroom learning to work, students become better prepared for the rigors and challenges of tomorrow's workplace (National School-to-Work Office, 1994).

The new playing field being created by the 21st century workplace brings with it opportunities as well as challenges. The opportunities come with the potential for tremendous growth into new markets. These markets, aided by constant technological advances, create and fuel an atmosphere of fierce competition with global implications that can offer immense opportunities. However, the challenges come in the form of maintaining workforce competitiveness with increasing shortages of qualified workers. This during a time when there are growing needs in a workplace caught in a state of metamorphosis.

Eric Stowe, vice president, executive development of the American Chamber of Commerce Executives indicated that a strong national economy, in an era of increasing global competition, depends upon a number of key ingredients, one of which is a skilled, well-educated work force (1999). The United States has held a dominant global position in this category during the last half of the 20th century.

However, a change in the composition of the workforce appears to threaten America's standing. The growing economy has created somewhat of a paradox in the workplace, one where sustained economic growth is resulting in a crisis for many employers. The early stages of this crisis is showing up in various industries where building more technology into processes has resulted in a tremendous need for highly

skilled employees (Malott, 1998). This is further evidenced through national studies that point to the rapidly changing nature of the workplace, and the shifting demographics of the future workforce (Willis, 1998).

Research indicates that the fastest growing jobs in this new economy require higher math, language, and reasoning capabilities, while slow growing jobs require less (Judy and D'Amico, 1997). To this end, some, such as Thompson (1997), feel that the new demands of the workforce not only require that employees be more knowledge based, but that a new corporate landscape emerge in which business leaders discover that flexibility and creativity is the key to structuring the type of transforming organizations capable of being successful in the 21st Century.

As businesses increasingly seek new and sometimes unconventional ways to address their workforce needs, the use of school-to-work as a workforce development strategy becomes more appealing as an important approach in helping organizations successfully transform and meet future workforce development challenges.

Purpose of the Study

The purpose of this study is to examine the similarities and differences in benefits of school-to-work initiatives from the perspective of employers, students and parents in Western Michigan so that STW can be used as a workforce development strategy more efficaciously. Three furniture manufacturers in the Grand Rapids, Michigan Statistical Metropolitan Area (SMA) will be a part of the triumvirate group

of stakeholders used to analyze the intricate relationships that must work in concert in order for this workforce development strategy to have broad based success. The findings will provide insight to employers, students, parents and educators as they address key workforce issues germane to the vitality and success of this economy.

The research questions this investigation seeks to answer include:

1. How are STW activities effective in addressing the workforce development needs of companies?
2. Which STW activity or activities prove to be of greatest benefit to the workforce development efforts of the businesses being studied?
3. Which obstacles are of greatest hindrance to employer involvement in STW?
4. Why do different stakeholders view some activities as being more beneficial than others?
5. How do students benefit from STW experiences?
6. How does parental involvement impact the success of students and businesses involved in STW?

Significance of the Study

As those in leadership positions within organizations confront the new challenges created by a shortage of highly skilled employees, thinking in

unconventional ways is a necessary part of becoming or remaining competitive (Johnson, 1991). In fact, an increasing number of companies are turning to students involved in 9-12 education as a new and important link in the “knowledge supply chain” (National Alliance of Business, 1998). From a business perspective, “high-achieving, well educated, dependable, motivated students are more likely to become the professionals that employees need to meet business challenges” (National Employer Leadership Council, 1999). High school students as a relatively untapped source of up and coming employees appear to offer a potential solution to the common business dilemma of finding new and creative ways to address changing and challenging workforce needs.

As corporations use school-to-work as a tenable way to attract and develop high school students into industries competing for young talented workers, identifying the activities that are beneficial to the company, students and their parents are germane to strengthening and growing this workforce development strategy. Moreover, producing empirical evidence of the success or non-success of this strategy from the perspective of these three key stakeholder groups is important to the advancement of knowledge in the field, and to further move this concept out of the realm of theory and into the dominion of scientifically supported practice. This study, unlike other studies in the literature, observes the delicate symbiotic relationship between the three primary stakeholder groups, and their impact on STW as a workforce development strategy in corporate America.

The findings from this study have the potential to be generalized to a broader range of industries outside of those being studied. Here, by doing a case study with manufacturers, there is a great likelihood that the workforce needs of these companies and the attitudes of the key stakeholder groups will be representative of a larger body of like and unlike industries of comparable size. It is also believed that smaller companies can extrapolate the findings and use them in the development and improvement of their workforce development strategies.

Definition of Terms

For the purpose of this study, the following definitions of terms will be used:

Youth Apprenticeships: A relationship between an employer and employee during which the worker or apprentice learns an occupation in a structured program.

Registered Apprenticeships: Programs that are like Youth Apprenticeship programs but also meet specific federally approved standards designed to safeguard the welfare of apprentices.

Internships: Situations where students work for an employer for a specified period of time to learn about a particular industry or occupation. Activities include special projects, a sample of tasks from different jobs, or tasks from a single occupation. They may be paid or unpaid experiences.

Job Shadowing: A part of a career exploration activity where a student follows an employee at a company for one or more days to learn about a particular occupation or industry.

Mentoring: Where an employee is assigned to guide a student and serve as a liaison with a school and/or parents on behalf of the student and the firm.

Cooperative Education: A method of instruction whereby students alternate or coordinate their academic and vocational studies with a paid or unpaid job in a related field.

School-to-Work (STW): An integrated school-based and work-based learning program that combines academic and occupational learning with education in the classroom.

Work Based Learning: Activities at the high school level that involve actual work experience, and which connects classroom learning to work.

Workforce Development: Activities and/or initiatives taken by business organizations to increase the number of employees with the skills, knowledge and attitude needed to be competitive in a given industry.

Conceptual Framework For The Study

There are numerous approaches and multiple factors that contribute to the development and successful implementation of any workforce development strategy. However, it is widely believed that those in leadership positions must be prophetic when carrying out a strategy that focuses resources to create desirable opportunities (Campbell, 1991). Supporting this notion, Bennis and Nanus (1985), indicate that leaders who have a sound vision of a possible and desirable future state of the organization enhance organizational success. In essence, the vision put forth and the actuation of that vision by leaders is fundamental to the development of a successful workforce development strategy. Moreover, as Burns (1978) notes:

To understand the nature of leadership, requires the understanding of the essence of power, for leadership is a special form of power... The two essentials of power are motive and resource. The two are interrelated. Lacking motive, resource diminishes; lacking resource, motive lies idle (p. 12).

To this end, the motive for business leaders is to build a qualified workforce in the midst of a skills shortage, and the resources for them to do that lie in their workforce development strategies. To be effective may require an employer to focus workforce development efforts in a number of key areas to include: (1) the existing workforce through training and retraining initiatives of current employees; (2) the displaced workforce through initiatives such as Welfare-to-Work aimed at reaching disenfranchised unemployed workers or previously retired individuals; (3) and the

emerging workforce, where employers seek new entrants into the workforce such as high school and college graduates (The Grand Rapids Area Manufacturers Council, 1999). Diagram 1 shows three major workforce development focuses which emanate from present day workforce development strategies. The primary employee groups being impacted are also illustrated.

The area of concentration for this study is on high school students as a part of the emerging workforce, and the involvement of other key stakeholder groups needed to make this workforce development strategy a success. Other than students, the key stakeholders include: (1) managers or directors from key departments in the businesses being studied and (2) the parents of those students involved in STW activities. Diagram 2 illustrates the relationship of the three key stakeholder groups to the development of a skilled workforce. Here, it is hypothesized that involvement from employers, students and parents as key stakeholders create successful STW experiences which ultimately lead to a skilled workforce.

While studying the relationships among these three stakeholder groups, the similarities and differences in benefits for these groups will be identified, as well as the symbiotic relationship that exists between stakeholders seen as essential to make STW a successful workforce development strategy

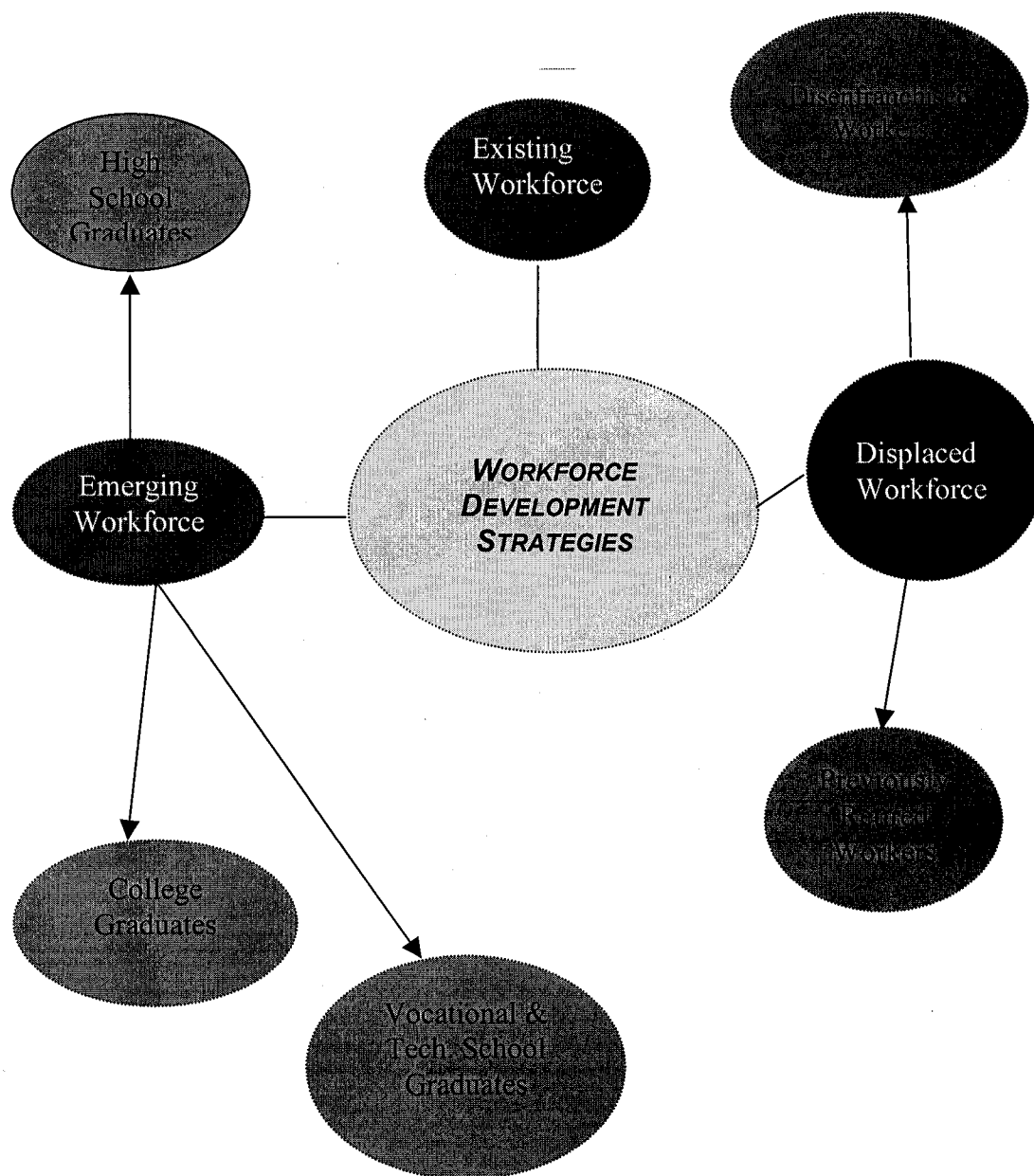


Figure 1

Three Major Workforce Development Focuses

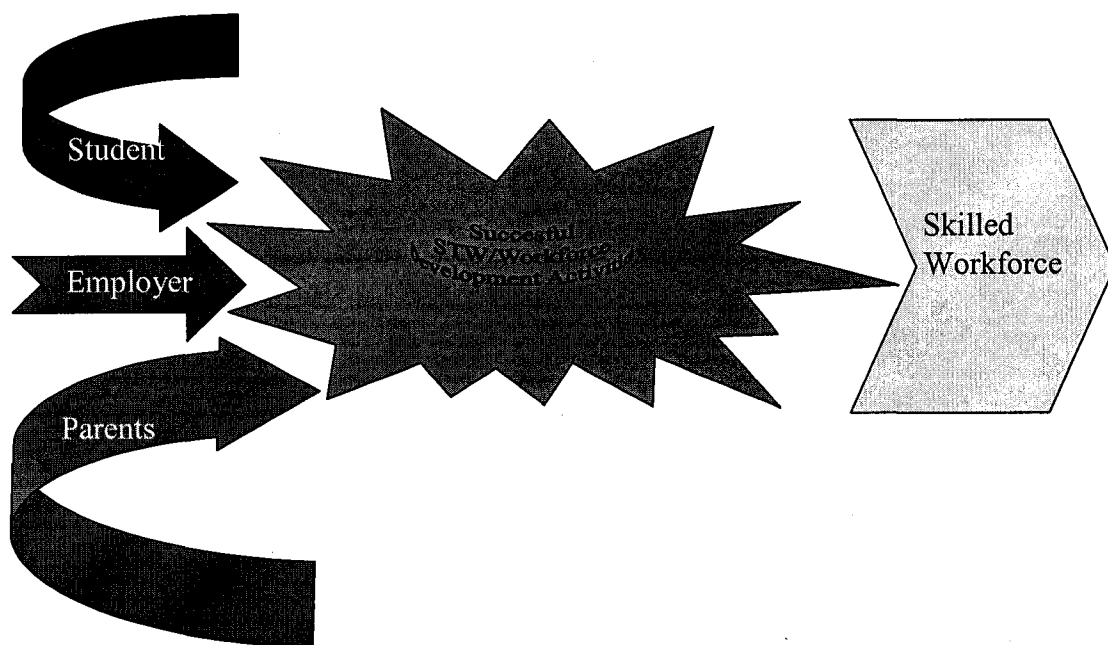


Figure 2

The Relationship of Key Stakeholder Groups to Successful
Workforce Development Activities

Organization of the Study

Chapter I presented an overview of workforce development needs and challenges facing many U.S. businesses in the 21st century. The problem was outlined, and the purpose of the study was identified as examining the similarities and differences in benefits of school-to-work initiatives from the perspective of employers, students and parents. This illustrated the relationship between these stakeholders groups, STW, and workforce development.

Chapter II provided a review of literature that is pertinent to the research questions outlined. The body of literature found in this chapter is composed of both theoretical and empirical works that provide the basis for the conceptual foundation of this study while providing evidence supporting the premise of this project. Chapter III describes the methodology used in this project. In Chapter IV, the data are presented and analyzed.

Chapter V summarizes the findings and implications for the key stakeholders, businesses in other job sectors, educators and others involved in various facets of STW and workforce development. Suggestions for further research in this area as well as limitations of the study are also described.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this study is to examine the similarities and differences in benefits of school-to-work initiatives from the perspective of key stakeholder groups in Western Michigan. The literature reviewed in this chapter will provide evidence for: (a) the effectiveness of STW activities in addressing workforce development needs of companies, (b) the difference in STW benefits for the key stakeholder groups being studied, and (c) the impact of parental involvement on the success of students and businesses engaged in STW.

Workforce Development Needs of Companies

As in the past, businesses must be aware of and contemplate numerous factors that contribute to the implementation of any successful workforce development strategy. With an identified skills shortage looming over many U.S. corporations and businesses in the early part of the 21st century, companies are facing the prospect of finding new ways to staff themselves with qualified workers (American Management Association, 2000). Consequently, developing and enacting successful workforce development strategies is of paramount importance to many business leaders. In fact, Ellen Bayer, global human resources practice leader for the American Management Association stated:

Employers are facing a period during which they will have to rethink the types of training they offer employees. In many cases businesses are going to be compelled to develop rather than hire workforces (American Management Association, 2000).

This long standing problem was identified as far back as February of 1990 when the United States Secretary of Labor convened a group of business leaders, educators, labor leaders and state government officials to examine the demands of the workplace, and determine whether the workforce at that time was capable of meeting those demands. Furthermore, the group called The Secretary's Commission on Achieving Necessary Skills (SCANS) was charged with defining a common core group of skills that constituted job readiness in the economic environment at that time and into the future. An ensuing report identified the following workplace competencies necessary for employees to perform effectively and efficiently in the current and future workforce (SCANS Report, 1991):

- Resources – Ability to identify, organize, plan, and allocate resources.
- Interpersonal skills – Ability to work with others.
- Information – Can acquire and use information.
- Systems – Understands complex inter-relationships.
- Technology – Ability to work with a variety of technologies.

In addition, the report identified the need for individuals to possess competencies with the following foundational skills:

- Basic skills – Ability to read instructions, write reports, do arithmetic and mathematical operations at a level adequate to perform common workplace tasks, able to listen and speak.
- Thinking Skills – Can think creatively, make decisions, solve problems, visualize, learn and reason.
- Personal qualities – Displays individual responsibility, self-esteem, sociability, self-management, and integrity and honesty.

To further magnify the need for these skills by the future workforce, in a 1999 survey released by the American Management Association (AMA), over 38% of job applicants tested for basic skills by U.S. corporations lacked in the necessary reading, writing and math skills to do the job sought. Moreover, that same report identified that the share of skills-deficient applicants is up from 35.5% in 1998 and 22.8% in 1997 (American Management Association, 2000). With these critical skills and qualities being sought by today's employers, it is important that entrants into the workforce possess these characteristics in order to meet the challenges of tomorrow's workplace.

The Impact of School-to-Work on Workforce Development

In 1983, a blistering critique of our nation's schools issued an alarming wake up call to many communities across the country. In a report by the US National Commission on Excellence in Education entitled *A Nation At Risk* (1984) published by the Reagan administration, a warning was sounded that "the educational

foundations of our society are presently being eroded by a rising tide of mediocrity that threaten our very future as a Nation and a people”. Understanding that the education of our youth impacts every facet of our society including business and industry, the report identified deficiencies with the education and knowledge levels of the nation’s youth at a time when “the demand for highly skilled workers in new fields is accelerating rapidly” (US Commission on Excellence in Education, 1984). Furthermore, it was pointed out “We are raising a new generation of Americans that is scientifically and technologically illiterate” (US Commission on Excellence in Education, 1984). During a time when technology permeates almost every facet of business, and is radically transforming a host of occupations, much concern and deliberation on the best course of action is not only being sought by the nation’s schools, but by the business community as well.

With an increasing focus on our nation’s schools and comprehensive education reform, the United States Congress passed The National School-to-Work Opportunities Act in 1994. This Act, H.R. 2884, established a national framework for the educational systems in this country (K-post secondary) to develop partnerships with businesses for the purpose of enhancing the academic achievement of all students.

Inherent in the concept of school-to-work is the element of work-based learning, which are activities at the high school level that involve actual work experience and connect classroom learning to work (National School-to-Work Office,

1997). This learning experience can take place in a variety of ways such as through internships, apprenticeships and job shadows.

School-to-work is viewed as an approach to learning in America's schools that links students, schools and workplaces, and is a way of preparing young people for their ultimate entry into the workplace (National School-to-Work Office, 1997). Through various work-based learning activities, students find more relevance in their learning by connecting classroom learning to the world of work. Likewise, studies show that employers involved in quality school-to-work programs reap measurable benefits (National Employer Leadership Council, 1999). These benefits are as follows:

- Reduced recruitment costs;
- Reduced training and supervision costs;
- Reduced employee turnover;
- Increased retention rates;
- Higher productivity of students; and
- Higher productivity and promotion rates of school-to-work graduates who are eventually hired compared to those of other newly hired workers (National Employer Leadership Council, 1997).

From a workforce development standpoint, the national school-to-work legislation provided a framework by which schools and businesses could develop partnerships to enhance student academic skills through practical application and real

life experiences. By exposing high school students to industry concepts, problems and solutions, the potential to develop a more knowledgeable and capable employee upon entry into the workforce is increased. Moreover, as a result of their exposure, these new workers may be better prepared to meet the demands and challenges of specific industries in the 21st Century.

Some employers feel that by offering high school students the opportunity to become better acquainted with their industry, the student's understanding of and interest in that industry will be increased. This would allow the employer to provide a specific learning opportunity to the student while monitoring and grooming the student as a potential future employee. For many companies, involvement in school-to-work offers a return on their investment in these students which is manifested through solutions to real business challenges, including increased productivity and recruiting, on the job training, and reduced supervising costs (National Employer Leadership Council, 1997).

Hence, by examining the similarities and differences in benefits derived from the use of STW as a workforce development strategy from the perspective of key stakeholders, this study seeks to provide useful information to industry leaders, educators, students and parents who are preparing to encounter or influence the challenges of the 21st century workforce. Furthermore, as a practitioner interested in organizational development, this researcher expects to explore the intricate

relationships among key stakeholders, and identify the elements that must work in concert in order for this workforce development strategy to have broad based success.

Employer Involvement In STW

The mere survival and growth of many organizations in the 21st Century will depend on the ability of their leaders to address the challenges posed by the future workforce. Many indications are that employers will have to work feverishly and judiciously to develop and revise strategies that will in effect combat the expected level of mediocrity in the workplace. With such a daunting and formidable task facing many of the nations employers, and with the importance of workforce development in this new American economy, involvement in non-traditional workforce development strategies is imperative to the survival and growth of many of our nation's businesses.

As Shapiro and Iannozzi note (1998), the fundamental question that any employer wants answered relates to the bottom line: "Is my investment in time and resources going to pay off?" Earlier research examined the issue of employer involvement in the STW strategy by comparing the characteristics of participating employers to a comparison sample of nonparticipating employers. Here, research done by Bailey, Hughes and Barr (1998) indicate that the use of STW by many businesses is not done in an arbitrary or capricious manner. Instead, the authors' note that existing research show that employer participation falls into two broad

categories. The first category includes theoretical discussions about employer participation that focus on potential reasons for employers to get involved. For the most part, these discussions tend to be pessimistic, and fail to show strong incentives for employer participation. Moreover, most theoretical discussions conclude that the costs and disadvantages for employers to get involved in STW outweigh the benefits. However, the authors do note that the theoretical arguments include a useful framework of three types of motivation, which may affect employers' decisions to participate in STW. These three types of motivation are philanthropic, individual, and collective. Diagram 3 illustrates the various benefits to businesses from involvement in STW.

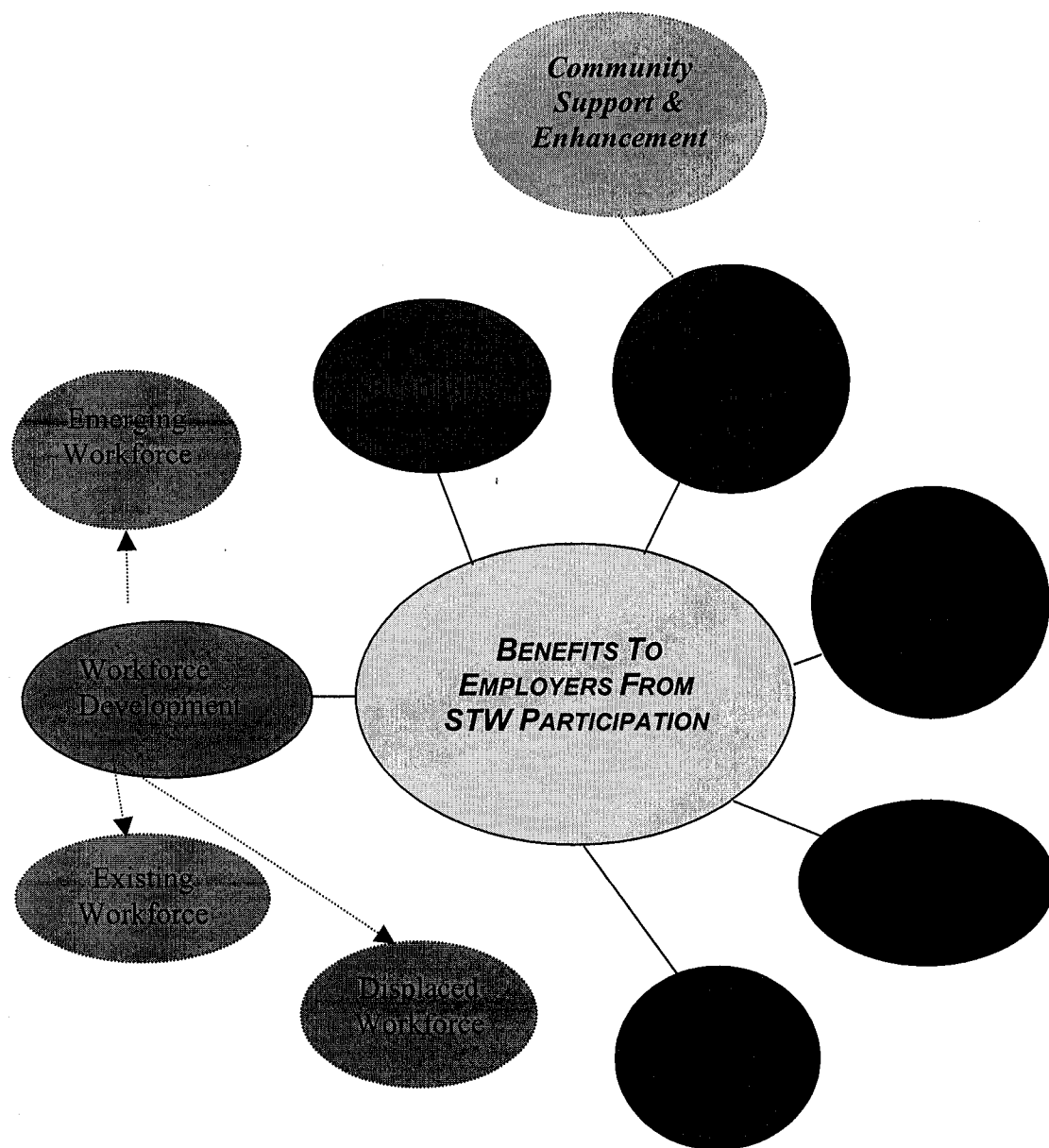


Figure 3

Reasons For Employer Involvement In STW

Benefits of Philanthropic Motivation to Employers

Bailey, Hughes and Barr (1998) indicate that some employers get involved in STW solely for philanthropic or altruistic reasons. Their research shows that these employers, particularly those from larger companies, saw involvement in STW as a way of performing a valuable community service. Moreover, they saw it as an optimal way of getting involved with the school community, and contributing to the educational development of America's youth. In fact, Lynn and Willis (1994) identified that large employers are generally most concerned about actively projecting a positive image throughout the community. In this instance, involvement in the community, and more specifically with high school youth, is seen as an important part of doing business. This view was echoed loudly by Ford Motor Company, where involving high school students in work based learning activities is seen as a corporate citizenship issue, as well as a key workforce development strategy (Wills, 1998). Others, such as Johnson and Johnson with approximately 89,500 employees feel that corporate America has played an active role in improving education through philanthropic support (Wills, 1998).

Some empirical studies support the concept of businesses getting involved in STW for philanthropic reasons. In a longitudinal study conducted by the U.S. Department of Education (1997), researchers found that when separately modeling participation for manufacturing and non-manufacturing establishments, the same four factors were identified. Those factors are (1) participation in community activities,

the single most important factor; (2) growth in the size of the establishment's permanent workforce over the last three years; (3) use of teachers' references in the making of hiring decisions; (4) and judging local high schools to be adequate or better in preparing their students for the workforce.

Benefits of Individual Motivation to Employers

The literature also indicates that some business leaders become involved in WBL initiatives solely for reasons that benefit the company. Here, employers may use work based learning programs as a long-term labor recruitment strategy (Wills, 1998). In this instance, if a student can be groomed to become a future permanent employee, the company may benefit by gaining a trained employee with reduced training costs (Wills, 1998). This can be seen through the philosophy of Charles Schwab & Company, Inc. where Larry Stupski, Vice Chairperson (Willis, 1998) stated the following:

We have found that students do productive work for us, allowing us to enhance productivity in the short run while building a workforce equipped with the skills that we need to meet our plans for the future (p.11).

However, it should be noted that other authors have taken contrary positions. For example, Klein (1995) indicated "The incentive for profit maximizing firms to sponsor training is nearly indistinguishable from charitable giving when students' productivity fails to offset their costs to the firm."

Furthermore, Osterman (1995) argues that the low monetary cost of student interns is often offset by the high supervisory costs of having interns.

Benefits of Collective Motivation to Employers

Finally, the literature indicates that a third reason for employer participation in WBL using high school students is its potential to strengthen the labor supply in a given market. Here, work based learning is seen as a way to help develop a more skilled labor force in general, which ultimately benefits the particular company and the industry. To this end, a report completed by the U.S. Department of education in 1998 titled *The Corporate Imperative* indicated the following:

Research shows that continued corporate prosperity depends on major education change to maintain a highly qualified, competitive workforce. What new employees need to know today is very different than what employees used to need to know to be successful. Developments in technology and the world economy have changed the needs of employers for a well-developed, trained and educated workforce. As a consequence, corporations have a tremendous stake in making education reform become a reality. Businesses can play a key role in ensuring that all students receive a high-quality, world-class education. (Judy and D'Amico, 1997).

Empirical Studies Supporting Employer Involvement in STW

As noted by various authors, many of the empirical studies identified have important limitations. For example, numerous survey samples are small, thus caution must be exercised when ascribing the importance to small differences among groups. Some of the studies do not include comparable samples of both participating and

nonparticipating employers. Some studies focus on only one type of work-based learning, while others cover several types. Some studies are limited geographically, while others collect data from employers nationally. Nevertheless, many of the findings in this section overlap, allowing for a broad perspective of the topic at hand, and a degree of confidence in the various findings presented.

The backdrop for empirical studies supporting employer involvement in STW may be summarized by the policy statement made by the National Center on the Educational Quality of the Workforce (EQW). In a statement by their policy board titled *On Connecting School and Work* (1995), EQW indicated that the transition to an economy founded on new production and employment systems is neither complete nor assured. In their report on *First Findings from the National Employers Survey* (1995), the EQW results indicated that 56 percent of employers surveyed reported increasing their skills requirements. This evidence would tend to support the notion that the increased demand for skilled workers is a feature in the new economy.

Moreover, EQW's research findings demonstrate the linkage between investments in education and training and the restructuring and reorganization of work. Their research also indicated "too many missed connections remain between firms and their workers, between workers and new technologies, and, most of all, between employers and their schools" (EQW, 1995). More specifically, the findings indicated the following:

A basic complementary can be found between investments in human and physical capital; one cannot proceed without the other. Establishments that train workers, invest in new work organization, and enhance the technologies used by front line workers in both manufacturing and non-manufacturing industries have one thing in common: workforces with more years of schooling.

Those establishments with educated workforces--- as represented by average years of schooling completed by their employees--- are likely to be more productive than firms of the same size competing in the same industry with less educated workforces (On Connecting School and Work, 1995; pp 4-5).

In reviewing the relevant literature, it should be noted that as recently as 1998 a representative survey of more than 5,000 employers with 20 or more employees shows that many employers are involved in STW. Moreover, the research shows that participation is greater among larger employers. While only 24 percent of the surveyed establishments with 20 to 99 employees engaged in STW partnerships, 42 percent of those with 250 to 999 employees participate and 60 percent of those with 1,000 or more employees report that they participate (Kaufmann, 1998).

When looking at the deciding factors that affect employer participation, results from the National Employer Survey II (1997) found the following four factors for manufacturing and non-manufacturing organizations: participation in community activities was the single most important factor; growth in the size of the organization's permanent work force over the last three years; use of teachers' references in making the hiring decisions; and judging local high schools to be adequate or better in preparing their students for the workforce.

A number of studies identified financial benefits to companies that used STW.

For example, in a report that explores the hypothesized relationship of what do we know about how schools affect the labor market performance of their students, Johnson and Summers (1993) concluded the following:

A substantial body of literature has been developed on the relationship between various characteristics of the school experience and cognitive achievement measures, but less literature exists on the relationship between cognitive achievement in school and subsequent labor market performance. There is also a substantial body of literature on the relationship between years of schooling and subsequent earnings, but there is only sparse literature, with varied conclusions, on the linkage between what schools do and how their students then fare in the labor market (Johnson and Summers, p.1).

Here, in a search of the empirical literature which unearthed over 200 studies linking school performance to market performance, the authors note that “No study identified has a set of characteristics that meet reasonable research standards for drawing policy inferences on the question of what schools can do to improve labor market performance of their graduates”. However, in their findings the authors do state that “acquiring knowledge about working during the high school years-through direct job experience or other sources of information-appears to be helpful for future job performance” (Johnson and Summers, 1993).

In somewhat related research, a number of studies show a strong relationship between student performance in high school and future labor market outcomes (Bishop, Blakemore and Low, 1985; Crawford, Johnson and Summers, 1995; Griffin and Alexander, 1978; Meyer and Wise, 1982). The significance of these studies lie in their support of the notion that employers can positively impact their workforce

development efforts through their involvement with high school students around work-based learning.

Further evidence supporting this notion comes from research done by Shapiro and Zemsky (1996). After analyzing specialized studies and employer surveys, the authors concurred with other studies that concluded employers who had substantial contact with students via work-based learning found them to be productive workers.

In a study funded by the National Employers Leadership Council, the American Society for Training and Development (Bassi, Feeley Hillmeyer and Ludwig, 1997) conducted case study research on eight companies to evaluate the costs and benefits to companies participating in school-to-work initiatives. The study revealed that companies benefit in the following ways:

- The value of student labor.
- Reduced training and recruitment costs.
- Higher productivity of students hired as regular employees as compared to other entry level employees.
- Improved community relations.
- Improved productivity and morale of workers.
- Increased diversity in the workplace.

The authors identified the following costs:

- Costs related to the development and administration of the program.

- Staff time related to supervision and mentoring activities.
- Salaries and stipends paid to student interns.
- Miscellaneous costs.

The study found that although many of the benefits to companies were difficult to quantify, three companies identified clear-cut benefits to their participation. On the other hand, three other companies identified an increase in net costs relating to their participation. The study's authors suggest that these costs may be outweighed by hard to measure long term gains.

To further support the relationship between school performance and benefits to the labor market, an analysis of the 1997 National Employer Survey done by Shapiro and Iannozzi (1998) found that there are real and substantial benefits to be gained by individual employers that participate in school related activities. The authors explain that businesses which regularly work with schools report that their local high schools do a better job of producing work ready graduates. They go on to note that employers who actively participate in eight or more activities with their local high schools have a young worker turnover rate that is half that of employers who do not.

Moreover, in two case studies of employers who participated in STW done by Bassi (1997), it was discovered that benefits of employer involvement often did exceed the costs. Possible intervening factors as noted by Bassi was that programs were located in areas with tight labor markets.

Salzman (1998) conducted a series of case studies of businesses representing the service and manufacturing sectors to better understand the interrelated issues of firm restructuring and skill development. He felt that two key policy issues facing corporate America today are the extent to which there is a need for workforce skill development, and the extent to which firms will engage in training and education for youth and incumbent workers. In his findings, Salzman notes:

The stage of restructuring for innovation and growth is one that we suggest is still developing and only in its early stages in companies that we observed. Thus, it is too early to have a clear description of the characteristics that will define companies in this stage. The exact forms are still quite varied, and a “dominant form” is probably not yet established. We do, however, postulate that the dynamic in this stage will be orientated toward reconstituting organizational integration, a “re-institutionalization” of organizational boundaries as important. The importance of this finding that firms will remain coherent organizational entities is that it implies the internal labor markets and the firm workforce commitments that are necessary to support these structures will also be developed, albeit in new forms (Salzman, p.11).

As a result of his findings and those of many others, Salzman suggest that firms should be very concerned about skill development in light of the restructuring and technological changes being made by companies to remain competitive.

Using data from the 1997 and 1998 National Employer Surveys, Shapiro (1999) examined the one-year impact on employers participating in school-to-work partnerships. His research found that there was a high degree of volatility in employer participation, with an over 30 percent drop out of employers from 1997 to 1998. However, Shapiro also revealed that a much higher number of businesses reported involvement in STW in 1998 than in 1997. The author noted that employers

who anticipated that real benefits would accrue from their involvement such as a decrease in the remediation of front line workers, in recruitment costs for new employees, and in turnover rates of young workers. Based on the comparison of the data, the author speculates that STW is attractive to employers that are concerned with the skill levels of their youth labor forces.

Existing research also supports the notion that some employers use multiple reasons as a basis for their involvement in STW as shown by Lynn and Willis (1994). Here, in a telephone survey of 224 large and small employers in six different metropolitan areas from around the country, it was revealed that the two overarching reasons why employers participate in STW programs with high school students are to perform a community service, or to recruit entry level workers. The research also revealed that contrary to popular belief, employers participating in these types of programs are pleased with the quality of students, and feel that students are productive workers. In fact, the authors reported that nearly 50 percent of companies surveyed had hired students as regular employees upon completion of their school-to-work programs. Even though this study primarily focused on employers involved in cooperative learning experiences, it is felt that the findings can be generalized to other types of work-based learning.

In an example of collective motivation for employer participation in STW, Osterman (1995) noted that a 1991 Louis Harris poll conducted at headquarters of large corporations found that of corporations familiar with youth apprenticeship

programs, 48 percent believed their company's involvement could help in producing a skilled labor force.

Another study that support the concept of multiple reasons for STW involvement by employers is seen by the Office of Technology Assessment (1995). Here, in their survey of 73 employers (54 current employers and 19 former employers), "nearly two thirds identified recruitment goals as their most important reason for participating, while only one quarter chose educational or community improvement goals (OTA, p.84). The report notes that at the same time, about three-fourths said that educational and improvement goals were a strong or primary benefit of work-based learning, and somewhat fewer said that recruitment goals were a strong or primary benefit.

In other employer benefits, Pauly, Kopp and Haimson (1995) in their comprehensive report of sixteen school-to-work programs identified that once employers get involved with students, the learning that takes place usually goes beyond simple work experience to include a wide range of contextual learning experiences with the company. The authors go on to note that employers involved themselves in school-to-work activities for a variety of reasons to include helping the students and the local community, helping the industry, and dissatisfaction with the number of job applicants possessing adequate technical skills for specific jobs. They also note that U.S. schools and employers are devising their own customized, hybrid school-to-work programs, which draw their core components from several models

and add components over time. Table 1 lists key motivations for employers to participate in STW (Bailey, Hughes and Barr, 1998).

Table 1

Key Motivations for Employer Involvement in STW

	Participants	Non-Participants
Local labor shortage	3.0%	1.6%
Opportunity to test potential employees	5.8%	17.1%
Part-time/short term hiring	10.3%	25.9%
Improving public education system	33.1%	9.3%
Encouragement from industry groups	0.6%	0.5%
Reducing benefits expenses	2.7%	0.5%
Contributing to community	25.8%	8.8%
Access to pre-screened applications	3.7%	8.3%
Increased training if necessary	4.6%	7.8%
Access to pool of qualified workers	10.3%	20.2%

N = 329 for participants and 295 for non-participants. Standard errors of estimates are under 1.3%

Obstacles to Employer Participation in STW

Although there are strong arguments for the use of STW by many businesses looking to develop their future workforces, there appears to be some equally strong arguments against its use. Using data from the National Employers Survey, Cappelli, Shapiro and Shumanis (1998) noted that fewer than a third of American employers in 1991 believed that recent high school graduates were capable of holding jobs in their companies. Moreover, they noted that employers might believe that recent high school graduates lack basic skills and work habits required to become valued employees.

Consequently, Gregson (1995) noted that employers tended to hire older applicants over recent high school graduates, even when older applicants are less qualified.

In an article written for The National Center on the Educational Quality of the Workforce, Cappelli and Iannozzi (1995) summarized recent survey findings of employers around characteristics needed by candidates to be successful in the work place. The findings indicated that attitudes and behaviors account for more employer dissatisfaction than does the lack of skills, and that high school students possess more of these deficits.

Osterman (1995) feels that this problem may be compounded because U.S. employers do not seem to perceive a skill shortage, which would lead them to alter

their attitudes. Here, he cited findings from a study done from the National Survey of Organizations in which employers were asked whether recruiting qualified people was difficult. Responses to the survey revealed that 40 percent saw it as a minor problem, and 45 percent saw it as no problem at all. Additionally, Osterman notes:

The numbers should not be surprising. A great many young people churn through low-wage, low-skill jobs before settling down in their mid twenties. However, an important component of this pattern is the aversion of “good” employers to hiring what they consider turnover prone youth. They prefer to hire employees in their mid to late twenties who have demonstrated commitment to work (Osterman, 1995, p.77).

As it relates to the demand for skilled workers, in an earlier study involving a combination of surveys and focus groups, Zemsky (1994) conducted research on employers in 15 cities around the country. In his research of non-participating employers, it was identified that the absence of labor demand was an important disincentive for businesses to participate in STW. This was particularly true during times of downsizing and freezes on hiring in the early 1990’s. Zemsky identified that during difficult times:

Larger companies expressed little interest in any initiative that detracted energy and attention from the immediate task of making their enterprise more competitive: leaner, more focused, less engaged in community projects.

The small-business owners, while they were still hiring, saw little need to engage in the extensive training of young people-not when there were so many older, more disciplined, better-skilled workers in search of jobs (Zemsky, 1994 P)

Still, other issues were unearthed in a study conducted by the Office of Technology Assessment (1995). Here, it was indicated that the growth of employer

participation in STW/work-based learning programs has been modest in most communities.

Ascher (1994) in a report to the U.S. Government Accounting Office indicated that the major obstacle to employer participation in STW lies in educating them about STW and the benefits to their businesses.

Hershey and Silverberg (1993) in a study of School-to-Work Transition/Youth Apprenticeship Demonstration sites for Mathematical Policy Research found in preliminary findings that “The special demands of the employer role of youth apprenticeship style workplace experience make it unlikely that this particular model will be implemented on a larger scale or become the prevalent pattern”. In essence the researchers feel that a very substantial burden on employers exists especially when they must choose between providing jobs and providing structured skill instruction. The authors go on to note that small employers are vulnerable to business fluctuations, and are less likely to accept the costs of sustained commitment to pay student wages or the costs beyond the informal OJT given to new employees.

In issues related to costs Pauly, Kopp and Haimson (1995) note that program directors and participating employers say that important reasons for nonparticipation or low involvement include the costs of supervising and training students and the costs of students’ wages.

Shapiro (1999), using data from the 1997 and 1998 National Employer Surveys, found that even those employers who were initially willing to make an investment in training a younger student may be dissuaded by the likelihood that the trainee could take his or her new-found talents elsewhere.

In this vein, research conducted by Bailey, Hughes and Barr (1998) indicated that approximately 22 percent of nonparticipating employers surveyed cited concerns over students leaving after being trained as a reason for their non-involvement.

Achieving growth of the concept of STW, as a workforce development strategy requires considerable amounts of vision, time and effort as partnerships between the business community, students and parents are developed and strengthened. Table 2 outlines key factors that discourage employer participation in STW (Bailey, Hughes and Barr, 1998).

Table 2

Key Factors That Discourage Employer Involvement in STW

	Participants	Non-Participants
Employee Resistance	1.4%	3.6%
Lost productivity for trainers	15.4%	18.0%
Students might leave after training	4.8%	22.6%
Opposition from unions	3.4%	0.6%
Uncertain economic climate	3.9%	4.8%
Students lack basic skills	26.9%	11.4%
OSHA/child labor law violations	9.6%	12.0%
Students not always available	9.6%	9.0%
Students are unreliable or immature	22.1%	15.0%
Student wages are too costly	1.4%	2.4%
Problems working with schools	1.4%	0.6%

N = 208 for participants and 209 for non-participants. Standard errors of estimates are under 1.9%.

Parent Involvement in STW

The importance of parental involvement and support of their children's educational pursuits has been well documented. In fact, there is a significant body of research that indicates when parents are involved in the education of their children the results are an increase in student achievement and improvement of student attitude (Henderson and Burla, 1994). Moreover, evidence indicates that there is an apparent link between educational achievement and preparedness for the workforce (Shapiro and Iannozzi, 1998), which adds credence to the notion of parental support in STW efforts as a way to ready their children for the workforce of tomorrow. As indicated by Rich (1996), schools can't be the only source of education for America's children as they prepare for the future. The important educational role of families must be supported in order to help children master the skills they need to succeed.

In the book Becoming Adult, Csikszentmihalyi and Schneider (2000) note that parental expectations are crucial in helping teenagers learn work skills that are important in preparing them for the future. In fact, the authors write:

Values, attitudes and expectations are not the only things young people must learn to become productive adults. It is also important for them to learn what job opportunities will be available to them and to practice the appropriate skills to take advantage of these opportunities.

Some believe that early exposure to work experiences helps teens develop responsibility, social skills, and disciplined habits that will be useful to them in their careers. Others argue that the low-level, routine jobs teens typically find, such as babysitting, delivering papers, or working in fast-food

restaurants, only serve to disillusion them from future work prospects (Csikszentmihalyi and Schneider 2000, pp.16-17).

Given this, it appears that parental involvement in and support of their child's participation in meaningful learning activities such as those found in quality STW endeavors is an important catalyst to successful productive involvement at a host company. Through their involvement, it is evident that parents can assist their children in the development of an important set of "meta-skills" which teaches the values and attitudes necessary to meet the challenges of the future. These skills can in turn be used no matter what challenges present themselves by providing the opportunity for young people to experience intense concentration in any activity that requires skill and discipline, regardless of its content (Csikszentmihalyi & Schneider, 2000). This is especially true during a time when occupational roles are increasingly becoming more vague and ephemeral.

Student Involvement in STW

In this new learning intensive economy, learning and work are seen as becoming increasingly intertwined by many business leaders, educators and parents. Moreover, some believe that a more explicit connection between education and employment will strengthen the bonds between academic classroom learning for students and workplace knowledge. Subsequently, students' benefit from improved academic and workplace success (National alliance of Business, 1999).

Work-based learning (WBL), which is a concept inherent in school-to-work, actually connect classroom learning to work. This provides a context in which high school students can mentally and physically connect their learning to real world concepts, oftentimes increasing their ability to learn and comprehend concepts (Pauly, Kopp and Haimson, 1995). Proponents of STW also believe that WBL experiences offer powerful contextual learning opportunities to students which gives meaning to the tasks that they are to perform at the worksite, and an opportunity to learn ideas and skills better than they could in traditional classroom settings (Pauly, Kopp and Haimson, 1995). Therefore, it is widely felt that students who engage in quality STW experiences not only clarify career goals and become better prepared for the future workforce, their academic performance and motivation to learn is improved (National alliance of Business, 1999).

CHAPTER III

METHODOLOGY

Through the literature review in Chapter II it has been established that many U.S. businesses are experiencing a shortage of skilled workers due to a rapid growth and expansion resulting from a robust economy. The literature also illuminated varying viewpoints on the benefits of school-to-work (STW) as a workforce development strategy. In that this study examines the similarities and differences in benefits of school-to-work initiatives from the perspective of employers, students and parents in Western Michigan, the methodology set forth in this chapter will aid in determining how efficacious STW is when used as a workforce development strategy.

Selection of Research Strategy

In order to get close to and involved with the data, and to take into account personal insights and behaviors of the individuals being studied, qualitative research methods were chosen for this study (Patton, 1997). More specifically, the use of case study research was seen as being the most tenable strategy when examining the similarities and differences in benefits of school-to-work initiatives from the perspective of three key stakeholder groups.

The United States General Accounting Office (GAO) Program Evaluation and Methodology Division (1990) defines case studies in the following way:

A case study is a method for learning about a complex instance, based on a comprehensive understanding of that instance obtained by extensive description and analysis of that instance taken as a whole and in its context (p. 14).

According to Yin (1994):

In general, case studies are the preferred strategy when “how” and “why” questions are being posed, when the investigator has little control over events, and when focus is on a contemporary phenomenon in some real-life context (p.1).

Both of these depictions of case studies define the study at hand in various ways. The current study is attempting to determine how the use of STW benefits key stakeholders when used as a workforce development strategy, particularly in the context of a contemporary work environment. The current study also seeks to gain a comprehensive understanding of the complex relationships between key stakeholders involved in STW when used as a workforce development strategy. With this in mind, the case study was seen as an optimal strategy for investigating the contemporary and yet banal dynamics evident in corporate use of STW as a workforce development strategy. It was also viewed as an ideal way for capturing the data on the perceptions of local actors from the inside (Miles and Huberman, 1994), which could provide rich subjective data.

Although case studies are valued by a great number of researchers, there is a good deal of variability in their uses. For example, In the Handbook of Qualitative

Research (Denzin and Lincoln, 1994), contributing author Robert Stake identified three types of studies inherent in case study research: (1) intrinsic case study, undertaken to gain better understanding of a particular case; (2) instrumental case study, undertaken to provide insight into a particular issue or for the refinement of theory; and (3) collective case study, whereby an instrumental study is extended to several cases (pp 237-238).

The GAO in their publication Case Study Evaluations (1990), identified the following six types of case studies: (1) Illustrative, which is a descriptive case study that adds in-depth examples to other information about a program or policy; (2) exploratory, which is descriptive but aims to generate hypotheses for later investigation; (3) critical instance, which examines a single instance of unique interest or serves as a critical test of an assertion about a program, problem or strategy; (4) program implementation, which is usually a normative investigation of operations at several sites; (5) program effects, which examines causality and multisite, multimethod assessments; and (6) cumulative, which brings together findings from many case studies to answer evaluation questions be they descriptive, normative or cause-and-effect (p.9).

Yin (1994) identified four types of case study designs used: (1) single case (holistic) designs; (2) single case (embedded) designs; (3) multiple case (holistic) designs; and (4) multiple case (embedded) designs (pp 38-44).

In order to gather the richest data in the most efficacious manner, this study will employ the exploratory approach to case studies as described by the GAO. In that this study seeks to examine the similarities and differences in the benefits of STW from key stakeholders, gathering and analyzing the complex descriptive data from each of the key stakeholder groups will be germane to the success of this undertaking. Therefore, an exploratory, multiple case designs are deemed to be a thorough and effective approach in accomplishing this study's goals.

Description of Case Studies

According to Kushner (2000), the roots of case studies go back to the 70's and 80's when the field of evaluation sought approaches that looked to generate and publicize as many program perspectives as possible. Stake (Denzin and Lincoln, 1994) states that "case study can be qualitative or quantitative or a combination of the two". He makes the point that case study is not a methodological choice, but a choice of object to be studied. Moreover, Stake asserts that as a form of research, case study is defined by interest in individual cases, not by the methods of inquiry used. In his book Case Study Research Design and Methods, Yin (1994) cited the following quote by W. Schramm:

The essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result (p.12).

The case study approach was deemed to be most appropriate because of its effectiveness in uncovering the delicate balance between phenomenon and context, especially with the contemporary significance of this study. Moreover, the multiple benefits that can be yielded from a case study were seen as meritorious.

Therefore, as posited by Yin (1994), a great value of the case study as a research endeavor is the contributions made to our knowledge of individual, organizational, social, and political phenomena. This coincides with the intent of this study which is to better understand corporate involvement in school-to-work, particularly during a time when improving and transforming workforce development strategies is so important to large, mid-sized and small companies in America, while they seek to maintain a competitive edge.

Multiple Case Study Design

In order to compare data gathered from the identified stakeholders in this study, a multiple case study design will be used. According to Yin (1994), although there are disadvantages to the use of multiple case study designs, there are distinct advantages. Notably, the evidence from multiple cases is often considered more compelling, and the overall study is regarded as being more robust. To conduct the study using a multiple case study design, qualitative data from the identified stakeholder groups will be gathered and analyzed to determine the perceived and actual benefits resulting from involvement in school-to-work activities.

The Population and Its Profile

The data used in this study will be collected from three primary sources or stakeholder groups (1) a key staff person representing the workforce development viewpoints of large, medium sized and small sized companies that manufacture furniture or products that support the furniture industry (2) high school students who have been or are currently involved in school-to-work activities at those companies, and (3) the parents of those students. All of the stakeholders groups will come from the Grand Rapids Statistical Metropolitan Area (SMA). Similarities and differences among the three stakeholder groups will be identified and examined, and applications to workforce development initiatives will be summarized. Data for this project will be collected from activities that occurred between January 1, 1998 and June 30, 2001.

Sampling Schemes

A purposive sampling scheme (GAO, 1990) will be used to select best practice employers in the SMA identified as being involved in school-to-work programs. Of the 24 manufacturers identified with information provided by the Right Place Program's Manufacturing Council, three employers will be chosen. The three employers are furniture manufacturers or manufacturers of wood products that support the huge furniture industry located in Western Michigan. Moreover, the employers represent a range in business sizes with one business being classified as large (1000 or more employees), one classified as mid-sized (250-499 employees),

and one classified as small (50-99 employees). Factors that affect the number of business participants include business size, organizational structure and the degree of involvement in STW. The business respondents selected to participate in the study will be full time paid employees who are directly involved in developing, overseeing or impacting the company's workforce development initiatives including STW involving high school students. The individuals involved will be identified with the assistance of support staff sanctioned by the company's leadership and designated to assist with this research project.

For students, a minimum of six students will be interviewed from each employment site. Students and their parents will be used as paired samples during the data collection process.

To aid in the analysis of the data, three business cohorts will be identified. Each cohort will consist of the business, the students that were involved with that business, and the student's parents. Data will be collected and analyzed both by stakeholder group and by business cohort group. The results from the stakeholder group data and the business cohort group data will then be synthesized into "one voice" which will offer a representation of the benefits and differences of STW as a workforce development strategy. Cross tabulations (GAO, 1990) of events will then be done to identify similarities and variations between groups and to check any other types of interactions. Diagram 4 illustrates the relationships of the three stakeholder groups to the development of the three business cohorts.

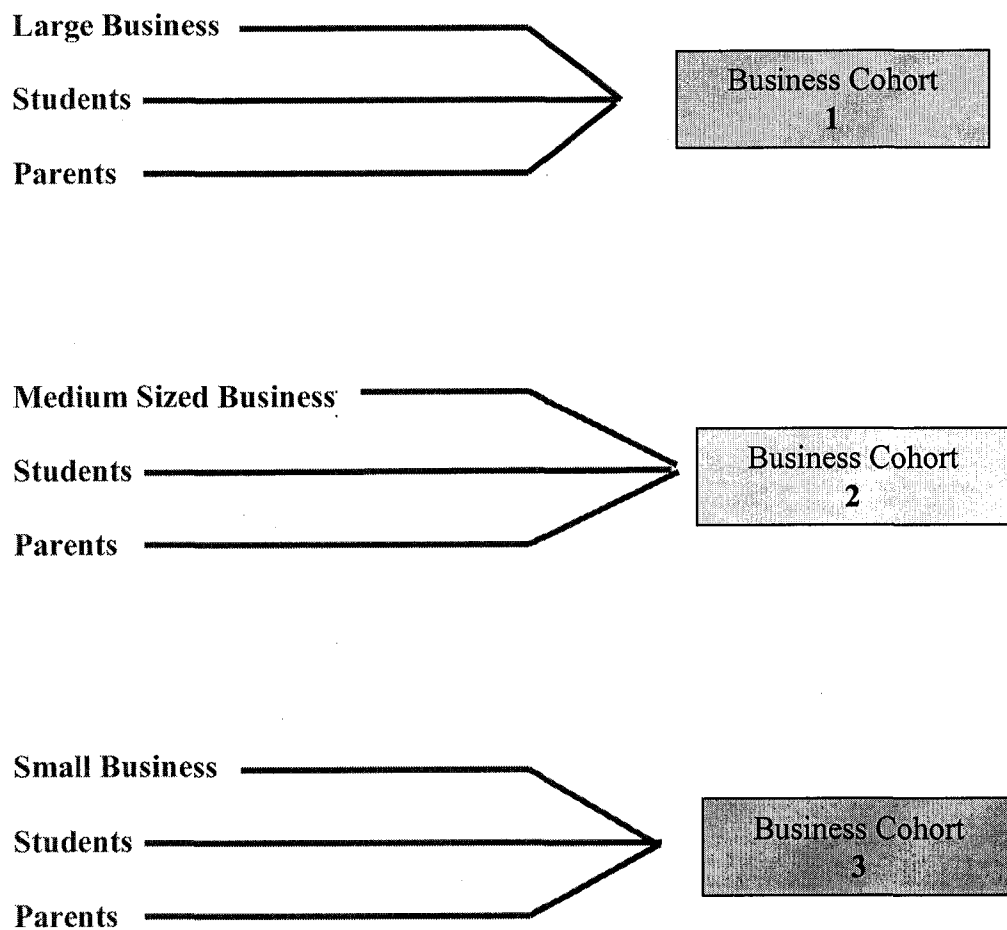


Figure 4
Business Cohort Groups

Development of Instrumentation

The instrument used in this study is a questionnaire patterned after the National Center on the Educational Quality of the Workforce Questionnaires (EQW) Phases I, and II, (1994 and 1997) with permission from the project leader Dr. Robert Zemsky, Dr. Lisa Lynch, and Daniel Shapiro. The EQW surveys were administered by the Bureau of the Census and were supported by the Department of Education (DOE), the National Center for Postsecondary Improvement (NCPI), and the Consortium for Policy Research in Education (CPRE).

The EQW surveys were chosen as models because of their focus on practices and expectations of employers in their search of a skilled and proficient workforce. The EQW National Employer Survey Phase I was designed for employers in the manufacturing sector with over 100 employees, excluding public sector employers, not-for-profit institutions, establishments with less than 20 employees, and corporate headquarters.

The EQW National Employer Survey Phase II was designed to address longitudinal issues identified in Phase I, and to better gage the link between the worlds of work and school.

Contents of the Questionnaire

There are a total of three questionnaires developed for this study, one for each of the stakeholder groups. Each of the three questionnaires asks the same basic questions with a few modifications, which are designed to accommodate the unique perspectives offered by each stakeholder group.

The Business Involvement In STW Survey and survey protocol (see Appendix A) consists of 63 substantive items divided into three sections: Department characteristics, STW activities and workforce development. The first section seeks information about the company, the respondent, and the respondent's responsibilities; the second section seeks information about the types of STW opportunities that have been provided at the company; and the third section seeks information around the respondent's perspective on the use of STW as a workforce development strategy.

The Student Involvement In STW Survey and survey protocol (see Appendix C) consists of 60 items divided into two sections: Student characteristics and STW activities. The first section seeks information about the student, and the student's perception and feelings on workforce development; the second section seeks information on the student's involvement in STW at the host company. This section also explores the student's knowledge and feelings about the concept of school-to-work, parental influence in their STW involvement, the perceived value of STW in

preparing them for employment, and problems or negative experiences associated with their STW experience.

The Parent Involvement In STW Survey and survey protocol (see Appendix D) consists of 13 items divided into two sections: Family characteristics and STW activities. The first section seeks information about the family, the parents, and their perception and feelings on workforce development. The second section seeks information on parent knowledge and feelings about the concept of STW, their involvement in supporting their child's STW efforts, and their feelings on the value of STW in preparing their children for employment.

Data Collection Methods

Face-to-face interviews using questionnaires will be used to collect data from all three-stakeholder groups. For employers, the Employer Involvement in STW Questionnaire was used for the designated respondent(s). For students, the Student Involvement in STW Questionnaire was used, and for parents, the Parent or Legal Guardian Involvement in STW Questionnaire was used.

The administration of the questionnaires took the hectic and often erratic schedules of the respondents into account. In order to be more accommodating and engaging, interviews were scheduled during times and at locations that were convenient to respondents.

Administration of the Employer Questionnaire

In preparation for the actual survey, leadership at a large, medium sized and small furniture manufacturer were contacted and informed of the purpose and scope of the study. Their support for the project and commitment to be involved in the study was secured, and a designated contact person from each of the businesses was identified. The contact people aided in identifying an individual(s) meeting the criteria for involvement in STW and workforce development initiatives at their company between January 1, 1998 and December 31, 2001. They also played an instrumental role in identifying students that have participated in work-based learning experiences at their companies during the period under study.

Afterward, a cover letter providing an overview of the study, an explanation of the purpose of the study, an invitation to participate in the study, a statement that the researcher would attempt to maintain confidentiality with information shared, and instructions on how to contact the researcher if interested was sent (see Appendix B). Follow-up telephone calls were made to non-respondents as a way to increase the overall response rate.

Administration of the Student Questionnaire

A list of students that have participated in STW activities at the selected companies were compiled with assistance from designated contacts at the businesses.

For minors (17 or younger), parent or guardian permission was obtained using the Parent or Guardian Permission Form (see Appendix E). A signed consent from the student agreeing to involvement in the study was obtained using the Assent of the Child or Ward Form (see Appendix F) along with an overview of the data collection process.

Data from students was collected in the same manner as the data collected from business respondents. Prior to the actual interview, a cover letter explaining the purpose of the study and guaranteeing confidentiality was sent (see Appendix C). Follow-up telephone calls were made to non-respondents as a way to increase the overall response rate.

Administration of the Parent Questionnaire

The parents of the children that participated in work-based learning experiences automatically qualified as participants in the study, and were used as paired samples. Like business and student respondents, data was collected using face-to-face interviews. Questionnaires were coded, and cover letters explaining the purpose of the study was sent along with a statement of confidentiality (see Appendix D). Follow-up telephone calls were made to non-respondents as a way to increase the overall response rate.

Interview Data Analysis Overview

The first step in the data analysis process was to clarify the various components of meaning among symbols or phrases obtained during data collection (Draze, 2000). Here, componential analysis, which includes the study of semantic relationships, was completed as a way of understand the interviewee's interpretation and perception of key terms and concepts (Spradley, 1979). This was an important pre-step to categorizing the data gathered for this study.

In that multi-site data sets are being handled in this study, the next step in the analysis was to identify themes and patterns that could be categorized and put into a matrix. As put forth by the GAO (1990), the categories were related to the evaluation sub-questions. Content analysis was the process used to identify patterns, and was done solely by the researcher without the aid of computer software.

Establishment of Reliability and Validity of Interviews

Lincoln and Guba (1985) described credibility and reliability in naturalistic inquiry as credibility, transferability, dependability and confirmability of the study. In addition, Robert Yin (1994) identified construct validity, internal validity, external validity, and reliability as four key elements essential in quality case study designs. In this study, credibility was established with the data provided from key staff involved in leading school-to-work initiatives at companies that were considered to

be best practice organizations by the Manufacturer's Council, an organization of peers. Transferability was established through the detailed descriptions of the context of the study, which allows the reader to replicate the study, and decide whether or not the analysis can fit in a broader context. Dependability and conformability of this study was ensured through the detailed record of notes, interview protocols and data analysis processes.

CHAPTER IV

DATA ANALYSIS

In this chapter, the interview results are analyzed and the similarities and differences in benefits of school-to-work are presented. To aid in the transcription of data, a table was created which summarized responses across pre-determined categories linked to the research questions (see Table 4, Appendix G). In the table, each column represents a business cohort group. Business Cohort Group 1 consists of the large business (1000 or more employees), students that participated in STW activities at that business, and the parents or legal guardians of those students; Business Cohort Group 2 consists of the mid-sized business (250-499 employees), students that participated in STW activities at that business, and the parents or legal guardians of those students; and Business Cohort Group 3 consists of the small business (50-99 employees), students that participated in STW activities at that business, and the parents or legal guardians of those students.

The qualitative data gathered as a part of this case study was analyzed in two ways. First, the data was analyzed by stakeholder group for themes (i.e. business respondents, students and parents). Secondly, the data was analyzed by business cohort group to determine if themes or patterns emerged from that stratum of analysis. In both cases, information analyzed sought to answer the six research

questions of the study identified in Chapter 2. The findings of the analysis which address the six research questions are presented under the following headings: (1) the effectiveness of STW activities in addressing the workforce development needs of companies; (2) STW activities of greatest benefit to workforce development efforts; (3) hindrances to employer involvement in STW (4) why stakeholders view some STW activities as being more beneficial than others; (5) STW benefits to students, and; (6) parental impact on the success of student and businesses involvement in STW.

Analysis of Data By Stakeholder Groups

Question 1

Question 1 analyzes stakeholder responses around the effectiveness of STW activities in addressing the workforce development needs of companies. Analysis of interviews by the three stakeholder groups provided the following evidence.

Analysis of Employer Interviews

A common theme among employer respondents centered around their feelings that STW activities at the high school level aided in long term development of their workforce through the identification, development and recruitment of young talented students as represented by the following business respondent:

STW using high school students help change the way we attract, develop, hire, and retain diverse and new talent. We start earlier, and sell our company as an employer of choice (Large business respondent).

Furthermore, they felt that by helping students to identify, eliminate and confirm career choices, they could influence those students and possibly increase the chances of good students seeking employment with the company, or in the industry. This feeling was supported in the literature, which indicated that employers typically involved themselves in STW activities for well thought out reasons (Bailey, Hughes and Barr, 1998). Employers also felt that these activities helped to debunk myths and misperceptions of a field or industry by providing accurate and up to date information.

Moreover, STW was clearly seen as an opportunity to engage and develop these up and coming entrants into the workforce with an eye on attracting the most talented. By providing a broad range of experiences, and by directing students to certain career paths in hopes of eventually filling key positions, employers tended to see some return on their investment from their participation in STW.

Furthermore, respondents collectively felt that employees who worked with students on various STW activities tended to understand connections between their work and other functions within the organization to a greater degree. Here, it was felt that by preparing for incoming students, and by teaching and imparting company and career knowledge to these students, employees benefited. These benefits were seen

through a deeper insight and appreciation for their jobs, and a better understanding of various work related processes, as represented by the following business respondent:

Our efforts were done more to benefit the students. However, it made our supervisors more able to understand their jobs at a more detailed level. In order to help the students understand what has to be done and how to do it, the employee had to stop and think in detail. The supervisor then benefited by working with the student; they came to understand their job in its most basic level of detail. (Small business respondent).

It was felt that benefits such as these contributed to employee's perception and understanding of their jobs and the company, and ultimately benefited the company.

Finally, employer respondents generally felt that providing STW opportunities for high school students contributed to a positive image of the company. By working with teachers to help in reaching and connecting with students, and with community based organizations (CBO's) that work with students, the businesses interviewed saw their STW involvement as a good way of demonstrating their corporate citizenship. Their STW involvement was also seen as a way to help the company's workforce development efforts by building community awareness around products, processes, career opportunities and expectations for employment. The following employer comments are clear examples of business sentiments:

Not only is STW a key strategy for developing our future workforce, it also serves a purpose in our community. Hopefully it will reduce the drop out rate of kids in our community, it will reduce the rate of kids using drugs and alcohol, as well as reduce the number of youth going into the prison system. As a manufacturing company we see that we are losing a huge number of poor kids that are going into the prison system rather than coming into the workforce. This is the paradigm we are working to change in Western Michigan (Mid-size business respondent).

One of the things that we help students with is the development of a proper attitude to understand that it is important to report to work every day, to report to work on time, and to report to work prepared to perform a task. If those things are there, then these kids will move into adulthood and into the real workforce equipped to do whatever (Small business respondent).

Some specific benefits that were more germane to individual companies included the large and mid-sized companies that felt their involvement kept them competitive with other businesses that work with schools around STW, and the small sized company which saw benefits in placing a special emphasis on working with minority students in STW, and developing their interests and abilities so as to increase their

Analysis of Student Interviews

Student respondents overwhelmingly felt that their involvement in STW activities helped them to identify, eliminate and confirm career choices, which would ultimately help the business community. Here, while supporting a student's curiosity to learn more about given careers and occupations, students felt that the host company helped them become more knowledgeable of career opportunities, real world applications of particular subjects such as math and science, and provided them with insight into the expectations of professionals in various fields. Most students felt that this in turn helped them to become better prepared to become more productive and effective employees in the future workforce. The literature supported these findings from students (National Employer Leadership Council, 1999).

Several students from the large and mid-sized companies provided somewhat different responses to this question. These students felt that the company benefited from students increased interest in the company through STW involvement. They felt that by capturing the interest of students, aspirations to work for that company would grow and thus act as a recruitment tool, especially in high demand fields such as engineering and computer sciences.

A few student respondents, mainly from the small business, did not feel that STW involvement was effective in addressing workforce development needs of businesses. It is felt that this attitude by a small number of students comes from a combination of student despair, immaturity, and lack of basic skills. These issues were consistent with findings in the literature around factors that discourage employer involvement in STW (Bailey, Hughes and Barr, 1998).

Analysis of Parent Interviews

Like their children, the majority of parent respondents felt that STW activities helped students identify, eliminate and confirm career choices, which would ultimately help in the workforce development of businesses. More specifically, parents felt that their children could become interested in the company that they had the experience with by learning more about that employer's culture, opportunities and expectations. These parents tended to feel that learning provided from STW experiences better prepared their children for entry into the workforce, which would

automatically make them more effective employees for that company. This viewpoint and approach taken by these parent responses was found to coincided with aspects of the literature, which found that schools can't be the only source of education for students as they prepare for their future careers (Rich, 1996).

Although other more individualized responses did not represent mainstream opinion, they did illustrate a variety of thought. These individualized responses included a response from a large business parent respondent who felt that STW addressed workforce development needs by marketing the company through community involvement as a way to enhance and publicize the company's image. There was also one large business parent respondent that did could not see how STW activities benefited the workforce development efforts of companies.

The similarities in both the student and parent sentiment around this question can be seen through the following responses:

They may have benefited by grabbing my interest in engineering. If they hadn't shown me CAD, I'm not sure how interested I'd still be. I really wanted to do something with computers, everything is going to be computerized and computers are quicker, and growing up with computers, I wanted to work where I can use them. I may be a future worker (Large business student respondent).

Finding a good employee is important for the company. Without a good employee or a pool of good employees the company will fail. If companies can develop and hold on to good workers for longer periods of time, because people change jobs so often, that will be good for that company. It creates a win/win situation where every one comes out ahead (Large business parent respondent).

In summary, businesses studied generally saw STW activities at the high school level as aiding in the long-term development of their workforce through the identification, development and recruitment of young talented students, while students overwhelmingly saw STW activities as a way to identify, eliminate and confirm career choices, which ultimately translated into enhanced workforce development for companies. The business respondents also seemed to feel that by engaging in STW activities, employees who worked with students on various STW activities oftentimes benefited by gaining a deeper understanding of the connections between their work and other functions within the organization. Parent respondents tended to concur with their children by seeing STW as a way to focus and develop their children on career options and career choices, capture their children's interest in positions and careers at companies, and groom their children for future workforce needs.

Question 2

The second question sought to identify the STW activity or activities of greatest benefit to the workforce development efforts of the businesses being studied. Analysis of interviews by the three stakeholder groups provided the following evidence.

Analysis of Employer Interviews

In response to this question, both the large and mid-sized companies could not identify any one STW activity that was seen as being more beneficial than others.

Here, because each activity that these businesses were involved in was seen as being beneficial in some way to the student and the company, neither the large or mid-sized company could separate out one particular activity that was seen as being more beneficial than others. However, the respondents did note that different activities required the use of different resources (i.e. human, financial, equipment etc.), and that this factor might pose various challenges at different times. Although these challenges exist, the respondents reiterated that their company's involvement in STW benefited their workforce development efforts greatly.

These findings point to the fact that although not always quantifiable, involvement in STW by these companies is thought out and viewed as beneficial for a multitude of reasons. Although the literature review did not unearth studies comparing the benefits of STW activities to workforce development, these employers determined that STW added value to their workforce development efforts, as can be seen in the following employer comments:

I think all the School-to-Career activities are beneficial to The company. They help employees feel good about themselves, and help them gain a sense of pride in their role at The company and their work environment.

STW strategically increases the awareness of The company, of who we are, what we do, and what opportunities are available here. We have office staff,

medical staff; protection services staff, food services, etc. We are like a little city in itself. We have a lot of different opportunities at The company. And although we are an office furniture manufacturing company, we are no longer just a manufacturing company; we are a work effectiveness company. Our company provides the knowledge; products and services that help our customers create work environments that integrate architecture, furniture and technology (Large business respondent).

These findings from the employer respondents coincide with the literature, which identifies a return on employer investment from STW involvement (National Employer Leadership Council, 1999).

On the other hand, the respondent from the small company specifically identified Job Shadowing as the STW activity that yielded the greatest benefit to that company's workforce development efforts. In this instance, Job Shadowing was seen as the single most effective method to reach a large number of students while having the smallest effect on the company's human and financial resources. This notion highlighting employer differences to this question can be clearly seen through the following comments expressed by the small business respondent:

I would have to say job shadowing without a doubt. Although I don't rely on these students as a primary source of building and developing my workforce, job shadowing allows me an opportunity to get larger groups of kids in here at once. I then have the chance to challenge them intellectually, and capture their interest and imagination in what we do. I can educate them on pathways to careers, and help guide their development toward the workforce. Also, being a small company, I have to maximize the use of my time, my staff's time, and the use of our resources. Job shadowing allows me the opportunity to plan and execute learning effectively and efficiently (Small business respondent).

As seen above, the small employer did not have the staff to engage in a wide variety of STW activities as did the larger business counterparts, and therefore it was a different task to scrutinize the benefits of STW activities from a small pool.

The small business respondent also reported measurable benefits to staff that were outgrowths from STW involvement. These benefits were manifested through an increased level of knowledge and awareness of job related activities that were gained through the preparation for and facilitation of Job Shadow experiences. In this instance, employees involved in hosting Job Shadows tended to demonstrate higher levels of efficiency and awareness of operational policies and procedures than those who did not.

Basically, they (employees) did a better job after getting involved with STW activities at the company because they understood better. And, when new hires come in, the supervisors are able to explain the jobs in greater detail (Small business respondent).

The literature did note that there were staff benefits from involvement in STW (National Employer Leadership Council).

Analysis of Student Interviews

The data revealed that the majority of student respondents either didn't know or were not sure of which STW activities were most beneficial to the workforce development efforts of businesses. Comments such as "I don't know how the company benefited from my participation" or "I don't think that they did benefit from my involvement other than having my picture in their news letter" seemed to indicate

that students typically didn't want to venture a guess, and felt that they didn't know enough about STW to appropriately answer the question. This would suggest that the concept of STW was fairly new for many of them. However, a few students with experiences at the large company did generalize their responses to express that those activities, which included visualization of a career with opportunities at hands on involvement enhanced student interest, learning and comprehension of concepts. Comments like "After letting me shadow him, the guy (employee) saw how much I like it and wanted to get into it so he said that he would be willing to do more shadows now. Maybe I opened the door for others" (Mid-size business respondent). This response coincides with the literature (Pauly, Kopp and Haimson, 1995). They went on to suggest that by augmenting their learning in this way, students would be more engaged in the activity and would get more out of it. It was suggested that these students in turn would be better connected to career choices and workforce expectations, and would ultimately be a better employee for a company.

Analysis of Parent Interviews

Like their children, the majority of parent respondents could not identify particular STW activities that they thought would most benefit the workforce development efforts of businesses. However, it appears that their reasons for not doing so were slightly different. Here, unlike their children, parents appeared to feel more comfortable in providing their assessment of workforce development needs of companies based off their perceptions and personal experiences. Their uncertainty

came when they attempted to overlay their knowledge of companies workforce development needs with an often-vague understanding of the various STW experiences being offered at the schools. Moreover, there was a degree of variability in parental participation in STW activities when the parents were of high school age, and some could and could not connect their experiences to those of their children. Because of this, many were unsure of the depth of today's experiences and how effectively they would address today's workforce needs. For example, one legal guardian stated:

When I was in high school in the 30's, I was involved in that, but it was called something different, Cooperative Education, to become an electrician. We went to school for part of the week and then had hands on experience in the field the second part of the week. Now I don't know if the kids today get that kind of experience, or if it prepares them like it did in the past (Mid-size business parent respondent).

Parents seemed attuned to the expectations of today's employers but felt that the skills for many occupations were better addressed by employers. Therefore, many respondents didn't feel that they could cite an activity or activities that would best benefit the workforce development efforts of a given company.

On the other hand, a small number of respondents whose children participated at the small business felt that the company's workforce development efforts would best be served through activities that exposed students to multiple careers. The following comments represent the thoughts of those few parents:

Our daughter wants to be a doctor, and there was not much connected with her experience at the company in that area. She seems to be pretty set on that, and

we want to support their choices. However, she has been exposed to the plant area, and one of the good things about being exposed to a small business is that she could see a lot of the different jobs to do like manual labor, the machinery etc, and on the corporate side of the business, she saw some things that appealed to her, but not the environment of running a business. Being exposed to different aspects of the company was helpful to our daughter, it gave her something to compare and contrast with. I think by exposing kids to a wide variety of areas like this in a company can help the company in the long run by presenting different learning and employment opportunities to students (Small business parent respondent).

These parents felt that personal contact by professionals through activities like work place tours, Job Shadows, lectures and career day would reach more students and have the biggest impact on them, which would eventually increase the quality of workers being hired into the workforce.

In summary, it appears that due to the size and scope of the operations of the large and mid-sized companies, no single STW activity could be ferreted out as being more beneficial to the company's workforce development efforts than others. It also appears that these two companies only engage in STW activities that are seen as adding value to the organizations, and because of the multiplicity of their workforce development goals, each activity is beneficial to the organization in different ways. On the other hand, the small company specifically identified job shadowing and tours as the most valuable activities, which seem to coincide with the more personal, altruistic approach and mission of that organization.

Moreover, the general response of students to this question appears to be reflective of students who either did not have the benefit of experiencing multiple types of STW experiences, or who had difficulty in identifying and prioritizing STW

experiences that would best serve the workforce development needs of business. Moreover, possibly because of their ages and levels of education, these students were not cognizant of their connection to the workforce, or of their future value to the workforce as knowledge workers in the new economy.

Parents did not seem confident enough or knowledgeable enough about the variety of STW activities to offer their opinion.

Question 3

The third question sought to identify the hindrances to employer involvement in STW. Analyses of stakeholder interviews are as follows.

Analysis of Employer Interviews

In response to this question, employer respondents were split. The large and small companies both identified safety and poor student attitude as key issues affecting employer involvement, as illustrated by the following responses:

The operation of our huge panel saws and other dangerous equipment are off limits to students. They may learn about how these machines are programmed using math and formulas, and how precise they cut, but they do not get actual hands on experience with these machines. First of all we are very safety conscious around here, and because of liability, kids can't even be in certain areas. Secondly, the materials are expensive, and mistakes cutting laminate would be very costly (Small business respondent).

Safety can be a barrier. When touring through a manufacturing facility there are many things to be aware of. At all times safety glasses should be worn. In a manufacturing setting, working with and around tools/equipment can cause

small particles to fly here and there. At times there are parts/pieces in the main walkway. Common sense would tell a person to walk around them and be careful. However, on one occasion we had a student who decided to slosh right through a puddle of water. We also had one student take a ride on a dolly as if it were a skateboard. If students continue to do these types of things, they would be taking advantage of what the company is offering and possibly ruin further visits for other students (Large business respondent).

Apparently student safety and company liability was seen as a potential barrier especially with high school student involvement in STW, in large part because of student functioning in a factory environment where large and sometimes dangerous machinery is in operation. These issues appear to be of greater concern to these two employers because of tightly controlled organizational structures as in the case of the large business, and an overarching fear of student injury with crippling law suits for the small business. It appears that the mid-sized employer is cognizant of these potential issues, but invests in staff training and tight monitoring as a way not to hinder student engagement. Differences in bureaucratic structures and management/leadership approaches may also play a significant role in employer actions. Stern (1995) identified these concerns as paramount for many employers.

In terms of student attitude, both the large and small employer respondents noted that student apathy, immaturity and misbehavior are obstacles that pose a hindrance to repeated employer involvement mainly because of the disruption caused to the organization, and the perceived waste in valuable human resources. The following comment by the small business respondent sums up this sentiment:

The thing that we look for in a student is that the person develop the proper attitude to understand that it is important to report to work every day, to report

to work on time, and to report to work prepared to perform a task. If those things are there, then moving into adulthood and into the real workforce, they will be equipped to do whatever. However, if students are lax, apathetic, not interested about being here, or just not serious about taking advantage of this learning opportunity, I will cut it short! I refuse to waste my time and my staff's time. We are eager to help, but we can't afford to have students working against us in the process of helping them (Small business respondent).

Both the large and small companies interpreted such behavior as an indicator of a non-motivated student that would not benefit from the experience or offer a potential benefit to the company. This issue may create a particular hindrance to the large company because of a focus on bottom line benefits to the organization where the small company with its altruistic involvement seeks to focus its energy on serious students. The mid-sized company appears to be more willing to work with more challenging students in hopes of eventually engaging them:

Developing the youth is a key part of our workforce development strategy! Not only is that a key strategy for developing our future workforce, it also serves a purpose in our community. Hopefully it will reduce the drop out rate of kids in our community, it will reduce the rate of kids using drugs and alcohol, as well as reduce the number of youth going into the prison system. As a manufacturing company we see that we are losing a huge number of poor kids that are going into the prison system rather than coming into the workforce. This is the paradigm we are working to change in Western Michigan. So, we are prepared as a company to interact with and work with all types of kids (Mid-size business respondent).

As noted above, this approach is seen largely as a result of the company's management/leadership philosophy. These hindrances identified by both of these employers are consistent with research cited in the literature review by Cappelli and Iannozzi (1995), and Bailey, Hughes and Barr (1998).

Respondents from the large and mid-sized companies also noted that the allocation of resources to accommodate very large numbers of students requesting to participate in multiple STW activities at times presented obstacles. This situation tended to tax the human resources of these organizations, and in some cases the budgets of departments facilitating or hosting activities. Although these organizations recognized the importance of STW activities, coordinating these events and working them into the organization's processes was identified as paramount.

Although there were no hindrances universally identified by all business respondents, each business did identify issues that presented challenges to that stakeholder. The weight of those issues for each employer appears to be influenced by factors not addressed in this study such as organizational goals around STW involvement, available resources and management/leadership approaches.

Analysis of Student Interviews

Most student respondents didn't identify any obstacles to employer involvement in STW. It appears from their point of view that the coordination of activities done mostly by the schools, and the facilitation of the opportunities done by the businesses were well executed and carried out without a hitch. This perception may reflect the general sense of value placed on the STW experience by almost all of the students that participated and the well-facilitated manner in which they were carried out by the host businesses.

However, a few responses such as those by a small number of students involved with the large business indicated that issues such as low student involvement in certain business supported STW activities, the lack of student flexibility in scheduling activities, and repeated student requests to spend more time on some activities could create hindrances to employer involvement. This small group of students appeared to have high levels of self-confidence and seemed to easily think about a variety of issues that not only affected them.

Other responses in the minority included the feeling by a student with an experience at the mid-sized business who felt that negative teacher attitudes toward students and toward student involvement in STW presented obstacles to business involvement, and one student one student with an experience at the small business who felt that forcing students to participate in STW activities as a school requirement would create dissension resulting in employer reluctance to further participate. Although these responses do represent factors that discourage employer involvement in STW as pointed out in the literature (Bailey, Hughes and Barr, 1998), it is obvious that these identified hindrances are based on negative sentiments and experiences of students.

Analysis of Parent Interviews

Similar to their children, a common theme in the data with parent respondents centered on their non-identification of obstacles that would present a hindrance to

employer participation in STW. Here, parents generally felt that businesses that support STW activities would work hard to accommodate students and their learning needs. It appears that like their children, most parents based their non-identification of barriers on the positive experiences of their children. Exceptions included two parent respondents connected with the large business who felt that requests for progress reports would be resisted and would pose a hindrance to further business involvement, nonetheless, these parents felt strongly about being involved in their children's education. Another exception included a set of mid-sized business parent respondents who echoed the frustrations of their child when identifying negative teacher attitudes toward students as hindrances to positive student/employer relationships in STW activities. A final exception was noted from several small business parent respondents who felt that pushing for more student hands on experiences would create some issues and present a large hindrance to further employer involvement.

In summary, the data would suggest that once a business has committed to participating in STW activities, import steps and safeguards are put in place to insure that the experience is a productive one. This appears to coincide with the amount of positive experiences reported by students and parents, and the relatively low amount of identified hindrances or impediments to employers. However, as in the case of the small business, parental guidance and direction are deemed important to the successful transition into the workforce.

Question 4

Question 4 sought to answer why stakeholders view some STW activities as being more beneficial than others. Analysis of interviews by the three stakeholder groups produced the following evidence.

Analysis of Employer Interviews

Although employer respondents from both the large and mid-sized companies had similar beliefs on the most beneficial STW activities to their companies, the data indicated that both companies also felt that engaging students and capturing their imagination was important. Here, hands on activities (where possible), and activities that helped students visualize various aspects of careers were viewed as being important to fostering interest and excitement in different fields:

We include a workshop along with the tour that has a hands-on activity with it, and found that the students like hands-on activities. So, either before or after the tour we do a workshop...

In some of the workshops we show students the different types of production lines. What we did was to take little Lego pieces and have them build something like a car. Let's say it didn't work very well that particular way. So we redid the line to go a different way. The students then got to see the advantages and disadvantages of different types of production lines, and which way would produce more. Whether you are trying to make a part by yourself or with a team, the student learned by finding out the way that worked best (Large business respondent).

The large business also identified the level of participation from employees as being important, and saw employee involvement as being germane to the success of STW activities at the company, and felt that “Participation from current employees is very supportive in determining the value and success of different activities” (Large business respondent).

The small business response to this question focused on community impact as a determinant of success. The respondent measured the benefit of STW activities by the effect that they had on poor and underprivileged students and eventually the communities in which they lived. The respondent noted:

I work primarily with minority kids, and lots of those kids come from homes that are strictly on welfare where their parents don't have a job to go to on a daily basis. One of my goals through any activity is to help kids understand that they have to be at work every day. I want to help them understand the importance of good work ethics, and get exposed to aspects of careers. I can do that through tours and job shadows (Small business respondent).

As noted by Bailey, Hughes and Barr (1998), this philanthropic motivation was an important factor in determining the type of activities to get involved in as well as the ultimate value of those activities.

Analysis of Student Interviews

There was a wide variation of responses to this question by all student respondents. The majority of student responses from the large business indicated that STW activities such as tours, internships and the pre-college engineering program offered insight on careers, especially with a promising job market in the engineering

and technology sectors. Moreover, these students felt that STW activities that supported the exploration of careers related to student ability provided the best opportunities for career success as an adult, and were therefore the most beneficial in attaining their career goals.

This point was made clear in comments like “Job shadowing showed me that I really wanted to do this job. It also showed me the way that they do it, and how they do it. The job that I was job shadowing really taught me a lot about Industrial Design” (Large business student respondent).

This analysis of the value of STW activities appears to be thought out and reflective of students who deliberately incorporate such activities into their general educational experience as a part of their career preparation. Other evidence of this way of thinking by students at the large company was offered by a student who included the belief that department tours were the most beneficial experiences offered. This belief was based off of the input given by parents and other relatives (other influences), who had existing knowledge and insight into the company and its opportunities.

Respondents from the mid-sized company tended to have a different view. Here, several students felt that the most valuable STW activities were those that were built off of or related to a previous STW experience. These students seemed to be mature, and were cognizant of the value of previous learning experiences as applied to future goals, as illustrated by the following example:

I want to go into the engineering field and get a doctorate in physics. I just recently decided on those goals, over the summer, and used my tour of the company and interaction with their staff as a way to help clarify my choice. In the past, I was in a math and science program through the University of Illinois, and they had different programs that I liked. That initially helped me choose my career goals in my freshman year, and then they changed. Now, after building on my experiences, I'm back at my original goals again by using my educational skills, organizational skills and computer skills. My organizational skills and computer skills are really advancing right now (Mid-size business student respondent).

Likewise, several students viewed activities that were endorsed or suggested by others as being more beneficial, regardless of the type of activity. In those cases, other individuals were seen as the authorities and were trusted in providing accurate information, beneficial in the establishment of the student's career direction. This is seen in the following example:

I heard about the progressions program and the class through a friend that was involved last year. They told me that it was the best way to decide your career. After that, I asked my guidance counselor and she agreed. She then put me in the class this year (Mid-size business student respondent).

Most of the student respondents from the small company did not view any one activity as being more beneficial than any other, and one student identified influences from school staff that helped shape his perception of the more beneficial STW activities. These students tended to have no prior STW experience, and little background knowledge of STW.

Analysis of Parent Interviews

In analyzing the parent data from this question, it was found that the responses generally varied by company size. Here, several respondents with children at the

large company felt that STW activities that provided opportunities at hands on learning were the most beneficial experiences. This view seems to support the notion that these parents want more connected and possibly higher level learning to take place during STW experiences. Others in this group felt that the level of exposure to management opportunities, advanced opportunities in a department, and the salary range of jobs being learned about was the key to determining the most beneficial type of STW activity. Examples of these two views are illustrated below:

I think experiences that give him real life exposure and hands on experience are the best. I'm a hands on learner, and I think activities that let you experience the job and actually see what it feels like is the most beneficial (Mid-size business parent respondent).

Like I said before, our daughter is motivated and very independent, so I think she will get what she needs regardless of the type of activity. But I do think the activities that will help her the most are the ones that expose her to the management structure of the company and give her the inside view of how to be successful in that arena. Our daughter is assertive and a leader, and she needs to get exposed to leaders in organizations (Mid-size business parent respondent).

One other respondent from the mid-sized company cited previous exposure to and knowledge of certain careers as guiding their view to the most beneficial STW activities, while respondents from the small company felt that tours, lectures and job shadows were the most beneficial activities.

In summary, respondents from the large & mid-sized companies both felt that through their experiences, activities that engaged students and captured their imaginations tended to be more beneficial in connecting with students and teaching them about aspects of careers. In addition, these companies included employee input

as a measurement of the value of the activity. The small company in contrast sought to identify activities with the greatest potential impact on underprivileged communities and underserved youth as a gauge of most beneficial activities.

The majority of student responses from the large business saw STW activities such as tours, internships and the pre-college engineering program as offering the best insight on careers while most respondents from the mid-sized company saw activities that were built off of or related to a previous STW experiences as being most beneficial.

Still, the majority of students from the small business did not view any particular activity as being more beneficial than others, perhaps because of their limited exposure to these activities.

Finally, several parent respondents (primarily from the large business) saw activities with hands-on experiences as being the most beneficial to the learning and engagement of students, while others saw activities with exposure to management structures, particular departments within a company and certain careers as being the most beneficial.

Question 5

Question 5 analyzes stakeholder responses around STW benefits to students. Analysis of interviews by the three stakeholder groups provided the following evidence.

Analysis of Employer Interviews

In response to this question, both the respondents from the large and mid-sized companies felt that students gain true benefits from STW experiences by getting a broad exposure to various careers and employment opportunities at those companies. Moreover, it was felt that this exposure helped students to identify the necessary knowledge, skills, and attitudes needed to be successful as a 21st century employee. By connecting high school learning to real world situations, these employers felt that students could gain important insight into various careers (especially those in high demand fields) and become better prepared for the job market while in high school, thus increasing their employment options. Examples of these employer contentions are highlighted below:

I think students benefit from the School-to-Career experiences at the company by getting a look at the different career opportunities, getting an insight as to what the different career opportunities entail. Once they get their insight, they can easily decide whether they want to pursue that career or not (Large business respondent).

Students learn important connection between classroom learning and the world of work. They go to school to get ready for a career, and involvement in STW is a valuable learning experience. Students also get an opportunity to identify and learn about a career that they may go into. They can visualize it, explore it and get better prepared for it while in high school. These experiences attach meaning to what is learned in school, and it allows all students be they black, white, Hispanic, rich or poor to gain access to learning and career opportunities at a world class organization like the company (Mid-size business respondent).

These contentions were supported by the STW literature offered by the National School- to-Work Office (1997).

Similarly, the small business respondent felt that students involved in STW activities benefit by gaining good foundational skills that are necessary to succeed in the workforce. Moreover, it was felt that many of these valuable skills are not taught in school or at home, but are important in building employee success in the work world.

Students' benefit by receiving first hand knowledge of key work skills and habits expected by employers. It's important to hear it from people outside of the family, from professionals, and see why those skills are important. Students are also challenged to think about their future, and think about what's needed to develop and build the necessary skills to successful in a career of their choice (Small business respondent).

Analysis of Student Interviews

Student responses to this question surfaced some common themes across two of the three businesses. First, with the large and mid-sized businesses, it was identified that high school students' benefit greatly by being exposed to multiple careers. In general, the students felt that the exposure provided a targeted view of specific occupations, and helped them to identify and narrow down their individual career choices. This allowed students to focus in on those choices with more dedication and precision. This is illustrated through the following student comments:

It helped me to think a little further than I would have, and it helped me in the math areas by seeing the concepts that I was studying. It helped me to apply what I was learning at the time (Large business student respondent).

I saw how some people had to work together, and obviously they had to have a lot of education with all of the machines that they were using. Plus, it gave me insight into the real use of technology at a company (Mid-size business student respondent).

Secondly, a number of students from all business sectors felt that their STW activity helped them to become more aware of the importance of their high school studies. This increased sense of awareness translated into the adjustment of some classes in order to be better prepared for entry into college (or some other post secondary learning experience), or directly into the job market after high school. This can be seen in the comment below:

I know now what goes into it, the classes that I have to take, and the preparation that I need before I get there. I also got information on what to take in college (Large business student respondent).

Other student benefits include the feeling of being encouraged and empowered to explore career areas previously un-thought of (respondents associated with large and mid-sized employers), and an in-depth look into the real and practical applications of technology (respondents associated with the large business). In both of these instances, students felt that their education of occupations and careers was enhanced. These findings are also supported in the literature as put forth by the National School-to-Work Office (1997).

However, a number of students, mostly from the small business, felt that there were no benefits derived from their STW involvement, or they were not sure. These opinions were in the minority, and seemed to reflect student disgruntlement with being forced to participate in STW activities through their school, or as in the case of the small business, students with little knowledge of identifying careers, and who got exposed to the concept late in high school.

Analysis of Parent Interviews

Like their children, parent responses across all three-business groups also revealed patterns. Here, most felt that their children's STW experiences were helpful in exposing their children to multiple careers, which aided them in academic and career preparation. Moreover, a number of parents from the large company felt that STW provided opportunities for real world and hands on learning which was important to the education of their children, and that STW opportunities offered insight into the real world use of math and technology, which are seen as important skills in today's employment landscape. This can be seen in the following example:

Well in the particular field that she is interested in studying, engineering, it helps her with her math, and that's crucial. Everything in your life is basically math. Paying your bills, just about everything that you do. So I just think that it helped her especially in the areas of math and science (Large business parent respondent).

Parents like these identified benefits to their children that were also identified benefits to business organizations involved in STW as put forth in the literature (National alliance of Business, 1999; Shapiro and Iannozzi, 1998; Henderson and Burla, 1994). As was the case with the student data, a small number of parents felt that STW offered no real value to students by attempting to steer them into certain tracks that benefit the employer needs, as indicated by the following parent respondent:

Students may get some benefits in that by looking, they might get some help in making career decisions, but finding what they want to do is more

complicated than that. Finding out what they want to do is as important as finding out what they don't want to do, and they can't get that from one day! These activities only show one side, the bright and shiny side of work. I think high schools should have a class on showing up to work on time everyday, to go in and work as hard as you can everyday, and try to do the very best that you can. New people need to come in and respect people that have 20 years of experience. Prove what you can do, don't tell me what you can do (Large business parent respondent).

This study showed viewpoints like these to be in the minority.

In review of this question, respondents from the large and mid-sized companies both appear to feel that students get multiple gains and benefit from STW experiences in their companies (i.e. broad exposure to various careers and employment opportunities at those companies, identification of and focus on career interests). Similarly, the small business respondent felt that students involved in STW activities benefit by gaining good foundational skills that were seen as being essential to worker success in the future workforce.

From the student perspective, a number of students from all business sectors felt that STW activities helped them to become more aware of the importance of their high school studies, while others (mostly from the large and mid-sized businesses) identified exposure to multiple careers as being the greatest benefit. Still others, mostly from the small business, either were not sure of benefits, or did not feel as if there were benefits derived from their STW involvement.

Parents on the other hand generally felt that their children's STW experiences were helpful in exposing their children to multiple careers, which aided them in

academic and career preparation. Opportunities for real world and hands-on learning were highlighted as being a benefit mostly from large company parents.

Question 6

Question 6 sought to analyze parental impact on the success of student and business involvement in STW. Analysis of interviews by the three stakeholder groups provided the following evidence.

Analysis of Employer Interviews

The majority of respondents from the large and mid-sized business both felt that involvement by parents in STW does not impact the success of a student's experience with the business. The data revealed that these employer respondents felt that their involvement with parents around STW was non-existent, and therefore had no impact on the success of the overall experience, as indicated by the following responses:

As far as the parents' involvement with us, I would say no value. I would like to see that change, but right now, their value is very low to our efforts. I think that the parents should play a critical role in that effort, but there are various problems that we are faced with. For example, the economic level of some parents in the inner city with kids at a high school like Central, is low, and many can't or don't know how to be involved. One of our goals is to work on this (Mid-size business respondent).

That's hard to say just because in a way we don't want parent's involvement, we want students to be responsible for themselves. When thinking about school, we always look back and think "if the parents were only more involved to help their students along the way". But in the STC area, I think

more of the focus is on the students themselves in being responsible and willing and wanting to be involved. If they don't want to be involved I don't want their parent pushing them our way and them coming here really not wanting to be here. (Large business respondent).

To the contrary, the respondent from the small business felt that parents played an important role in the total success of the STW activity. Here, although valuable teaching from employees would occur no matter what, it was felt that parental involvement would support the on site teaching, and positively affect student STW learning. The respondent felt that key areas such as the teaching of certain values and work ethics would be impacted. Parents were also seen as an important avenue for increasing student interest and focus in career development. This can be clearly seen in the following comment:

As far as the parents' involvement with us, I would say low. But as far as the parents training their child to prepare themselves for the job market... after college or if they don't go to college, the parent's involvement is very critical. They have a chance to set the agenda for that kids behavior. But in regard to the company, we don't have the relationship with the parent. The parent does their thing with the kid and we do ours. If the parent doesn't do their job, it's hard to find good kids that have the right attitude to move forward. Aptitude is one side of the equation, and attitude is then other. Parents control the attitude by what they do and what they tell the kids. The parents are critical, but we don't have direct contact with the parents (Small business respondent).

Analysis of Student Interviews

When reviewing the student responses to this question, two primary themes emerged across all three groups. The first theme identified a feeling that a major role played by parents was to give moral support and encouragement in various points of the STW experience. This support and encouragement gave confidence to students as

they embarked on their career exploration, and provided an important impetus to them as they intensify their career development work. This theme is seen in the following comment:

My mother knows that I am going to graduate soon, and wanted me to start thinking about what I'm going to do next. She encouraged me to explore my interest areas, and offered support by to the owner one day about letting me tour. She let me set it up (Small business student respondent).

A second emergent theme indicated that parental involvement had no impact on student or business success in STW. Students that expressed these sentiments felt that the success of the STW experience was predicated on the student's ability to engage employers and take advantage of the information garnered from the experience. This theme is exemplified by the following comment:

It was up to me to learn and get the benefits. My parents want me to be successful, but they realize that I am the one that has to do the work. It was me and the staff at the company that made the experience successful (Large business student respondent).

This contrasting viewpoint appears to represent diversity in student personality and upbringing where some students look forward to guidance and direction, while others are autonomous and more self-reliant. Although both of these student perceptions were spread across all business groups, future research may be helpful in differentiating these student characteristics.

Analysis of Parent Interviews

In reviewing the parent data for this question, a several trends emerged. A number of parents from primarily the large and mid-sized business tended to feel that they had limited impact on the success of their children's STW experience. These parents credited their children and their efforts along with the high schools and sponsoring businesses as being responsible for student success. Moreover, they appeared to support their children by being available for assistance while allowing them to be autonomous in their educational exploration. This sense can be seen in the following example:

Very limited! I think that our impact was limited, and it should be. The experience should be something that's more between the student and the business, to develop at their own interaction. If the parents are sticking their nose in, I think that it could cause problems. The parent should make sure that everything is o.k. and above board, but beyond that, step back and let them interact together. That's the best way to do it (Large business parent respondent).

On the other hand, a number of parents felt that by giving moral support and encouragement to their children, their STW experience was made less threatening and taken more seriously. Here, it was felt that parents played an important role in guided their children through key aspects of decision making around career choices and career development which set the foundation for a successful and productive STW experience. This sentiment can be seen in the following comment:

I was there when I was needed. I didn't know too much about the careers that he was learning, but I gave support by constantly talking to the child. If he

was interested in a certain program, I talk about it and brought up new ideas. I helped him think about things that he could take back to the workforce (Mid-size business parent respondent).

Furthermore, these parents felt that they were instrumental in providing important information on various careers to their children, and in some instances, giving information and advice on particular departments or businesses that gave students critical insight.

Other patterns were seen to a lesser degree in the responses presented by some large and small business respondents. These parents felt that they contributed to the success of their children's STW experiences by teaching them work ethics, and by helping the students connect and knit together life and other learning experiences. These parents tended to view the contributions made to the development of their children over a period of time, and did not focus on what was done immediately preceding the STW experience. This way of viewing the impact that parents make was well documented in the literature in Csikszentmihalyi and Schneider's book Becoming Adult (2000).

In reviewing this question, the majority of respondents from the large and mid-sized businesses both felt that involvement by parents in STW does not impact the success of a student's experience with the business, while in total contrast, the respondent from the small business felt that parents played a significant role in the total success of the student in their STW activity. Similarly, a number of student respondents felt that parents had minimal to no impact on the success of student and

business involvement in STW. However, the majority of parents, and a small number of students did feel that parents impacted the success of the student/business involvement to varying degrees. Here, some felt that the moral support and encouragement promoted student success. Others felt that by providing services such as transportation or assistance such as advice or input on departments made a tremendous difference in the success of the experience.

Analysis of Data By Cohort Group

Question 1

Question 1 analyzes stakeholder responses around the effectiveness of STW activities in addressing the workforce development needs of companies. Analysis of interviews by business cohort group provided the following evidence.

Analysis of Business Cohort Group 1

A similar and related theme was identified from all three-stake holder groups when the data was analyzed for Business Cohort Group 1. Here, it appears that the majority of respondents in this cohort group felt that STW activities helped to engage high school students at business sites which in turn helped to develop and fine tune their career interests to meet the varied business needs of the future, as represented by the following comments:

As a workforce development strategy, STW helps to strategically increase the awareness of the company, of who we are, what we do, and what opportunities are available at the company. We have office staff, medical staff, protection services staff, food services, etc. We are like a little city in itself. We have a lot of different opportunities at the company. And although we are an office furniture manufacturing company, we are no longer just a manufacturing company. We are a work effectiveness company. Our company provides the knowledge, products and services that help our customers create work environments that integrate architecture, furniture and technology (Large business respondent).

Although each stakeholder group identified different motivations for STW involvement, the end result was the conclusion that involvement in these activities was effective in addressing long-term business workforce development needs.

Examples of differing stakeholder motives include the following:

- Employers who mainly used STW activities as an important means of marketing to, recruiting and attracting talented young people to the company. Their interest in STW allowed the company to address its future workforce development needs proactively.
- Students who tended to view STW activities as an opportunity to help them identify and confirm career choices. Students also recognized that these choices could eventually translate into future employment opportunities for them.
- Parents who tended to see student involvement in STW activities as a way to help clarify a student's career choice, which would lead to a more focused, better trained individual to enter the workforce.

In the end, STW activities were seen as a vehicle to attract students to industry, help them to identify and clarify career goals, possibly gain interest in the business, and ultimately get recruited to fill critical workforce needs.

In summary, the majority of respondents in this cohort group felt that STW activities helped to engage high school students at business sites which in turn helped to develop and fine tune their career interests to meet the varied business needs of the future. Although each stakeholder group identified different motivations for STW involvement, the end result was the conclusion that involvement in these activities was effective in addressing long-term business workforce development needs.

Analysis of Business Cohort 2

Although there were broader visions of how STW activities are effective in addressing a company's workforce development needs, the analysis of the data from Business Cohort 2 revealed that there were some basic similarities in viewpoints by all three-stakeholder groups. Here, it was generally felt that by supporting education through the connection of classroom learning to the world of work, students would be better prepared to meet the challenging needs of the future workforce. This was strongly emphasized by the mid-sized company as seen below:

As I mentioned earlier, we are growing at a rate of about 18% per year. Most companies are doing the majority of their recruiting in colleges. Our position is that we have got to develop a new style of recruiting. That means that we have got to assist the community in raising up young people who will be equipped to come into the workforce from elementary through middle and up

through high school. These kids will then have an opportunity to be prepared if they are not going on to post secondary to enter into the workforce. This is crucial to our growth if we are going to be a billion dollar company in the next eight years (Mid-size business respondent).

With a strong focus on helping students identify, eliminate and confirm career choices, STW was seen as playing an important role in developing the next generation of workers for future workforce positions.

A secondary point that seemed to resonate with the business leader and parents was that by offering STW opportunities, high school students would learn employer expectations, gain an appreciation and interest in the company, and increase the likelihood of being trained and recruited as a skilled employee:

I think the business benefited from STW experiences by exposing our son to hands on experience, opportunities at the company, and what is expected on the job. I'm a hands on learner, and I think activities that let you experience the job and actually see what it feels like is very beneficial (Mid-size business parent respondent).

In reviewing the data from this cohort group, basic similarities in viewpoints by all three-stakeholder groups was evident. There was a general sense that by supporting education through the connection of classroom learning to the world of work, students would be better prepared to meet the challenging needs of the future workforce.

However, a secondary point of view advanced by the business respondent and a number of parents suggested that by offering STW opportunities, high school students would learn employer expectations, gain an appreciation and interest in the

company, and increase the likelihood of being trained and recruited as a skilled employee.

Analysis of Business Cohort 3

There was some similarity in thought among the stakeholders in Business Cohort 3. In this business cohort, the business respondent felt that STW activities involving high schools students would have little to no direct impact on addressing the workforce development needs of his company. Because most of the individuals in highly skilled positions were developed and promoted from within, this employer felt that direct benefits from STW would not be realized. However, there was a strong feeling that by supporting and offering learning opportunities to at risk and minority youth, a segment of the community would be better prepared, and may enter other related industries and businesses that would offer indirect benefits (i.e. increased diversity and thus increased sensitivity to the business needs of a minority owned business; fewer flawed products from vendors and suppliers).

Our efforts were done more to benefit the students, especially those minority and poor students that may not have the opportunities to get exposed to and develop interest in careers early on. We depend on other companies for work, so it's important for us to have skilled people at those companies that supply us. If we get product with a high number of errors from them, our job is harder which causes us to redo work. This makes us late with orders to our customers, so it's a domino effect. The better-trained workers are at all levels, the better off all companies are (Small business respondent).

With a somewhat related point of view, the majority of parent and student respondents in this cohort felt that involvement in STW activities helped students

identify, eliminate and confirm career choices at an important developmental period in their lives. It was felt that this opportunity to explore and confirm career choices helped to prepare these students for future careers. Therefore, by being better prepared in high school, and by being exposed to career opportunities at the small company, students would be in a better position to enter the workforce successfully, and positively impact the workforce needs of a given industry.

In summary, the small business respondent felt that STW involvement with high schools students would have little to no impact on addressing the workforce development of his company, however the majority of parent and student respondents in this cohort felt that involvement in STW activities helped students identify, eliminate and confirm career choices at an important developmental period in their lives, which would eventually help with workforce development efforts.

Question 2

Question 2 analyzes stakeholder responses around STW activities of greatest benefit to workforce development efforts. Analysis of interviews by business cohort group provided the following evidence.

Analysis of Business Cohort 1

There was a variation in responses to this question from the three stakeholder groups in this cohort, and therefore no distinguishable trends were evident. Data

from the large business represented in this cohort indicated that all STW activities that the company supports are beneficial to workforce development efforts, but in different ways. The business respondent noted that each activity requires different resources, has different expectations and yields different results, but are nonetheless seen as being important to the futuristic thinking and long term workforce development efforts of the company. This can be seen in the following response:

I think all the School-to-Career activities are beneficial to the company. They help employees feel good about themselves, and help them gain a sense of pride in their role at the company and their work environment.

STW strategically increases the awareness of the company, of who we are, what we do, and what opportunities are available here. We have office staff, medical staff; protection services staff, food services, etc. We are like a little city in itself. We have a lot of different opportunities at the company. And although we are an office furniture manufacturing company, we are no longer just a manufacturing company; we are a work effectiveness company. Our company provides the knowledge; products and services that help our customers create work environments that integrate architecture, furniture and technology (Large business respondent).

Although a little more than half of the student respondents was not sure or didn't know which activities were of greatest benefit, a smaller number felt that activities that included visualization of careers and hands on experiences would be most beneficial to workforce development efforts. These individuals felt that hands on types of experiences would enhance their learning, and would thus increase their potential of becoming qualified employees for the company. Moreover, they felt that by physically performing some of the functions of a given occupation, they could better grasp, understand and appreciate the expectations and complexities of high demand jobs. These attitudes are exemplified in the following comment:

I believe that certain activities benefit workforce development for businesses. There are benefits by letting kids come in to the company and get hands on experience to better understand what is involved in certain kinds of careers that are out there at the company. By letting us do that, the company help kids to connect what they learn in school to a job before they get to college (Large business student respondent).

To further illustrate the variation in responses, none of the parents were comfortable in answering this question because of their lack of detailed knowledge of the various types and benefits of STW activities. They felt that their responses would be based solely off of the experiences of their children, which would not be representative.

In summary, the large business respondent in this cohort indicated that all STW activities that the company supports are beneficial to workforce development efforts, but requires the use of different resources for different activities, and that there are different expectations that yield different results. A smaller number of student respondents felt that activities that included visualization of careers and hands on experiences were of greatest benefits, while none of the parents were comfortable in answering this question because of their lack of detailed knowledge of the various types and benefits of STW activities.

Analysis of Business Cohort 2

The data revealed stark differences between the response given by the business respondent, and those given by the majority of students and parents. Like their large business counterpart, the respondent for the mid-sized business felt that all

STW activities that they were involved in were valuable to the workforce development efforts of the mid-sized company. Moreover, it was felt that the STW activities supported by the company had a reciprocal value in that STW was deemed important to the future growth and viability of the company, while being equally valuable to students, the community, and to other businesses in the industry. In essence, the business respondent believed that by getting involved in selected STW activities, the company was enhancing the career, occupational and workforce development of students, as seen through the following response:

All STC activities that we are involved in are important to our workforce development efforts. They help us to start looking outside of the box. What I mean by that is companies that are growing by 18% per year not only need to recruit in college, but also need to recruit in high school and begin developing our students that aren't going for post secondary education. So our students are equipped to come right into the workforce upon graduation (Mid-size business respondent).

Moreover, the company was fulfilling a number of organizational goals including altruism, community engagement and development, and workforce development.

However, the majority of students and parents in this cohort group could not identify particular STW activities that would be beneficial to the workforce development efforts of businesses. Although most of these respondents felt that students would be attracted to various businesses through STW experiences, they were unsure of other potential benefits to businesses. This seemed in part due to

these stakeholders not having an overall knowledge of the various types of STW activities being offered to students.

In summary, it was felt by the business respondent that all STW activities that the mid-sized business hosted was valuable to the workforce development efforts of the company. These activities were deemed important to the future growth and viability of the company by attracting talented youth, and were seen as having a reciprocal benefit to students. On the other hand, the majority of student and parent respondents in this cohort group could not identify any particular STW activities that they thought would be beneficial to the workforce development efforts of businesses.

Analysis of Business Cohort 3

In analyzing the data for this cohort, there was a theme identified in the response given by both the business respondent and the majority of parents. Here, these two-stakeholder groups felt that the two most beneficial STW activities were job shadows and workplace tours, as indicated below:

I would have to say job shadowing without a doubt. Although I don't rely on these students as a primary source of building and developing my workforce, job shadowing allows me an opportunity to get larger groups of kids in here at once. I then have the chance to challenge them intellectually, and capture their interest and imagination in what we do. I can educate them on pathways to careers, and help guide their development toward the workforce. Also, being a small company, I have to maximize the use of my time, my staff's time, and the use of our resources. Job shadowing allows me the opportunity to plan and execute learning effectively and efficiently (Small business respondent).

Shadowing and tours! I think those experiences help to prepare the student for the workforce a great deal, which is helping the company. It gives the student a better idea of what he wants to do, and how he can go about doing it (Small business parent respondent).

They felt that these activities in particular offered an opportunity for a large number of students to benefit from physically going out and learning about careers while receiving a great deal of information about the tools necessary to succeed in the workforce. Furthermore, it was felt that these activities provided students with the benefit of being exposed to multiple careers, and getting information that could be synthesized and processed later.

On the other hand, the majority of students did not respond to this question primarily because they lacked general information on the various types of STW activities.

In summarizing the information from this cohort group, the business respondent along with a majority of parents felt that job shadows and workplace tours offered the greatest benefits to the workforce development goals of the small business. Offering a large number of students exposure to multiple careers seemed to be particularly appealing. In contrast, the majority of students in this cohort group did not respond to this question, primarily because they seemed to lack general information on the various types of STW activities and their benefits.

Question 3

The third question sought to identify the hindrances to employer involvement in STW. An analysis by business cohort is as follows.

Analysis of Business Cohort 1

From the employer standpoint, safety was highlighted as a key hindrance along with student apathy and the allocation of resources (financial, human, physical). In order for involvement in STW to be viewed as “value added”, and thus benefiting both the students and the business, the employer constantly weighed all of these factors when considering the type and frequency of STW involvement best suited for the company, as can be seen through the following comments:

Safety can be a barrier. When touring through a manufacturing facility there are many things to be aware of. At all times safety glasses should be worn. In a manufacturing setting, working with and around tools/equipment can cause small particles to fly here and there. At times there are parts/pieces in the main walkway. Common sense would tell a person to walk around them and be careful. However, on one occasion we had a student who decided to slosh right through a puddle of water. We also had one student take a ride on a dolly as if it were a skateboard. If students continue to do these types of things, they would be taking advantage of what the company is offering and possibly ruin further visits for other students (Large business respondent).

On the other hand, the majority of student and parent respondents couldn't identify any obstacles to employer involvement (although several individual responses indicated that issues such as participation by too few students, requests for extended time on activities, and more flexibility in accommodating student schedules

may be a hindrance to continued employer involvement). The non-identification of hindrances by student and parent respondents may be significant in that these two groups appear to have been jointly satisfied with the overall STW experience, and the benefits derived from the experience. Moreover, students and parents seemed to focus on factors and outcomes related to the student experience, and baring pronounced issues presented by the host employer, these stakeholders saw no problems or hindrances.

In summary, the employer respondent identified safety issues along with along with student apathy and the allocation of resources as potential hindrances to their involvement in STW, while the majority of student and parent respondents couldn't identify any obstacles to employer involvement. The non-identification of hindrances by student and parent respondents may be indicative of the seamlessness in coordinating the activities and the overall satisfaction with the experience that these two groups had.

Analysis of Business Cohort 2

There was some variation in the response to this question among stakeholders in Business Cohort 2. Here, the business respondent noted that the timing of activities (time of year) along with employee availability presented the biggest threats and potential hindrances to employer involvement. However, it was also noted that the company unequivocally supported involvement in STW with high school

students, and noted that if barriers such as these arose, they would be worked out with the student and the schools. The following comment magnifies this point:

The only perceived barrier with mentoring is for our employees to have the availability of time to really work with the students with us being so busy. To add to that, some request may come during a time of year when we are really busy, which might create some delays. We will work through those though. In fact, I would like to see more employees involved in that process so as to take the weight off of the volunteers who are currently doing it (Mid-size business respondent).

This was in contrast to perceptions by most student and parent stakeholders, who did not identify any hindrances to employer involvement. Here, it was basically felt that the willingness demonstrated by the business to involve students through STW was an indication of support and dedication to the concept. Many of these stakeholders also seemed to feel that the involvement by businesses, and the fervor of their staff to work with students, gave a clear impression that STW involvement with high school students was thought through, and that all potential barriers and hindrances would be worked out.

In summarizing the findings from this cohort group, the business respondent noted that the timing of STW requests (time of year or busy periods) might cause potential hindrances or delays in involvement primarily due to the lack of employee availability. In contrast, most student and parent stakeholders did not identify any hindrances to employer involvement. As noted in the previous cohort group, this may be the result of the seamlessness in coordinating the activities and the overall satisfaction with the experience that these two groups had.

Analysis of Business Cohort 3

In Business Cohort 3, there were variations in responses to this question among members of the stakeholder groups. The business respondent in this cohort, having a small operation, was very concerned with student safety issues and thus liability issues for the company, as seen in the following comment:

The operation of our huge panel saws and other dangerous equipment are off limits to students. They may learn about how these machines are programmed using math and formulas, and how precise they cut, but they do not get actual hands on experience with these machines. First of all we are very safety conscious around here, and because of liability, kids can't even be in certain areas. Secondly, the materials are expensive, and mistakes cutting laminate would be very costly" (Small business respondent).

Furthermore, there was little to no tolerance for student apathy, inattentiveness, poor attitude and behavioral problems. With a focus on STW involvement as an altruistic measure, there was an expectation that students would come with an open mind and a willingness to learn what was being offered. Poor student involvement was seen as being counterproductive to the organizations goals, and would thus cast doubt on future involvement with classes taught by a particular teacher, or possibly even from a school.

From the student point of view, most students could not identify obstacles to employer involvement. However, one student did state that their involvement was solely due to a school requirement. That student recognized that his attitude could be a hindrance to further involvement at that business site.

The parents interviewed in this cohort had very mixed responses. Several parents felt that the hindrance was more on their part as opposed to the business. They felt that they wanted their children to have a STW experience with learning opportunities that were unfortunately not offered at the small business, as represented through the following response:

Our daughter is “artsy” so we try to get her an idea of what is out there, areas that she can fit into. We try to exposure her and encourage her to look at every option that she has. We talk to her a little bit about her strengths, and let them know that those are the areas that she may want to focus on. Although the company has given her some valuable information on business management, she’s not getting as much diversity in perspective on careers as we hoped for. I’m sure there may be other parents who feel like that (Small business parent respondent).

They went on to state that they wanted their children to have more hands on experiences. One parent could not identify any hindrances to employer involvement.

Similar to the large business, the small business respondent in this cohort group was very concerned with student safety and liability issues, which could have a devastating effect on the small business, while most student respondents could not identify any obstacles or hindrances to employer involvement.

From the parent perspective, several respondents couldn’t identify any hindrances while others felt as if the hindrance was on their part when they openly wondered if their children could get a broad exposure to careers offered at a small company.

Question 4

Question 4 sought to identify why stakeholders viewed some STW activities as being more beneficial than others. The results by business cohort are as follows.

Analysis of Business Cohort 1

The stakeholder responses to this question were quite varied. From the employer perspective, although no particular STW activity was singled out as being more beneficial than others, it was apparent from the response that multiple factors were used when determining which STW activities the company should and could get involved in. This was highlighted in the following comment:

Our goals around STW with high school students are to help us change the way we attract, develop, hire and retain diverse new talent. We want to do this by starting the process earlier, and by selling our company as an employer of choice. We also look to respond to our internal client groups and the functional areas within the company that are developing programs that seek creative ways to stay ahead of the competition. Activities that help us compete for talented entry-level employees are extremely important in helping us meet future business needs. We are always thinking about the future and charting the Course (Large business respondent).

On the other hand, most students in this cohort tended to view some activities as being more beneficial because of the salary range of the occupations and careers they were interested in, and the opportunity for hands on experiences, which tended to enhance their learning, as seen through the following comment:

The activities that were most beneficial to me were those that showed me a lot of different branches of engineering and industrial engineering. It helped me to see people that worked on the design part and people that worked on the finished product, and I found myself liking the design part. I particularly liked the salaries that those guys made which let me know that I really wanted engineering as a career (Large business student respondent).

The variation in opinion could be seen through other student input, which included one respondent who noted that influence from parents who had knowledge of the company and departments in the company influenced his view of which activity was most beneficial as illustrated through the following comment:

I wanted to learn more about the engineering field to see if any of it interested me, so my father convinced me that the company was an ideal place to learn more about different aspects of engineering. He even told me about which departments could give me information on different aspects of engineering (Large business student respondent).

One other student had no expectations.

With parents, the majority of them had no comment in this area because of a lack of overall knowledge of various STW activities. However, several respondents felt that activities that included hands on experiences were the most beneficial to students and their learning, while one other parent felt that STW activities that focused on managerial positions and high paying careers were the most beneficial to students.

In review of this cohort group data, although no particular STW activity was singled out as being more beneficial than others, it was apparent from the employer response that multiple factors were used when determining which STW activities were beneficial to the company's workforce development goals, and which ones the

company should and could get involved in. Activities that met business goals such as seeking out talented students with the potential of becoming future employees in high need areas seemed to be important, as well as those that could capture student interest and engagement.

Most students in this cohort tended to identify activities exposing them to high paying careers as being the most beneficial, while the parent tended not to have comments in this area. The lack of overall knowledge is felt to be a contributing factor for the parent's non-response.

Analysis of Business Cohort 2

Like their large business counterpart, the mid-sized business respondent did not offer one particular STW activity as being more beneficial than any other, however, insight was gained into why this stakeholder viewed the STW activities that they supported as being beneficial. First, it was felt that all STW activities at the high school level gave students insight into the many different career opportunities at the company, and the types of education needed to get into those careers. These types of activities gave exposure to the company while providing students with a learning opportunity as seen through the following response:

Our STC goals are to provide the internship, job shadowing, mentoring in any area of the company. For instance, in accounting, HR, production, engineering, anything that we do, we want to provide the opportunity for those students to come in and do an internship or job shadow in our company. It's a win for the student who gets a variety of learning opportunities, and a win

for us by exposing students to career opportunities (Mid-size business respondent).

Secondly, the business stakeholder took into account the level of student and employee interest and involvement in the supported activities, and used that as a way to gauge value, as seen through the following comment:

I think they have been very beneficial. We always get real good feedback from the students and their schools in regards to their involvement here. We also get positive feedback from the employees that participate (Mid-size business respondent).

Finally, the benefits to student learning and to community improvement helped shape this employer's view of why the STW activities that they chose to get involved in were beneficial, as illustrated below:

I think the biggest change is we have been doing STC for the past six years, and the biggest change that I have seen is that we are now looking outside of the box. In the first six years of the program, what I have basically seen coming in for internships, job shadowing and those types of positions from schools was basically your middle class white students, you didn't see any minority students. There were no students from the lower class. So this is where we began to develop and look at other means of servicing the population that wasn't serviced. This is where we developed the School-to-Career Progressions Program (Mid-size business respondent).

On the other hand, most student respondents indicated that the most valuable STW activities were those that were built off of or related to a previous STW experiences, as indicated in the following response:

I want to go into the engineering field and get a doctorate in physics. I just recently decided on those goals, over the summer, and used my tour of the company and interaction with their staff as a way to help clarify my choice. In the past, I was in a math and science program through the University of Illinois, and they had different programs that I liked. That initially helped me choose my career goals in my freshman year, and then they changed. Now,

after building on my experiences, I'm back at my original goals again by using my educational skills, organizational skills and computer skills. My organizational skills and computer skills are really advancing right now (Mid-size business student respondent).

Along that same line, one student indicated that influence from a relative affected their viewpoint. One other student had no comment on this question.

The majority of parental responses indicated that exposure to careers and hands-on experience helped them to determine which activities might be the most beneficial for their children. This is noted in the following comment:

Like I said before, our daughter is motivated and very independent, so I think she will get what she needs regardless of the type of activity. But I do think the activities that will help her the most are the ones that expose her to the management structure of the company and give her the inside view of how to be successful in that arena. Our daughter is assertive and a leader, and she needs to get exposed to leaders in organizations (Mid-size business parent respondent).

In some instances, simply knowing about a particular experience was enough to shape an opinion. One other parent chose not to answer this question because of lack of basic information of other types of STW activities.

In summary, although the business respondent in this cohort group did not identify any one activity as being more beneficial than another, it was obvious that the level of student and employee interest and involvement was taken into account as the business identified the level of support given to various activities. Being more specific, a large number of student respondents noted that the most valuable STW activities were those that were built off of or related to a previous STW experiences. And still, the majority of parental responses indicated that exposure to multiple

careers with opportunities at hands-on learning experiences as being a measure of the most beneficial STW activities.

Analysis of Business Cohort 3

The respondent from the small business viewed activities that could accommodate and educate the largest number of students as being the most beneficial, as noted below:

I work primarily with minority kids, and lots of those kids come from homes that are strictly on welfare where their parents don't have a job to go to on a daily basis. One of my goals through any activity is to help kids understand that they have to be at work every day. I want to help them understand the importance of good work ethics, and get exposed to aspects of careers. I can do that through tours and job shadows (Small business respondent).

Here, STW activities such as job shadows, lectures and tours were seen as addressing organizational goals of community involvement, while influencing and impacting a defined segment of very needy students.

Most of the student respondents did not have an opinion on this question because they had no other exposure to STW activities. However, one student felt that family, her high school counselor and school staff influenced her view by suggesting that an internship would benefit her in her college pursuits.

The majority of parents interviewed in this cohort actually worked for the small company, and shared the perceptions and feelings of the employer. Here, they agreed that tours and job shadows were the most beneficial STW experiences. It was

quite obvious through the responses of these parents that their employer influenced their view through conversations, and through the overall organizational culture.

I agree with how the company handles it, students need to hear from business owners first hand. If they can see the business while getting a dose of reality of what is expected out of employees, I think that will stick. They can get that from tours, shadows and lectures. It means more coming from a businessman than from parents (Small business respondent parent respondent).

One parent did not respond to the question because of lack of general information on the various types of STW activities.

In summarizing the data from this cohort group, it was identified that the small business respondent viewed activities that could accommodate and educate the largest number of students as being the most beneficial. In contrast, most of the student respondents did not have an opinion on this question simply because they had no other exposure to STW activities and had no reference to compare it to. Finally, most of the parent respondents (who happened to work for the small company), shared the perceptions of the business respondent, and thought that tours and job shadows were the most beneficial activities.

Question 5

Question 5 sought to identify the perceived STW benefits to students from the three stakeholders perspective in this business cohort. The analysis of the data is below.

Analysis of Business Cohort 1

In business cohort 1, there was a common theme that emerged from all three-stakeholder groups on this question. Overwhelmingly, it was felt that student involvement in STW exposed them to multiple careers and career choices. This increased exposure provided insight into the company, and gave an in-depth view of a particular career within the company. Most respondents felt that by exposing high school students to multiple careers in this way, students were being given tremendous advantages in the areas of identifying careers, narrow down choices and selecting careers, and in matching interest and skills to careers. This is illustrated through the following comments:

I think students benefit from the School-to-Career experiences at the company by getting a look at the different career opportunities, getting an insight as to what the different career opportunities entail. Once they get their insight, they can easily decide whether they want to pursue that career or not (Large business respondent).

I know now what goes into it, the classes that I have to take, and the preparation that I need before I get there. I also got information on what to take in college (Large business student respondent).

In addition, a large number of parents went on to express that their children benefited from the “real world” experience and exposure to professionals as seen through the comments below:

It gave her opportunities and options, and helped to confirm her skills and abilities while interacting with professionals (Large business parent respondent).

Most student and parent respondents provided in-depth observations to this question, which show the intense level of excitement and interest in this area. Many of these respondents identified deeper impacts of the experience such as the likelihood of students to ask more critical questions around their academics, which in some cases led to the adjustment of classes to aid in their academic preparation for college and thus a particular career. Some also felt that students gained tremendous insights into certain fields, particularly those involving science, math and technology.

In summary, the respondents in this cohort overwhelmingly felt that students involved in STW benefited through exposure to multiple careers and career choices. Moreover, most felt that by exposing high school students to multiple careers in this way, students were being given tremendous advantages in the areas of identifying careers, narrow down choices and selecting careers, and in matching interest and skills to careers.

Analysis of Business Cohort 2

A common theme that emerged in Business Cohort 2 was the sense that STW benefited students by exposing them to multiple careers, and employment opportunities in those careers. They felt that the increased exposure helped students to narrow down career choices and either rule in or rule out options. This can be clearly seen through the following comments:

Students learn important connection between classroom learning and the world of work. They go to school to get ready for a career, and involvement in STW is a valuable learning experience. Students also get an opportunity to identify and learn about a career that they may go into. They can visualize it, explore it and get better prepared for it while in high school. These experiences attach meaning to what is learned in school, and it allows all students be they black, white, Hispanic, rich or poor to gain access to learning and career opportunities at a world class organization like the company (Mid-size business respondent).

The teachers in the STC progressions programs are helping to broaden our perspectives on careers first through lecture and then through internships our second semester. The way this is structured, it helps us validate a career that we are interested in, and then, if that's what we think we really want to do, get more knowledge of that career, and how to focus on that career while in high school (Mid-size business student respondent).

STW helped our daughter focus on her career choice. She first wanted to be a teacher in the ninth grade, then in the tenth grade she wanted to be a lawyer. Recently she started talking about forensics and then she shied away from that, but now after being involved in the program, she is certain that she wants to go into forensics. She even plans to get involved in a program in the police department in January, which will give her more information. It actually got her head on her shoulders so that she know exactly what she wants to do as a career (Mid-size business parent respondent).

Moreover, many from the three-stakeholder groups felt that STW experiences were an important beginning step in preparing students for careers and eventually the world of work. They felt that by connecting learning to work with the use of professionals, students benefited from expert and professional insight.

In summarizing the data from this cohort group, there was a general sense by most stakeholders that STW benefited students by exposing them to multiple careers, and employment opportunities in those careers.

Analysis of Business Cohort 3

When analyzing the data from business cohort 3, the business respondent felt that students involved in STW experiences benefited from employer support, encouragement, and exposure to not only career opportunities, but also employment expectations, and the skills necessary to be successful in the workforce, as seen through the following comments:

Students' benefit by receiving first hand knowledge of key work skills and habits expected by employers. It's important to hear it from people outside of the family, from professionals, and see why those skills are important. Students are also challenged to think about their future, and think about what's needed to develop and build the necessary skills to successful in a career of their choice (Small business respondent).

The small sized business respondent also felt that students benefited from role modeling provided by the owner and other employees of color. This factor alone was seen to be invaluable to many poor and core city students, who could be transformed by interacting with successful people of color.

The data from the majority of student respondents in this cohort revealed that most students were not sure of the overall benefits of STW to their situation. These students tended to be students of color, and mostly came from the lower socioeconomic level. They also appear to have had little prior exposure to discussions of careers, and got exposed to STW opportunities late in high school. A telling student comment is identified below:

I saw what went on in the company from the view of different positions, and none of it really clicked. Some of the work was interesting and some was boring. There just wasn't anything for me (Small business student respondent).

On the other hand, a number of parent respondents felt that STW experiences benefited students by helping them to think about and focus on a career after high school, as seen through the following comment:

He would get information on the company and get a perspective on work from the owner. That information gave him a real point of view on what he needs to do to be successful like being on time, how math is used, and how important college is (Small business parent respondent).

Many also felt that involvement in STW helped students identify career interests that would be further explored.

In summarizing the data from this business cohort group, the business respondent felt that students involved in STW experiences benefited from employer support, encouragement, and exposure to career opportunities offered in manufacturing, and that poor and minority students in particular received positive role modeling by the owner and other employees of color. The majority of parent respondents echoed this sentiment as well. However, the majority of student respondents were not able to identify concrete benefits to student involvement.

Question 6

Question 6 sought to explore parental impact on the success of student and business involvement in STW. The analysis of data by business cohort group is as follows.

Analysis of Business Cohort Group 1

There were several interesting trends that emerged from this question. First, a number of respondents from all three-stakeholder groups in this cohort felt that parents had very little to no impact on the success of students and businesses involved in STW activities. Moreover, most respondents generally felt that students and their relationship with the host business determined the degree of success of the experience, as indicated below:

I think the role of the parent would be more direct with the school in being there for their son or daughter during their growing up years. For the most part, a lot of the schools that we work with are doing a great job of getting the opportunities out to the students. It is always better with parent involvement, but it is a partnership between the student, the parent and the school, the three together are essential. But with School-To-Career, I feel that it is more the school, the business and the student working together, not the parent (Large business respondent).

It was up to me to learn and get the benefits. My parents want me to be successful, but they realize that I am the one that has to do the work. It was me and the staff at the company that made the experience successful (Large business student respondent).

I didn't have any impact in her success in GRAPCEP at the company (Large business parent respondent).

However, a greater number of parents and several students felt that parental involvement had a positive and important impact on a student's success through moral support and encouragement given prior to the experience, as seen through the following responses:

My wife and I had a tremendous impact on our son's success. First, we really convinced him to go to the company's bring-your-future to work day. He was really apprehensive; he is more of a cautious personality. He likes to be in a very controlled, comfortable environment with routines. It took a lot of encouragement for him to go to something different like that. He was so glad at the end of that day that he had gone. We wanted him to have exposure so that he could make career decisions for himself rather than do what someone else thought he should do (Large business parent respondent).

Even though my dad was not able to help lead my tour, he did get me involved in it. He told me what to look for and the type of questions to ask. I think it was because of him and his support it went so well (Large business student respondent).

These respondents felt that the psychological boost and sense of empowerment gained from this invaluable form of involvement helped their children to focus and clarify goals and expectations of the experience.

A third trend revealed in the data showed a small number of parents and students that felt that parents impacted the success of student involvement by providing valuable career and sometimes company and department information, as seen in the following response:

I think my involvement was important. I got the application allowing him to participate in the experience and made it available to him, and I also made sure that various people in the plant knew that my kid would be involved. So as selections were made to involve students in the learning experience, some people made sure that my kid was selected and involved. I let some key people know that my son was nervous and they took care of making him feel

welcome and comfortable (Large business Large business respondent parent respondent).

This information tended to guide students in their career choices, and directed them to seek out certain types of information in their learning experience. These respondents also felt that through deliberate discussions on various learning experiences that their children had, they helped the students to connect the experiences together to better understand the career direction that they wanted to go in.

In summarizing the data on this question, the business respondent as well as a number of student and parent respondents in this cohort group felt that parents had very little to no impact on the success of students and businesses involved in STW activities. However, they were not the majority opinion on this question. A greater number of parents and several students felt that parental involvement had a positive and important impact on a student's success through moral support and encouragement given prior to the experience, thus magnifying the perceived significance of parental involvement to these stakeholders. In a related response, a third trend revealed that a small number of parent and student respondents felt that the way parents impacted the success of student involvement was by providing valuable career, company and department information to the student prior to the experience.

Analysis of Business Cohort 2

In general, the stakeholders in this cohort felt that parental involvement had little to no impact on the success of students or businesses involved in STW. Here, the common sentiment was that students along with their business host determined the success of the experience. This is illustrated in the following comments:

As far as the parents' involvement with us, I would say no value. I would like to see that change, but right now, their value is very low to our efforts. I think that the parents should play a critical role in that effort, but there are various problems that we are faced with. For example, the economic level of some parents in the inner city with kids at a high school like Central, is low, and many can't or don't know how to be involved. One of our goals is to work on this (Mid-size business respondent).

She basically did it on her own. She is very self motivated. If she says she is going to do it, she is going to do it. Our impact was very little if at all. It is up to her and the school (Mid-size business parent respondent).

However, it should be noted that several students did indicate that the moral support and encouragement given by their parents affected how they viewed and approached their experience, and thus impacted the success of their STW experience, as noted in the following comment:

My parents encouraged me, and took me back and forth to my activity; I'd say that their support helped me get the most out of the shadow (Mid-size business student respondent).

Along these same lines, several parents felt that through their many conversations on careers with their children along with ensuing discussions, they had an impact on the success of their children's STW experiences. They felt that their

children internalized the conversations, and used advice and direction given to enhance their experience.

In summarizing this cohort group's responses, the business respondent and a very few student and parent respondents felt that parental involvement had little to no impact on the success of students or businesses involved in STW. In contrast to this viewpoint, a greater number of student and parent respondents indicated that the moral support and encouragement given by parents affected how students viewed and approached their experience. In addition, several parents felt that through their many conversations on careers with their children along with ensuing discussions, they had a profound impact on the success of their children's STW experiences.

Analysis of Business Cohort 3

In analyzing the data from business cohort three, themes emerged from the responses given by employer and parent respondents. Here, both of these stakeholder groups felt that parents impacted the success of students involved in STW through the teaching of good work ethics and values. This is seen through the following comments:

As far as the parents' involvement with us, I would say low. But as far as the parents training their child to prepare them for the job market... after college or if they don't go to college, the parent's involvement is very critical. They have a chance to set the agenda for that kids behavior. But in regard to the company, we don't have the relationship with the parent. The parent does their thing with the kid and we do ours. If the parent doesn't do their job, it's hard to find good kids that have the right attitude to move forward. Aptitude

is one side of the equation, and attitude is then other. Parents control the attitude by what they do and what they tell the kids. The parents are critical, but we don't have direct contact with the parents (Small business respondent).

As parents, we provided exposure, and provided him with our expectations while at the same time being a role model. Both my husband and I have our Master's Degree, and our kids know that we both sacrificed to go to school, so they are aware of our expectations for learning. We want them to take school seriously, and at this point not going to college is not an option. It's what we want them to do, and these types of experiences are all a part of their preparation (Small business parent respondent).

They also felt that these teachings directed student behavior at the worksite, and helped them to become more amenable to the teaching and information provided by employees.

Other themes that emerged from the parent and student stakeholder groups revealed that moral support and encouragement given by parents helped students to establish an important foundation for learning. This is illustrated in the following response:

My mother knows that I am going to graduate soon, and wanted me to start thinking about what I'm going to do next. She encouraged me to explore my interest areas, and offered support by to the owner one day about letting me tour. She let me set it up (Small business student respondent).

Along these same lines, several parent respondents felt that the role modeling, guidance and follow-up given to their children around careers and career development had a positive impact on the success of students and businesses involvement in STW.

In summarizing the data from this cohort group, the business respondent felt strongly about the power and positive impact that parents had on the success of their

children's STW experience through the teaching of good work ethics and values. Moreover, parent and student stakeholder groups in this cohort group revealed that moral support and encouragement given by parents helped students to establish an important foundation for learning. Role modeling, guidance and follow-up given to children around careers and career development were felt to have a positive impact on the success of students and businesses involvement in STW.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This study was undertaken to examine the similarities and differences in benefits derived from involvement in school-to-work activities by employers, students and parents when used as a workforce development strategy. The literature reviewed in Chapter II showed that many U.S. corporations and businesses are facing a skills shortage in their industries, and are compelled to enact new and different strategies to develop their workforces (American Management Association, 2000). Specifically, the literature showed that involvement in STW initiatives with high school students as a way to engage, develop and attract young talent was seen as an viable course of action by many businesses seeking to radically address their workforce development needs during a time when technology permeates so many facets of their business operations.

The literature also revealed benefits to the academic achievement of students involved in work-based learning (WBL) activities prevalent in STW (National School-to-Work Office, 1997), and showed that parental influence on the educational achievement of their children when preparing them for the workforce engenders student success in the workforce (Csikszentmihalyi and Schneider, 2000). Using the findings from the six research questions that were identified in Chapter I, this study

documented similarities and differences in STW benefits from the perspectives of the three stakeholder groups involved.

Conclusions

This section describes the study's conclusions derived from the six research questions identified in Chapter I. The conclusions are organized under six main headings with an analysis of the findings presented by stakeholder group and business cohort group. The main headings are as follows: (1) The effectiveness of STW activities in addressing the workforce development needs of companies; (2) STW activities of greatest benefit to workforce development efforts; (3) Hindrances to employer involvement in STW (4) Why stakeholders view some STW activities as being more beneficial than others; (5) STW benefits to students, and; (6) Parental impact on successful student involvement in STW.

The Effectiveness of STW Activities in Addressing the Workforce Development

Needs of Companies

The current study shows that the large and mid-sized companies saw benefits through their participation in STW through recruitment of talented employees to fields and careers important to the company's success. The study also showed that involvement by these businesses in STW activities with high school students were an effective and promising way to address future workforce development needs, and

pointed to the use of these activities as a long-term strategy aimed at increasing competitiveness and skill levels of future workers. These benefits identified by the businesses were supported through findings in the literature on identified benefits to business participation in STW (Wills, 1998).

In the case of the small business, STW was not seen as a viable means to effectively address their workforce development needs. Instead, it was viewed mostly as a philanthropic effort aimed at helping poor and minority high school students in the surrounding communities, while indirectly developing them for broader opportunities in industry. Bailey, Hughes and Barr (1998) noted that this approach was one of the three main reasons for employer involvement in STW.

The differences in focus between the large and mid-sized employers, and the small employer is not only related to the size of the business operation, but is also related to a personal connection to and identification of the needs in the minority community, and the difference in resource needs of the smaller employer. While the large and mid-sized companies face similar kinds of workforce needs to address growth and competition, the small business seeks to rely on other more individualized approaches to workforce development. In doing so, more emphasis is placed on STW as a way to enhance community and youth development. It should be noted that a possible intervening variable in this study is the minority ownership of the small business, and the great sensitivity and appreciation placed on the issues encountered by minority youth.

This study also found that students and their parents overwhelmingly saw STW as an effective means in developing the workforce of businesses, regardless of their size. This attitude coincides with research findings described in Chapter II that showed a strong relationship between student performance in high school and future labor market outcomes (Bishop, Blakemore and Low, 1985; Crawford, Johnson and Summers, 1995; Griffin and Alexander, 1978; Meyer and Wise, 1982).

When analyzed by cohort group, the results from Business Cohort Groups 1 and 2 coincided with aforementioned results of individual stakeholders. This showed that the effectiveness of STW in addressing the workforce development needs of businesses was seen through its ability to attract students to industry, while helping them to identify and clarify their career goals. Only Business Cohort Group 3 reflected differing opinions between the business respondent and the student and parent respondents. As was noted earlier, this difference appears to arise from the fact that the small business owner must develop the workforce differently from the mid-sized and large sized business counterparts.

STW Activities of Greatest Benefit to Workforce Development Efforts

Responses to this question revealed some variation between all three-stakeholders groups. First, the large and mid-sized employers could not identify any single STW activity that was seen as being more beneficial to their workforce development efforts than others. Their responses appear to reflect an angst resulting

from an attempt to narrow down the “most beneficial” STW activity and generalize it to organizational needs when they are attempting to fulfill complex workforce development goals. With multiple types of benefits derived from various STW activities, this research showed that the large and mid-sized companies put a great deal of emphasis on selecting the activities that they participated in, and even then, only participated in activities that they felt yielded reasonable returns to the companies in some way. The research also revealed that most of the STW activities engaged in by these two companies for high school students were similar. They included the following: (1) Work place tours for students (2) Internships (3) Job Shadowing (4) Mentoring (5) Cooperative Education. Diagram 3 illustrates the potential benefits to large and mid-sized companies from their participation in certain types of STW activities. Many of the benefits identified by these two companies were cited in the literature (Wills, 1998; Bishop, Blakemore and Low, 1985; Crawford, Johnson and Summers, 1995; Griffin and Alexander, 1978; Meyer and Wise, 1982; Bassi, Feeley, Hillmeyer and Ludwig, 1997).

On the other hand, the small sized company deviated from this perspective. In this instance, workplace tours, job shadowing and some lectures were seen as the most beneficial STW activities to engage in. This response indicated that the small sized business with an operation that is much lesser in scope has different workforce development goals, objectives and needs. It is apparent that their STW involvement was tailored to best complement the organization’s more philanthropically orientated goals. Moreover, the activities selected as being most beneficial to this company’s

workforce development efforts was formulated around a way to engage a maximum number of students with a minimal expenditure in resources. This altruistic motivation was supported in the literature (Bailey, Hughes and Barr, 1998), although these types of actions are primarily associated with big companies.

Analysis of the data also revealed that students had a difficult time identifying STW activities that they thought would be most beneficial to workforce development efforts. In general, students were reluctant in responding to this question because of their limited experiences in STW participation. Although these students were typically excited about their experiences, many did not feel that they had enough information needed to compare experiences and make an informed decision. This illustrates the need by the large company to increase their marketing and education of STW opportunities to students, schools and parents.

For parents, most did not respond to this question. The data revealed that although the majority of parents were knowledgeable of workforce development needs of companies through their backgrounds and experiences, most were not attuned to the depth and connectedness of STW experiences offered to their children. Moreover, most parents were not sure how the STW experiences of their children coincided with workforce development needs of businesses, which may show a disconnect between school related activities and workforce development. A slight exception to this was with a small number of parents mostly associated with the small business that agreed with the small business respondent on the most beneficial STW

activities. However, the opinion of these parents seemed to have been shaped through the personal and collegial relationship forged with the leadership of the organization.

When viewing the data by business cohort group, business and student respondents from the first business cohort group had compatible perspectives on this question. With the business purporting benefits from all activities that promote futuristic thinking to their workforce goals and needs, and students leaning toward activities that help with visualization of careers, some commonality in perspectives was found. It appears that some of this alignment may result from the fact that activities supporting futuristic thinking sought by the employer coincides with the “out of the box” thinking of many students in this business cohort. It also appears that many of the students in this business cohort had career interests in fields requiring proficiency in math and science. This may be a result of the attraction to this large corporation, the assertiveness of competitive schools to get their students involved with this corporation, or the type of experiences available. In any event, this is an area that warrants further investigation.

Data in Business Cohort Group 2 revealed non-responses by student and parent stakeholders to this question. As was the case with the previous business cohort group, students generally felt that their lack of multiple STW experiences prevented them from providing an effective comparison and in identifying the most beneficial experience. Likewise, parents typically felt that they were not informed

enough on the types of STW activities offered to students to give valuable input. As was noted above, this illustrates the need by the mid-sized company to increase their marketing and education of STW opportunities to students, schools and parents.

Finally, an analysis of Business Cohort Group 3 showed that both business and parent stakeholders agreed that job shadows and workplace tours are the most beneficial STW activities in that these activities are designed to get greater number of students involved and exposed to work environments. These activities were seen as being most beneficial to workforce development efforts. The business and parent respondents felt that exposure to the business through the aforementioned STW activities would expose students to role modeling and work ethics that would help the student and eventually the field. The alignment in thought by the business and parent stakeholders seems to be representative of a set of shared educational values and ideals. In a smaller more informal environment, creating symmetry in philosophies and goals appear to be more attainable.

Hindrances to Employer Involvement in STW

The data showed that while employers identified the majority of hindrances to involvement in STW, students and parents had a difficult time identifying many. From the perspective of students and parents, it is clear that they were pleased with the process and the outcome resulting from STW involvement with the host businesses. It is also obvious that as a result of their positive experience, no issues or

hindrances that would impede future business involvement were perceived. Student and parent perceptions seems to be the results of a high level of organization, preparation and communication carried out by the host businesses, which allowed for a successful STW experience. This degree of preparation not only illustrates the level of professionalism put forth by these organizations, but is also reflective of their commitment to use STW as a workforce development strategy.

On the other hand, identified hindrances manifested themselves through the large and small businesses in the employer stakeholder group, where issues concerning safety and liability were revealed. Here, the fact that these two organizations maintained such a high degree of vigilance on student behavior, movement and involvement in certain areas highlighted the degree of internal and external oversight and monitoring that occurs. This magnified the ever-present reality that a balance with involvement in this initiative with high school students must be maintained to avoid physical injuries and legal issues to the company (Stern, 1995).

A shared hindrance identified by the large and mid-sized businesses centered around a growing need to allocate various types of resources to this initiative, especially as it grows in popularity. It is clear that as students increasingly have successful STW experiences, and reap benefits from its involvement, the volume and complexity of requests will rise substantially. The fact that the large and mid-sized businesses are concerned about the potential increase in students illustrates their level of forward thinking and need for preparation. It also brings to light the challenge of

identifying how much to invest in such an initiative in order to yield an acceptable return.

Finally, student behavior identified as a hindrance for the large and small business seems to be an issue for somewhat different reasons. From the large business perspective, disruptive or disinterested students contribute to a waste in human and other resources. Efficiency and productiveness is strived for, even with activities involving students. With the mid-sized business, students that pose behavioral problems or who are uninterested, automatically screen themselves out of being potential contributors to the company's future workforce. With the small business, disruptive or uninterested students may be tolerated a bit more, but eventually prove to be a hindrance to the altruistic goals of the organization, which is to engage, interest and motivate poor and minority students in hopes of helping them to develop loftier career goals.

Data from Business Cohort Group 1 indicated that the employer identified safety issues, student apathy and allocation of resources as a primary hindrance. Student and parent respondents in this cohort group could not identify any hindrances.

Business Cohort Group 2 showed some variation in their responses to this question. The business respondent indicated that although they are totally committed to STW efforts, employee availability for support of such activities and the level of

business of the company could offer potential hindrances. In contrast, most student and parent stakeholders did not identify any hindrances.

An analysis of data from Business Cohort 3 showed that concerns over student safety were paramount while parents varied in their responses of wanting their children to have more hands on experiences and having experiences that were not offered at the company. Students in this business cohort group identified no hindrances.

Why Stakeholders View Some STW Activities

As Being More Beneficial Than Other

Large and mid-sized business respondents shared similar views on this question. As was noted earlier, these two companies could not single out any one activity as being more beneficial than others, however, they felt that engaging high school students and capturing their interest in the company and in high demand careers at the company was a very important attribute of STW. By doing so, these companies increased their chances of identifying, grooming and possibly recruiting talented students as they progressed through their academic careers. This long-term labor recruitment strategy was identified by (Wills, 1998) who saw it as a benefit to companies drawn to STW primarily out of an individual corporate motivation.

The small business on the other hand, clearly identified tours, lectures and job shadows as the most beneficial STW activities. Here, it was felt that these activities allowed for greater access to large numbers of students, giving the small business leader more opportunities to connect with and impact the lives of students. This premeditated effort to connect with a particular population of high school students illustrates the altruistic nature of this employer's intentions, and coincides with identified employer motivations as documented by Bailey, Hughes and Barr (1998). However, it should be noted that this type of motivation for involvement in STW is atypical for a small business. As pointed out in the literature, research shows that generally large companies saw STW as a way of performing valuable community service (Bailey, Hughes and Barr, 1998).

With student respondents, two discernable trends to this question emerged from students with experiences at the large and small businesses. Here, students from the large business felt that STW activities such as internships and the Grand Rapids Pre-college Engineering Program (GRAPCEP) were the most beneficial because of the insight that they offer to promising high paying careers in engineering and technology. Several of these students had previous STW experiences, and the data seems to indicate that for the most part, many of these students have clarified their career goals, and appeared to be focused on the sector of the job market that they wanted to go into. Furthermore, the data revealed that these students tended to have more advanced skills in math and science.

The data suggested that students with experiences at the mid-sized business tended to turn to and rely upon the wisdom afforded to them from parents, other influential adults in their lives, and in some cases, previous STW experiences. Although involved in some of the same types of activities as were students from the large business (i.e. tours, job shadows, internships, GRAPCEP), the data indicated that students involved in experiences at the mid-sized business were a bit less assertive and autonomous in thoughts about their careers.

The only real trend from the students at the small business was their non-reply to this question. In large part this seemed to be resulting from a lack of previous STW experiences to draw on, and a general absence in previous education on careers and career development.

In summary, for reasons that may be related to levels of parent education and levels of student achievement, it appeared that the students from the large company were very focused on specific career areas, and looked at how STW experiences matched up with their talents to determine the most valuable activities to participate in. Moreover, these students incorporated economic outlook and opportunities into their decisions around valuable STW activities. On the other hand, students from the mid-sized companies seemed to rely on a combination of knowledge from previous experiences and parental/relative guidance when determining which STW activities were most valuable. Finally, students from the small company seemed rely totally on outside guidance when determining the most valuable STW experiences.

From the perspective of the Business Cohort Groups, cohort group 1 indicated that the employer used multiple factors when determining which STW activities were beneficial to the company's workforce development efforts. Even so, no specific activity was singled out. Students tended to point to activities that exposed them to high paying careers. Parents tended not to respond to this question.

In Business Cohort Group 2, the level of student and employee interest and involvement was taken into account as the business identified the level of support given to various activities. On the other hand, a large number of students identified experiences that were built off of previous experiences as being most beneficial, and parent respondents generally saw activities with hands on experiences as being most important.

In Business Cohort Group 3, the business and parent respondents saw activities that could accommodate and educate the largest number of students as being most beneficial while students generally had no opinion on this question.

STW Benefits to Students

From the stakeholder perspective, the data revealed that all three-stakeholder groups felt that STW activities benefited students by provided them with broad exposure to careers while in high school. The stakeholders also felt that that during the important period in the lives of young adults where students were maturing, and where career decision were being made, experiences at a businesses offered students

opportunities to identify and clarify career goals. Apparently, the exposure to knowledge, skills and attitudes necessary to be successful as a 21st Century employee helped develop students, while providing them with exposure to various career opportunities at the companies. Moreover, the benefit of learning basic employment foundational skills gained by students helped prepare many for expectations in the work world. These identified benefits are well documented in the literature (National alliance of Business, 1999; Pauly, Kopp and Haimson, 1995). What's more, the data indicated that some students became more aware of the importance of their high school studies, which in some cases led to the adjustment of some classes in preparation for post secondary learning in a field or specified career area. This benefit was also identified in the literature (National alliance of Business, 1999).

In analyzing the data by business cohort group, themes from cohort groups 1 and 2 revealed that the overwhelming benefit to students was exposure to multiple careers, which aided students in defining and refining career choices. Benefits to students also presented themselves through increased employment opportunities in the future at the host businesses, particularly for those students who demonstrated sought after qualities and skills. The data from Business Cohort Group 3 coincided with the themes from the other two cohort groups, but emphasized the benefit of learned employment skills gained by students participating in STW at that business. In all, well-conducted STW experiences appeared to be a win/win for students and their business hosts.

Parental Impact on Successful Student Involvement In STW.

The data from the large and mid-sized business respondents indicated that parental involvement did not impact the success of a student's STW experience. In these instances, the two employers viewed students as young adults who should take on self-responsibility for their learning and their behavior. They felt that the direct student/employer relationship had more of an affect on the success or non-success of the experience than did any other factor. This notion coincided with the philosophy of these employers, who felt that employees play an active role in becoming successful at work.

To the contrary, the small business respondent felt that parents had a tremendous impact on the success of a student's STW involvement. This perspective arises from the philosophy that parents have a tremendous impact on the success or non-success of their children's learning, and that they are crucial in the teaching and reinforcement of key values and work ethics critical to successful entry into the workforce. This view was supported in the literature through a landmark report by James S. Coleman to the U.S. Office of Education (1966) which found that academic achievement was related to financial means and family background which impacted the student in the early school years, and that there was a greater disparity between the academic differences between whites and blacks as a result. This view appears to reflect the sentiments of the small employer not only because of the sense of altruism and giving back to the community (Bailey, Hughes and Barr, 1998), but also because

of the adopted management style, which is more collegial and personal in nature (Bennis & Nanus, 1985).

Some of the student responses (mostly those from the large business) concurred with the employer results, which indicated that parents do not have an impact on student success in STW involvement, while an almost equal number felt that parents did have an impact through moral support and encouragement given. These two opposing views seem to represent a dichotomy in student thought, where some students outwardly acknowledged the importance of parental guidance and support when getting involved in career related learning. On the other hand, others were more independent and autonomous, and viewed parental involvement as being negligible when compared to the efforts that they put forth. It is clear that these dichotomous viewpoints are influenced by other variables such as student personality, parenting styles, student demographics and career path to name a few. More detailed study is needed to clarify the intervening variables to this question.

In general, parents felt that they played an important role in their children's successful involvement in STW activities, no matter the size of the company. They felt, to a large degree, that moral support and encouragement given to students increased their sense of confidence, direction and commitment to the experience. These parents appeared to have a more "hands on" involvement with their children, and tended to be more involved in guided their children through key aspects of decision making around career choices. Moreover, it was quite evident that many of

these parents felt that teaching listening and directly communicating with their children on their career aspirations and affiliated experiences was an essential to STW success. It should be noted that this study did not explore the demographics of these parents nor did it determine if this family approach had a different impact on student success than did other approaches.

Analysis of the data by business cohort group showed many similarities to the data analyzed by stakeholder group with a few exceptions. In Business Cohort Group 1, the majority of student respondents concurred with the business respondent and indicated that parents had very little to no impact on the success of their STW experience. In looking at these results, it appears that the students interviewed for this study for the large corporation possessed many of the attributes sought out by the company (i.e. a certain level of maturity). It also appears that these students did not factor parents into the equation other than to give permission for participation. It is not clear from this research how these students were selected for participation with the large corporation.

The findings from Business Cohort Group 2 revealed that although the business respondent felt that parents had no impact in the success of their children's STW experience, the majority of student and parent respondents in this cohort group felt that parents provided moral support, encouragement and guidance that were deemed critical to the success of the student experience. As supported by the literature (Shapiro and Iannozzi, 1998; Henderson and Burla, 1994) students and

parents saw a greater impact stemming from a direct interest and involvement in the career interest and preparation of the student.

The responses from Business Cohort Group 3 revealed that all three-stakeholder groups felt that parents impacted the success of students involved in STW through their teaching of good work ethics and values. Themes clearly indicated that parents provided an important element to student success through moral support, guidance and encouragement. This strong feeling is accented by the employer's insistence that parental involvement is germane to student success and achievement in post high school endeavors, and is supported by the literature (Shapiro and Iannozzi, 1998; Henderson and Burla, 1994). The fact that there is such widespread consensus on this question by all three-stakeholder groups would strongly point to a collegial culture in the small company enabling similar work values to flourish.

Implications

This research suggests that the following issues be addressed or further explored when employers work with high school students around STW as a workforce development strategy. First, when determining the effectiveness of STW in addressing workforce development needs, small businesses need to take factors such as competition from larger businesses into account as they seek involvement from students. Small businesses may also look at building a greater pool of qualified workers in the industry as a long-term workforce development strategy. Secondly, a

more detailed analysis of the benefits of each STW activities should be done, with particular attention paid to activity by grade level with analyses of visual, audio and contextual learning. A third implication is that issues or situations that hinder the involvement of businesses should be made clear to students, parents, schools and other entities that support student involvement in STW. A fourth implication is that businesses add research on audio, visual and contextual learning of students to feedback gathered internally when determining the most beneficial STW activities. Moreover, an increased effort should be put forth by businesses to educate their employees on future labor market outcomes and the need for career development of their children, and career development opportunities in the company. A fifth implication is that companies seek to involve a broader cross section of students in STW to in order to reap a greater wealth of benefits that a more diverse group can offer. Furthermore, specific initiatives for students of color, low-income students, and students in elementary and middle school should be explored as a way to increase student diversity, and establish the connectivity between academics and the work world. To this end, work with high school administrators, parent groups and community groups to name a few on curriculum development and learning initiatives should occur. Finally, there is an implication that businesses should devise an approach aimed at increasing information flow to and from parents in order to gain the maximum benefit of parental impact/influence in the preparation of their children for the future workforce.

Limitations and Recommendations of the Study

The data from this study revealed a number of areas where there is an opportunity for improvement to the way STW activities are offered, managed and measured at various sized businesses. Moreover, although the sampling for this study was taken solely from the manufacturing sector, it is felt that the findings can be generalized to other business sectors. In that this study can be seen as one in a number of information-gathering processes, a series of recommendations developed from the data analysis are listed below:

Representative Sampling

The student samples for this study were gathered from participating businesses, and were based on participation in STW activities at those companies. However, it was recognized that most of the 26 school districts in the Kent Intermediate School District were not represented. Furthermore, the students involved in this study were selected based on participation in STW activities at three prescribed companies. In that certain demographic criteria were not a part of the student selection process, representative samples by race, gender and ethnicity were not maintained. Moreover, other intervening variables such as school district support of STW, levels of implementation of STW and mandatory versus voluntary involvement were not controlled for. Nonetheless, based on the sample of students, it is felt that the data represents a cross-section of student beliefs.

It is not clear what if any impact these demographic variables would have on the findings, however differences in school size and location (e.g. urban, suburban, rural) create a possibility of painting a different picture with the data and thus the results. Therefore, for future studies, this issue could be address by building a representative sampling scheme into the research design that would account for demographic and socioeconomic variables not addressed in the current study.

In that parents were automatically selected with a participating student as a part of a paired sample, any changes to accomplish a more representative student sample would also have to include the parents.

In collecting data from the business sector, a representative from a large (1000 or more employees), mid-sized (250 – 499 employees) and small (50 – 99 employees) manufacturer of furniture, or a related industry, was used as the business sample. The manufacturers selected for this study, although a cross section of the furniture industry, may or may not be representative of thoughts and beliefs of leaders in other industries. Therefore, the generalizability of the results to other industry sectors may be questioned. However, the study does show that the results may have some utility to the furniture industry in general, and possibly other manufacturing organizations in that the principles and goals of competitive world class businesses are fairly universal.

Moreover, in reviewing the data, it was identified that various sub-groups were not proportionately represented in the survey, which may not provide a full

picture. With employers, these sub-groups include a broader range of employees from different levels of the companies studied. This is especially important in the companies that involve various workers in giving input around the value of STW activities, as well as those employees who participate in the hosting of the activities. To address this, it is recommended that the following occur:

1. Conduct a follow-up survey using stratified sampling to ensure statistical representation from all groups. That data can then be used in conjunction with the data already collected to provide a much broader picture.
2. Hold a series of focus groups to collect data from targeted groups that were underrepresented in the survey. Likewise, that information can also be used in conjunction with the existing data to form a more detailed picture.

Connect Areas of Congruence In Achieving Stakeholder Goals

In that the stakeholder questionnaires allowed for collection of information on various types of STW experiences, the study did not allow for the exploration of the relationship between the type of STW activity and student success. To do this, it is suggested that a research design be set up to identify benefits of STW by activity and by company size. However, the data did reveal that although there were various differences in stakeholder goals for involvement in STW activities, similarities in some goals by stakeholders was identified. Most predominant in this area was the identified benefits to career development goals of high school students, and to the

ability of increasing the pool of skilled employees needed for high demand jobs. In order to better connect congruence of stakeholder goals, it is recommended that businesses provide leadership in the following ways:

- Determine key elements and processes needed in the construction and actuation of a cross-functional system, whereby career development needs of students and workforce development needs of businesses can be met through multiple departments and in diverse industries.
- Develop feedback loops that enable information flow on the effectiveness of activities, approaches and strategies that can be shared inter-organizationally as well as intra-industry wide. This would include the promotion of corporate benefits obtained by combining some efforts along with the creation of cross-functional systems.
- Develop an information sharing platform or network that will enable key stakeholder groups to engage one another, and share information germane to the building of better and more comprehensive STW experiences. This would include the building of a business led communications vehicle to stakeholder groups. The fact that a significant number of parents and a large number of students were not aware of the prolific and long-term benefits of STW is indicative of a significant void in knowledge of STW, and how important it is in tying together parent goals for their children's success, and educator's goals for developing and preparing students for careers and the workforce.

Measurement of Soft Benefits

This research revealed that a number of respondents from all stakeholder groups reported benefits and increased levels of learning that resulted from their involvement in various STW activities. Furthermore, some anecdotal information indicated that employees benefited personally and professionally from mentoring activities through cathartic, and introspective experiences. Although difficult to measure, this type of learning may provide employees with an important avenue of continuous education and development that can ultimately benefit the company. Unfortunately, learning of this nature does not appear to be consistently harnessed, processed and disseminated to individuals and/or groups within companies. Consequently, benefits from this knowledge are not fully taken advantage of by departments across organizations. Therefore, it is recommended that the following occur:

- The development of a process by business leaders aimed at identifying and measuring “soft benefits” for organizational leaders, educators, students and parents. This should be done through periodic attitudinal surveys or brief questionnaires aimed at garnering information on stakeholder benefits. Factors relating to employee performance, job satisfaction and involvement in certain types of education related activities such as tours, job shadows and internships should be studied. Moreover, to measure the effect of soft benefits on employee productivity, identified benefits should be incorporated into

existing training processes and training for impact models (Brinkerhoof & Apking, 2001) where this knowledge is converted into defined training goals with measurable outcomes.

- Business leaders feed data back to designated committees or subcommittee within the organizations to aid in knowledge and information dissemination, and to assess how the information translates into the enhancement of skills, knowledge and attitude of employees.
- Business leaders review the relationship between cathartic experiences and enhanced work performance gained from STW involvement, and the connection to modern business and motivational theories such as those postulated in Theory Z by Ouchi (1993).

Influence of Organizational Culture

With youth being particularly impressionable, the culture of an organization can affect the perceptions of students involved with that organization, even if just for a brief period. As noted by Yukl (1994), “The underlying beliefs representing the culture of a group or organization are learned responses to problems of survival in an external environment and problems of internal integration (p.355).” To a degree, such learned responses by students could be influenced and shaped by responsible business organizations in the process of changing and shaping various practices and

processes in preparation for future challenges. Therefore, although there does appear to be various workforce development benefits to businesses involved in STW, there also appears to be an opportunity for businesses to positively influence impressionable high school students.

Research The Educational Divide Between Minorities, Low Income Students

And Their White Counterparts

Based on the results of the current study, anecdotal information suggests that a disparity exists between the amount and type of previous STW experiences of white students and students of color. Moreover, the data indicated that parental income might also relate to the amount and type of previous STW experiences. Therefore, further study of an empirical nature will be necessary to determine if one group has more overall STW exposure, and if so, if there is a connection to academic performance, future workforce preparedness, and increased skills as a result.

Establish a Uniform Screening Process For High School Students Involved in

STW

The current study indicated that high school students participated in STW experiences through various screening processes. Moreover, the current study revealed that a small number of students participated in STW activities without a

discernable amount of intrinsic motivation. Hence, not only was there the possibility that needy and deserving students were not afforded opportunities, but that some non-motivated students and students who would not benefit from some experiences (possibly because of advanced skills) would fruitlessly take part. Therefore, in order to increase the likelihood that all students will be prepared to absorb, comprehend and synthesize the information presented to them by staff, it is recommended that employers develop clear and uniform goals and objectives for various types of STW activities. This should be done in the following way:

1. Create a standard screening process agreed upon by those in the business community that provides educators, students, parents and staff with criteria for student involvement in work-based learning experiences at businesses. These criteria would act as a guide for all parties involved, and would require students to come prepared for a quality learning experience. It is recommended that the criteria be grade appropriate and tailored to various types of STW experiences.

Key components of the screening process should include the following:

- a. A commitment from the school leadership to prepare students for involvement in all activities at the business to include behavior, appearance, and expectations for learning and follow-up.
- b. A student interview, the joint development of a learning plan (student, teacher and employer), review of performance expectations, and a

review of evaluation criteria for higher-level activities (e.g. internships).

- c. Set standards for grade level involvement or successive involvement in education related activities.

2. Parameters for the adequate preparation and debriefing of students.

3. The development of a continuum of 9th -12th grade activities that are sequenced, and that build upon one another. These experiences should be progressively more rigorous while offering the student increased opportunities to gain more knowledge about a career or given occupation. Moreover, the host business should establish a mechanism to:

- a. Track student involvement along with their career interest areas.
- b. Identify levels of student skill, knowledge and attitude throughout their involvement in the continuum of activities.
- c. Connect student involvement from 9th -12th grade to post-secondary learning activities (e.g. college internships, apprenticeships, recruiting efforts).

Parental Involvement

The current study shows that a large number of parents, some students and one business respondent felt that parents play a significant role in the success of the STW experience of students. Although the research showed this point to be contested by many other respondents, to have a large group of respondents (mostly parents) feeling that parental contributions make a difference is seen as significant. Moreover, the literature shows that parental involvement with their children's education result in increased student achievement (Henderson and Burla, 1994), and that parental expectations are crucial in helping teenagers learn work skills that are important in preparing them for the future (Csikszentmihalyi and Schneider, 2000). With this potential impact by parents on successful STW outcomes of their children, the following recommendations are put forth:

1. Businesses develop systems and processes to engage parents in order to increase parent/business communication around STW. This can be done in settings such as forums with parent groups, schools and community groups.
2. Businesses establish and/or further develop relationships with those parents who work for them, and provide opportunities for their involvement in STW. An example of this involvement is parents as internal resources to build and strengthen a parent network and maximize the use of employees who are invested

and interested in the future of their children. By cultivating from within the company, an opportunity exists to grow, cultivate and groom kids from within.

With the ushering in of the new millennium bringing with it new and varied challenges for the U.S. businesses workforce, this study on STW provides important considerations for a promising and emerging workforce development strategy. Moreover, insights gained from world-class businesses representing the manufacturing sector, one of the most powerful drivers in the U.S. economy, is significant and potentially far-reaching.

The timeliness of this study along with its recommendations comes at a point in our history when the forces surrounding the globalization of businesses and the metamorphoses of K-12 education are joining together around parallel goals. To this end, the *Examination of the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy* offers tangible and beneficial information to those in leadership positions in business organizations, and to educators, teachers, and students as they all confront the new challenges created by a shortage of highly skilled employees.

APPENDICES

APPENDIX A

Protocol Clearance From The Human Subjects Institutional Review Board

Human Subjects Institutional Review Board

Kalamazoo, Michigan 49006-5456
616 387-8293

WESTERN MICHIGAN UNIVERSITY

Date: 4 September 2001

To: Charles Warfield, Principal Investigator
Alton Leon Alford, Student Investigator dissertationFrom: Mary Lagerwey, Chair *Mary Lagerwey*

Re: HSIRB Project Number: 01-08-07

This letter will serve as confirmation that your research project entitled "Examining the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy: A Study of Key Stakeholder Involvement Using a Multiple Case Study Approach" has been **approved** under the **expedited** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may **only** conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 4 September 2002

APPENDIX B

Business Involvement In STW Protocol and Survey

BUSINESS INVOLVEMENT IN STW*Survey***Business Involvement In STW Survey**

DEVELOPED BY A. LEON ALFORD
DOCTORAL CANDIDATE
HUMAN RESOURCE DEVELOPMENT
WESTERN MICHIGAN UNIVERSITY

Business Involvement In STW

Hello. My name is A. Leon Alford, and I am a doctoral student at Western Michigan University. I am conducting a survey to examine the similarities and differences in benefits of school-to-work initiatives used as a workforce development strategy from the perspective of employers, students and parents in Western Michigan. The results from the survey will shed light on the intricate relationship between these three groups, and will provide insight to employers, students, parents and educators as they address key workforce issues germane to the success and vitality of our future economy.

Following is a list of questions requesting your response. If the requested information is not available or would be difficult to obtain, please provide me with your best estimate.

The survey is divided into the following 3 sections:

Department Characteristics, School-to-Work Activities and Workforce Development. Please indicate N/A after questions that **do not** relate to you or your department's functions? Lets begin.

I. Department Characteristics

Question 1

What is your official title or position in the company?

Question 2

What is your department's principle function?

Question 3

How does your position or function impact the company's workforce development efforts?

Question 4

Please check the area that most closely describes your position.

VP _____

Director _____

Manager _____

Project Leader _____

Staff Position _____

Other _____

Question 5

How long have you been in your current position?

a. Less than two years _____

b. 3-5 years _____

c. More than 5 years _____



II School-to-Work Activities

I would now like to ask you some questions about school-to-work activities involving the use of high school students at [Company Name].

Question 6

School-to-work partnerships include work-based learning activities for high school students, which involves actual work experience that connects classroom learning to work.

Question 6a

Describe your company's goals around H.S. student involvement in STW.

Question 7

Has your department participated in any such school-to-work partnerships between Sept. 30, 1999 and June 30, 2001?

<Yes> ☐

<No> ☐

Question 8

Which of the following activities has your department participated in between Sept. 30, 1999 and June 30, 2001?

Question 8a

Job shadowing [Read if necessary: *Where a high school student usually follows an employee for a half-day or more*

to learn about a particular occupation or industry.]

<Yes> ☐

<No> ☐ [go to question 8a.7]

Question 8a.1

How many students participated in Job Shadows between Sept. 30, 1999 and June 30, 2001?

Question 8a.2

Were Job Shadows beneficial to workforce development efforts at [Company Name]?

<Yes> ☐

<No> ☐

Question 8a.3

Please explain?

Question 8a.4

Were parents helpful in any aspect of the job shadow experience?

<Yes> ☐

<No> ☐

Question 8a.5

If yes, please explain how?

Question 8a.6

What were the unexpected outcomes from participation in Job Shadows?



Question 8a.7

Please list actual or perceived barriers to involvement in Job Shadows.

Question 8b

Mentoring [Read if necessary: *Where an employee is assigned to guide a high school student and serve as liaison with the school on behalf of the student and [Company Name].*

<Yes> _____

<No> _____ [go to question 8b.7]

Question 8b.1

How many students were mentored between Sept. 30, 1999 and June 30, 2001?

Question 8b.2

Was Mentoring beneficial to workforce development efforts at [Company Name]?

<Yes> _____

<No> _____

Question 8b.3

Please explain?

Question 8b.4

Were parents helpful in any aspect of the Mentoring experience?

<Yes> _____

<No> _____

Question 8b.5

If yes, please explain how?

Question 8b.6

What are the unexpected outcomes from participation in Mentoring programs?

Question 8b.7

Please list actual or perceived barriers to involvement in Mentoring.

Question 8c

Internships [Read if necessary: *Where for a specified period of time high school students' work for an employer to learn about a particular occupation or industry. This may or may not include financial compensation.*]

<Yes> _____

<No> _____ [go to question 8c.7]

Question 8c.1

How many students participated in Internships between Sept. 30, 1999 and June 30, 2001?

Question 8c.2

Were Internships beneficial to workforce development efforts at [Company Name]?

<Yes> _____

<No> _____

Question 8c.3
Please explain?

Question 8c.4
Were parents helpful in any aspect of the Internship experience?
<Yes> ☐
<No> ☐

Question 8c.5
If yes, please explain how?

Question 8c.6
What were the unexpected outcomes from participation in Internships?

Question 8c.7
Please list actual or perceived barriers to involvement in Internships.

Question 8d
Cooperative Education [Read if necessary: *A method of instruction whereby high school students alternate or coordinate their academic and vocational studies with a paid or unpaid job in a related field.*]
<Yes> ☐
<No> ☐ [go to question 8d.7]

Question 8d.1
How many students participated in Cooperative Education between Sept. 30, 1999 and June 30, 2001?

Question 8d.2
Were Cooperative Education activities beneficial to workforce development efforts at [Company Name]?
<Yes> ☐
<No> ☐

Question 8d.3
Please explain?

Question 8d.4
Were parents helpful in any aspect of the Cooperative Education experience?
<Yes> ☐
<No> ☐

Question 8d.5
If yes, please explain how?

Question 8d.6
What were the unexpected outcomes from participation in Cooperative Education?



Question 8d.7

Please list actual or perceived barriers to involvement in Cooperative Education.

Question 8e

Registered Apprenticeships
[Read if necessary: Formal programs registered with the U.S. Department of Labor or with an approved state apprenticeship agency. Registered apprenticeships are usually paid work experiences]
 <Yes> ☐
 <No> ☐ [go to question 8e.7]

Question 8e.1

How many high school students participated in Registered Apprenticeships between Sept. 30, 1999 and June 30, 2001?

Question 8e.2

Were Registered Apprenticeships with high school students beneficial to workforce development efforts at [Company Name]?
 <Yes> ☐
 <No> ☐

Question 8e.3

Please explain?

Question 8e.4

Were parents of those students helpful in any aspect of the Registered Apprenticeship experience?

<Yes> ☐
 <No> ☐

Question 8e.5

If yes, please explain how?

Question 8e.6

What were the unexpected outcomes from participation in Registered Apprenticeships with high school students?

Question 8e.7

Please list actual or perceived barriers to involvement in Registered Apprenticeships with high school students.

Question 8f

Workplace Tours for students
[Read if necessary: Workplace Tours for high school student groups are designed to give students insight into the changing nature of an occupation or industry.]
 <Yes> ☐
 <No> ☐ [go to question 8f.7]

Question 8f.1

How many students participated in Workplace Tours between Sept. 30, 1999 and June 30, 2001?



Question 8f.2

Were Workplace Tours for students beneficial to workforce development efforts at [Company Name]?

<Yes> ____

<No> ____

Question 8f.3

Please explain?

Question 8f.4

Were parents helpful in any aspect of the student Workplace Tour experience?

<Yes> ____

<No> ____

Question 8f.5

If yes, please explain how?

Question 8f.6

What were the unexpected outcomes from participation in student Workplace Tours?

Question 8f.7

Please list actual or perceived barriers to involvement in Workplace Tours.

Question 8g

Career Fairs [Read if necessary: *Opportunities to showcase career opportunities to high school students.*]

<Yes> ____

<No> ____ [go to question 8h]

Question 8g.1

How many students participated in Career Fairs between Sept. 30, 1999 and June 30, 2001?

Question 8g.2

Were Career Fairs beneficial to workforce development efforts at [Company Name]?

<Yes> ____

<No> ____

Question 8g.3

Please explain?

Question 8g.4

Were parents helpful in any aspect of the Career Fairs experience?

<Yes> ____

<No> ____

Question 8g.5

If yes, please explain how?

Question 8g.6

What were the unexpected outcomes from participation in Career Fairs?



Question 8g.7

Please list actual or perceived barriers to involvement in Career Fairs.

Question 8h

List any other school-related activities that your department has been involved in.

III Workforce Development

I would now like to ask you some questions about workforce development activities at [Company Name].

Question 9

Is school-to-work a part your department's workforce development strategy?

<Yes> ____

<No> ____

Question 9a

If yes, please explain how?

Question 10

Is school-to-work a part of [Company Name] workforce development strategy?

<Yes> ____

<No> ____

Question 10a

Please explain.

Question 11

How many individuals have been hired into your department that has been involved in school-to-work activities between Sept. 30, 1999 and June 30, 2001?

Question 12

Based on your knowledge or experience, how would you rate the overall performance of high school students that have been involved in school-to-work activities?

Unacceptable ____

Barely acceptable ____

Adequate ____

More than adequate ____

Outstanding ____

Question 13

Since Sept. 30 1999, have the skills required to perform the following jobs at an acceptable level increased (I), decreased (D) or remained the same (S)? Write N/A for not applicable.

(a) Managers/Professionals ____

(b) Supervisors ____

(c) Technical/tech. support ____

(d) Office/clerical/sales/customer service ____

(e) Production ____



Question 14

Since Sept. 30 1999, has the proportion of individuals in the following jobs you consider to be fully proficient increased (I), decreased (D) or remained the same (S)? Write N/A for not applicable.

- (a) Managers/Professionals ____
- (b) Supervisors ____
- (c) Technical/tech. support ____
- (d) Office/clerical/sales/customer service ____
- (e) Production ____

Question 15

On a scale from 1-5, please rank the value of parents in helping you to recruit applicants after they complete high school:

- (1) No value (2) Some Value
- (3) Important (4) Very important
- (5) Essential

Write N/A for not applicable.

- (a) Managers/Professionals ____
- (b) Supervisors ____
- (c) Technical/tech. support ____
- (d) Office/clerical/sales/customer service ____
- (e) Production ____

Question 16

How do you think students benefit from school-to-work experiences at [Company Name]?

Question 17

Which school-to-work activities involving H.S. students do you feel are the most beneficial to [Company Name] and why?



APPENDIX C

Student Involvement In STW Protocol and Survey

STUDENT INVOLVEMENT IN STW
Survey

Student Involvement In STW Survey

DEVELOPED BY A. LEON ALFORD
DOCTORAL CANDIDATE
HUMAN RESOURCE DEVELOPMENT
WESTERN MICHIGAN UNIVERSITY

Student Involvement In STW

Hello. My name is A. Leon Alford, and I am a doctoral student at Western Michigan University. I am conducting a survey to examine the similarities and differences in benefits of school-to-work initiatives used as a workforce development strategy from the perspective of employers, students and parents in Western Michigan. The results from the survey will shed light on the intricate relationship between these three groups, and will provide insight to employers, students, parents and educators as they address key workforce issues germane to the success and vitality of our future economy.

Following is a survey with a list of questions requiring your response. If the requested information is not available or would be difficult to obtain, please provide me with your best estimate.

The survey will take 30-45 minutes to complete and is divided into the following 2 sections: *Student Characteristics and School-to-Work Activities*. Please indicate not applicable (N/A) after questions that **do not** relate to you or your experiences? Lets begin.

I. Student Characteristics

Question 1

How old are you?

Question 2

What grade are you currently in?

Question 3

What are your career goals?

Question 4

Please explain how you first decided on your career goals.

II School-to-Work Activities

I would now like to ask you some specific questions about the school-to-work activities that you were involved in.

School-to-work partnerships include work-based learning activities for high school students, which involves actual work experience that connects classroom learning to work [give examples if necessary].



Question 5

What do you know about the concept of STW?

Question 6

What grade were you in when you *first* participated in a work-based learning at experience of any kind?

Question 7

What grade were you in when you participated in your *last* work-based learning experience at [Name of company]?

Question 8

What motivated you to participate in a work-based learning activity at [Name of company]?

Question 9

What were your expectations before participating?

Question 10

Which of the following STW activities have you participated in at [Name of company]?

Question 10a

Job shadowing [Read if necessary: *Where a high school student usually follows an employee for a half-day or more to learn about a particular occupation or industry.*]

<Yes> ☐

<No> ☐ [go to question 10a.7]

Question 10a.1

When did you participate in a Job Shadow(s) with [Name of company]?

Question 10a.2

Was Job Shadowing beneficial to you in preparing you for your future career goals?

<Yes> ☐

<No> ☐

Question 10a.3

Please explain?

Question 10a.4

Were your parents helpful in any aspect of the Job Shadow experience?

<Yes> ☐

<No> ☐

Question 10a.5

Please explain?

Question 10a.6

What were the unexpected outcomes from your participation in Job Shadows?

Question 10a.7

Please list actual or perceived barriers to involvement in Job Shadows.

Question 10b

Mentoring [Read if necessary: *Where an employee is assigned to guide a high school student and serve as liaison with the school on behalf of the student and NAME OF COMPANY.*]

<Yes> ☐

<No> ☐ [go to question 10b.7]

Question 10b.1

When were you mentored at [Name of company]?

Question 10b.2

Was Mentoring beneficial to you in preparing you for your future career?

<Yes> ☐

<No> ☐

Question 10b.3

Please explain?

Question 10b.4

Were your parents helpful in any aspect of your Mentoring experience?

<Yes> ☐

<No> ☐

Question 10b.5

Please explain?

Question 10b.6

Were there any unexpected outcomes from your participation in Mentoring programs?

Question 10b.7

Please list actual or perceived barriers to your involvement in Mentoring.

Question 10c

Internships [Read if necessary: *Where for a specified period of time high school students' work for an employer to learn about a particular occupation or industry. This may or may not include financial compensation.*]

<Yes> ☐

<No> ☐ [go to question 10c.7]

Question 10c.1

When did you participate in an Internship(s) with [Name of company]?



Question 10c.2

Was your Internship beneficial in preparing you for your future career goals?

<Yes> ☐ _____

<No> ☐ _____

Question 10c.3

Please explain?

Question 10c.4

Were your parents helpful in any aspect of your Internship experience?

<Yes> ☐ _____

<No> ☐ _____

Question 10c.5

Please explain?

Question 10c.6

What were the unexpected outcomes from participation in your Internship(s)?

Question 10c.7

Please list actual or perceived barriers to involvement in Internships.

Question 10d

Cooperative Education [Read if necessary: *A method of instruction whereby high school students alternate or coordinate their academic and vocational studies with a paid or unpaid job in a related field.*]

<Yes> ☐ _____

<No> ☐ [go to question 10d.7]

Question 10d.1

When did you participate in your Cooperative Education experience with [Name of company]?

Question 10d.2

Was Cooperative Education beneficial in preparing you for your future career goals?

<Yes> ☐ _____

<No> ☐ _____

Question 10d.3

Please explain?

Question 10d.4

Were your parents helpful in any aspect of your Cooperative Education experience?

<Yes> ☐ _____

<No> ☐ _____

Question 10d.5

Please explain?



Question 10d.6

What were the unexpected outcomes from your participation in Cooperative Education?

Question 10d.7

Please list actual or perceived barriers to involvement in Cooperative Education.

Question 10e

Registered Apprenticeships

[Read if necessary: Formal programs registered with the U.S. Department of Labor or with an approved state apprenticeship agency. Registered apprenticeships are usually paid work experiences]

<Yes> ☐

<No> ☐ [go to question 10e.7]

Question 10e.1

When did you participate in your Registered Apprenticeship experience with [Name of company]?

Question 10e.2

Were Registered Apprenticeships beneficial in preparing you for your future career goals?

<Yes> ☐

<No> ☐

Question 10e.3

Please explain?

Question 10e.4

Were your parents helpful in any aspect of your Registered Apprenticeship experience?

<Yes> ☐

<No> ☐

Question 10e.5

Please explain?

Question 10e.6

What were the unexpected outcomes from participation in Registered Apprenticeships?

Question 10e.7

Please list the actual or perceived barriers to involvement in Registered Apprenticeships.

Question 10f

Workplace Tours for students

[Read if necessary: Workplace Tours for high school student groups are designed to give students insight into the changing nature of an occupation or industry.]

<Yes> ☐

<No> ☐ [go to question 10f.7]



Question 10f.1

When did you go on a
Workplace Tour of [Name of
company]?

Question 10f.2

Were Workplace Tours
beneficial in preparing you for
your future career goals?

<Yes> ☐

<No> ☐

Question 10f.3

Please explain?

Question 10f.4

Were your parents helpful in
any aspect of your Workplace
Tour experience?

<Yes> ☐

<No> ☐

Question 10f.5

Please explain?

Question 10f.6

What were the unexpected
outcomes from participation in
Workplace Tours?

Question 10f.7

Please list the actual or
perceived barriers to
involvement in Workplace
Tours

Question 10g

Career Fairs [Read if
necessary: *Opportunities to
showcase career opportunities
to high school students.*]

<Yes> ☐

<No> ☐ [go to question 10g.7]

Question 10g.1

When did you attend a Career
Fair for [Name of company]?

Question 10g.2

Were Career Fairs beneficial in
preparing you for your future
career goals?

<Yes> ☐

<No> ☐

Question 10g.3

Please explain?

Question 10g.4

Were parents helpful in any
aspect of your Career Fair
experience?

<Yes> ☐

<No> ☐

Question 10g.5

Please explain?

Question 10g.6

What were the unexpected
outcomes from participation in
Career Fairs?

Question 10g.7

Please list actual or perceived barriers to involvement in Career Fairs.

Question 11

Have your career goals changed since your participation in a work-based learning experience at [Name of company]?

<Yes> ☐

<No> ☐

Question 12

If yes, please explain.

Question 13

Do you feel your STW experience at [Name of company] helped prepare you for work?

<Yes> ☐

<No> ☐

Question 14

Please explain.

Question 15

In your estimation, how did [Name of company] benefit from your involvement in STW?

Question 16

What one thing would you change about your STW experience?

Question 17

Please explain why?

Question 18

List any other work-based learning activities that you have been involved in since Jan. 1, 1998.



THIS CONCLUDES THE SURVEY. THANK YOU FOR YOUR COOPERATION!

APPENDIX D

Parent Involvement In STW Protocol and Survey

INTERVIEW PROTOCOL

Hello. This is Alton Leon Alford, a doctoral student at Western Michigan University. Is this the _____ residence? **(If wrong number, terminate the call by saying "I'm sorry to have bothered you").** As a part of my doctoral dissertation, I am conducting a survey of parents who have or had children involved in school-to-work activities at area manufacturers. Earlier this month a letter was sent to your household explaining the study, did you receive it? **[If no, say " I'm sorry it didn't reach you. The letter was to inform you of this call, and the nature of this study.]** I would like to get your opinions and perceptions on your child's involvement in school-to-work, and information on how your family supported him/her in school-to-work. **[Define school-to-work if necessary as a school related program that helps students connect classroom learning to the real world of work through the involvement in actual work experiences at businesses. Students may participate in activities such as internships, apprenticeships, mentorships, job shadows and workplace tours].** Your number was selected because of your child's involvement in school-to-work at _____ **(name of company).** The interview should only take about ten minutes of your time. Please feel free to ask questions at any time, and you may withhold your responses to any item if you wish. Okay?

PARENT INVOLVEMENT IN STW

Survey

Parent STW Survey

DEVELOPED BY A. LEON ALFORD
DOCTORAL CANDIDATE
HUMAN RESOURCE DEVELOPMENT
WESTERN MICHIGAN UNIVERSITY

Parent Involvement In STW

Hello. My name is A. Leon Alford, and I am a doctoral student at Western Michigan University. I am conducting a survey to examine the similarities and differences in benefits of school-to-work initiatives used as a workforce development strategy from the perspective of employers, students and parents in Western Michigan. The results from the survey will shed light on the intricate relationship between these three groups, and will provide insight to employers, students, parents and educators as they address key workforce issues germane to the success and vitality of our future economy.

Following is a list of questions requesting your response. If the requested information is not available or would be difficult to obtain, please provide me with your best estimate.

The survey is divided into the following 2 sections: *Family Characteristics and School-to-Work Activities*. Please indicate not applicable (N/A) after questions that **do not** relate to you? Lets begin.

I. Family Characteristics

Question 1

What is your and your spouse's/partner's occupation?

Question 2

What do you know about the concept of STW?

Question 3

How active are you in supporting your child's identification of a career?

- a) Very active
- b) Active
- c) Somewhat active
- d) Barely active
- e) Not active at all

Question 4

Please describe the role that you and your spouse/partner play in supporting your child's career direction.



II School-to-Work Activities

School-to-work partnerships include work-based learning activities for high school students, which involves actual work experience that connects classroom learning to work.

I would now like to ask you some questions about specific school-to-work activities and your child.

Question 5

Did you or your spouse/partner participate in any such experiences when you were in high school?

<Yes> _____

<No> _____

Question 5a

If so, describe their value in helping to prepare you for your career?

Question 6

How did you and your spouse/partner feel about your child's choice to participate in a work-based learning activity at [Name of company]?

Question 7

Please discuss the role that you and your spouse/partner play in supporting your child's involvement in STW activities at [Name of company]?

Question 8

What involvement if any **did** you and your spouse/partner have with [Name of company] in supporting your child's work-based learning experience?

Question 9

What involvement if any do you feel you and your spouse/partner should have had with [Name of company] in supporting your child's work-based learning experience?

Question 10

In your opinion, was your child's work-based learning activity at [Name of company] beneficial in preparing him/her for the workforce?

<Yes> _____

<No> _____

Question 10a

Please explain?

Question 11

What were the unexpected outcomes from your child's participation in a work-based learning activity at [Name of company]?

Question 12

Please list actual or perceived barriers to your child's involvement in his/her work-based learning experience.

Question 13

In your opinion, what should be the role of parents or legal guardians in preparing their child/children for the workforce?

Question 14

In your opinion, how should parents or legal guardians interact with businesses to prepare their child/children for the workforce?

APPENDIX E

Parent or Legal Guardian Permission Form

Parent or Guardian Permission

Western Michigan University
 Department of: Educational Leadership
 Principal Investigator: Charles C. Warfield, Ph.D.
 Student Investigator: A. Leon Alford

My child/ward has been invited to participate in a research project entitled "Examining the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy: A Study of Key Stakeholder Involvement Using A Multiple Case Study Approach". The purpose of the study is to examine the similarities and differences in the use of school-to-work (STW) initiatives from the perspective of employers, students and parents or legal guardians in Western Michigan so that STW can be used as a workforce development strategy more efficaciously. This project is being conducted to fulfill A. Leon Alford's doctoral dissertation requirement.

Permission for my child/ward to participate in this project means that he/she will be interviewed face-to-face to complete the Student Involvement in School-to-Work Questionnaire. My child/ward will be free at any time -- even during the face-to-face interview -- to choose not to participate. Although there may be no immediate benefits to my child/ward for participating, the data collected may eventually provide information that is beneficial to other high school students, parents, the school district and area businesses that are involved in school-to-work programs.

All data and information collected will remain confidential. That means that my child's/ward's name will be omitted from all forms and a code number will be attached. The principal investigator will keep a separate master list with the names of the students and their corresponding code numbers. Once the data are collected and analyzed, the master list will be destroyed, and no identifying information will be included in the final write-ups. All other forms will be retained for at least three years in a locked file in the principal investigator's office. No names will be used if the results are published or reported at a professional meeting.

The only risks anticipated are minor discomforts typically experienced by children when being interviewed or completing a questionnaire (e.g., boredom, mild stress). All of the usual methods employed during interviews to minimize discomforts will be employed in this study. As in all research, there may be unforeseen risks to my child/ward. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or treatment will be made available to me or my child/ward except as otherwise specified in this permission form.

I may also withdraw my child/ward from this study at any time without any negative effect on services to him/her. If I have any questions or concerns about this study, I may contact either *Charles C. Warfield, Ph.D.* at (616) 387-3890 or *A. Leon Alford* at (616) 531-5943. I may also contact the chair of the Human Subjects Institutional Review Board at (616) 387-8293 or the vice president for research (616) 387-9298 with any concerns that I have.

This permission document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not sign this document if the corner does not have a stamped date and signature.

My signature below indicates that I, as parent or legal guardian can and do give my permission for _____ (*child's/ward's name*) to be interviewed by phone for the purpose of completing the Student Involvement in School-to-Work Questionnaire.

 Signature

 Date

*

APPENDIX F

Assent of a Child or Ward Form

Assent of a Child or Ward

Western Michigan University
 Department of: Educational Leadership
 Principal Investigator: Charles C. Warfield, Ph.D.
 Student Investigator: A. Leon Alford

I have been asked to participate in a research project entitled "Examining the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy: A Study of Key Stakeholder Involvement Using A Multiple Case Study Approach". The purpose of the study is to examine the similarities and differences in the use of school-to-work (STW) initiatives from the perspective of employers, students and parents in Western Michigan so that STW can be used as a workforce development strategy more efficaciously.

I will be given the Student Involvement in School-to-Work Questionnaire by phone in September or October. Even if I agree today to participate by signing this form, I can change my mind at any time when contacted to complete the questionnaire or at any time during the completion of the questionnaire.

My name will not be on any of the forms. The researchers will use a code number instead. The researchers will keep a list of names and code numbers that will be destroyed once the researchers have compiled the information from all other questionnaires.

If I have any questions or concerns about this study, I may contact either *Charles C. Warfield, Ph.D.* at (616) 387-3890 or *A. Leon Alford* at (616) 531-5943.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not sign this document if the corner does not have a stamped date and signature.

My signature below indicates that I agree to be interviewed by phone for the purpose of completing the Student Involvement in School-to-Work Questionnaire.

 Signature Date

APPENDIX G

Student Consent For Involvement Form

WESTERN MICHIGAN UNIVERSITY
H. S. I. R. B.
Approved for use for one year from this date:

SEP 04 2001

Western Michigan University
Department of: Educational Leadership
Principal Investigator: Charles C. Warfield, Ph.D.
Student Investigator: A. Leon Alford

x *May Lagerwey*
HSIRB Chair

I have been invited to participate in a research project entitled "Examining the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy: A Study of Key Stakeholder Involvement Using A Multiple Case Study Approach". The purpose of the study is to examine the similarities and differences in the use of school-to-work (STW) initiatives from the perspective of employers, students and parents in Western Michigan so that STW can be used as a workforce development strategy more effectively. Dr. Charles C. Warfield and A. Leon Alford from Western Michigan University, Department of Educational Leadership, are conducting the study. This research is being conducted as a partial requirement for a doctorate degree in Human Resource Development for A. Leon Alford.

As a part of the study I will be involved in a face-to-face interview where the *Student Involvement in School-to-Work Questionnaire* is completed. Even if I agree today to participate by signing this form, I can change my mind at any time when contacted for the interview or at any time during the interview. I can change my mind without penalty or impact on my position or status at school or work. Answers given will not be a part of my employment record.

My name will not be on any of the forms, and no identifying information will be included in the final write-ups. The researchers will use a code number instead. The researchers will keep a list of names and code numbers that will be destroyed once the researchers have compiled the information from all other interviews.

If I have any questions or concerns about this study, I may contact either *Charles C. Warfield, Ph.D.* at (616) 387-3890 or *A. Leon Alford* at (616) 531-5943.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not sign this document if the corner does not have a stamped date and signature.

My signature below indicates that I agree to be interviewed for the purpose of completing the *Student Involvement in School-to-Work Questionnaire*.

Signature

Date

APPENDIX H

Parent Consent For Involvement Form

WESTERN MICHIGAN UNIVERSITY
H. S. I. R. B.
Approved for use for one year from this date:

SEP 04 2001

x. Mary Lagerwey
HSIRB Chair

Western Michigan University
Department of: Educational Leadership
Principal Investigator: Charles C. Warfield, Ph.D.
Student Investigator: A. Leon Alford

I have been invited to participate in a research project entitled "Examining the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy: A Study of Key Stakeholder Involvement Using A Multiple Case Study Approach". The purpose of the study is to examine the similarities and differences in the use of school-to-work (STW) initiatives from the perspective of employers, students and parents in Western Michigan so that STW can be used as a workforce development strategy more effectively. Dr. Charles C. Warfield and A. Leon Alford from Western Michigan University, Department of Educational Leadership, are conducting the study. This research is being conducted as a partial requirement for a doctorate degree in Human Resource Development for A. Leon Alford.

As a part of the study I will be involved in a face-to-face interview where the *Parent or Legal Guardian Involvement in School-to-Work Questionnaire* is completed. Even if I agree today to participate by signing this form, I can change my mind at any time when contacted for the interview or at any time during the interview. I can change my mind without penalty or impact on my position or status at school or work. Answers given will not be a part of my employment record.

My name will not be on any of the forms, and no identifying information will be included in the final write-ups. The researchers will use a code number instead. The researchers will keep a list of names and code numbers that will be destroyed once the researchers have compiled the information from all other interviews.

If I have any questions or concerns about this study, I may contact either Charles C. Warfield, Ph.D. at (616) 387-3890 or A. Leon Alford at (616) 531-5943.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not sign this document if the corner does not have a stamped date and signature.

My signature below indicates that I agree to be interviewed for the purpose of completing the *Parent or Legal Guardian Involvement in School-to-Work Questionnaire*.

Signature

Date

APPENDIX I

Business Consent For Involvement Form

WESTERN MICHIGAN UNIVERSITY

H. S. I. R. B.

Approved for use for one year from this date:

SEP 04 2001

Western Michigan University
 Department of: Educational Leadership
 Principal Investigator: Charles C. Warfield, Ph.D.
 Student Investigator: A. Leon Alford

x *May Lagerwey*
 HSIRB Chair

I have been invited to participate in a research project entitled "Examining the Similarities and Differences in Benefits of School-to-Work as a Workforce Development Strategy: A Study of Key Stakeholder Involvement Using A Multiple Case Study Approach". The purpose of the study is to examine the similarities and differences in the use of school-to-work (STW) initiatives from the perspective of employers, students and parents in Western Michigan so that STW can be used as a workforce development strategy more effectively. Dr. Charles C. Warfield and A. Leon Alford from Western Michigan University, Department of Educational Leadership, are conducting the study. This research is being conducted as a partial requirement for a doctorate degree in Human Resource Development for A. Leon Alford.

As a part of the study I will be involved in a face-to-face interview where the *Business Involvement in School-to-Work Questionnaire* is completed. Even if I agree today to participate by signing this form, I can change my mind at any time when contacted for the interview or at any time during the interview. I can change my mind without penalty or impact on my position or status at school or work. Answers given will not be a part of my employment record.

My name will not be on any of the forms, and no identifying information will be included in the final write-ups. The researchers will use a code number instead. The researchers will keep a list of names and code numbers that will be destroyed once the researchers have compiled the information from all other interviews.

If I have any questions or concerns about this study, I may contact either *Charles C. Warfield, Ph.D.* at (616) 387-3890 or *A. Leon Alford* at (616) 531-5943.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board as indicated by the stamped date and signature of the board chair in the upper right corner. Subjects should not sign this document if the corner does not have a stamped date and signature.

My signature below indicates that I agree to be interviewed for the purpose of completing the *Business Involvement in School-to-Work Questionnaire*.

 Signature

 Date

APPENDIX J

Table 3

Data Organization Matrix

Table 3
Data Organization Matrix

Research Questions	Employer Questionnaire	Student Questionnaire	Parent Questionnaire
#1 - How are STW activities effective in addressing the workforce development needs of companies?	6a, 8a.3, 8b.3, 8c.3, 8d.3, 8e.3, 8f.3, 8g.3, 9a, 10a,	10a.2, 10a.3, 10b.3, 10c.3, 10d.3, 10e.3, 10f.3, 10g.3, 12, 15	10,
#2 - Which STW activity or activities prove to be of greatest benefit to the workforce development efforts of the businesses being studied?	8a.3, 8b.3, 8c.3, 8d.3, 8e.3, 8f.3, 8g.3, 17	10a.3, 10b.3, 10c.3, 10d.3, 10e.3, 10f.3, 10 g.3, 15,	4, 5, 5a, 9
#3 – Which obstacles are of greatest hindrance to employer involvement in STW?	8a.6, 8a.7, 8b.6, 8b.7, 8c.6, 8c.7, 8d.6, 8d.7, 8e.6, 8e.7, 8f.6, 8f.7, 8g.6, hg.7	10a.6, 10a.7, 10b.6, 10b7, 10c.6, 10c.7, 10d.6, 10d.7, 10e.6, 10e.7, 10f.6, 10f.7, 10g.6, 10g.7,	9, 11, 12,
#4 – Why do different stakeholders view some activities as being more beneficial than others?	8c.6, 8d.6, 8e.6, 8f.6, 8g.6, 8h.6	8, 9, 10a.3, 10a.6, 10b.3, 10c.3, 10d.3, 10e.3, 10f.3, 10g.3, 12, 13, 16, 17	5, 5a, 6,
#5 – How do students benefit from STW experiences?	8c.3, 8d.3, 16	10a.3, 8, 13,	10, 10.a, 13, 14
#6 – How does parental involvement impact the success of students and businesses involved in STW?	8a.5, 8b.5, 8c.5, 8d.5, 8e.5, 8f.5, 8g.5, 15,	10a.5, 10b.5, 10c.5, 10d.5, 10e.5, 10f.5, 10g.5	3, 4, 7, 8, 13, 14

APPENDIX K

Table 4:

Interview Responses

Table 4
Interview Responses

	Business Cohort 1 (Large)	Business Cohort 2 (Mid-Sized)	Business Cohort 3 (Small)
Employer	<p>Identifying, attracting, recruiting, training, developing and hiring diverse talent (Q 1)</p> <p>Marketing the company; addressing image (not just manufacturing); knowledge company with technology applications; diverse jobs and opportunities (Q 1)</p> <p>Proactive response to internal clients (Q 1)</p> <p>Being competitive (Q 1)</p> <p>Futuristic thinking (Q 1)</p> <p>Provides teaching experience & training to employees (I); helps employees evaluate their jobs & work environment (T) (Q 1)</p> <p>Community involvement (Q 1)</p> <p>Company pride & appreciation (Q 1)</p> <p>Efficiency, low cost, assistance in getting real work done (Q 1)</p> <p>All actives are beneficial in different ways. Difficult to identify one of greatest benefit (Q 2)</p> <p>Student apathy (Q 3)</p> <p>Employee time/timing of activities (Q 3)</p> <p>Resource problem for some depts. (budget, good assignments, people) (Q 3)</p> <p>Student safety (Q 3)</p> <p>Level of participation from employees (Q 4)</p> <p>Level of student interest/engagement through hands on activities (Q 4)</p>	<p>Company pride & appreciation (Q 1)</p> <p>Identifying, attracting, recruiting, training, developing and hiring diverse talent (Q 1)</p> <p>Community involvement (Q 1)</p> <p>Supporting education by connecting classroom learning to work (Q 1)</p> <p>All actives are beneficial in different ways. Difficult to identify one of greatest benefit (Q 2)</p> <p>Employee time/timing of activities (Q 3)</p> <p>Level of student interest/engagement through hands on activities (Q 4)</p> <p>Career exposure & employment opportunities (Q5)</p> <p>Connecting learning to work (Q5)</p> <p>No Impact (Q6)</p>	<p>Provides teaching experience & training to employees (Q 1)</p> <p>Identifying, attracting, recruiting, training, developing and hiring diverse talent (Q 1)</p> <p>Providing support & teaching to at risk & minority students (Q 1)</p> <p>Job shadows help in teaching/training of employees while they give info. (Q 2)</p> <p>JS get info. To large numbers of students. (Q 2)</p> <p>Student safety (Q 3)</p> <p>Students with poor work ethics (Q 3)</p> <p>Community involvement with underprivileged kids (Q 4)</p> <p>Providing students with foundational skills necessary to be a good employee. (Q5)</p> <p>Teaching good work ethics and values to their kids (Q6)</p>

	Getting a look at different career opportunities; gaining insight to make decisions. (Q5)		
	Not much, student and school are key (Q6)		
Student	<p>Helping students to identify, eliminate & confirm career choices in the industry/debunk myths of a field (Q 1)</p> <p>Getting students interested in the company (Q 1)</p> <p>Making the company a potential career choice (Q 1)</p> <p>Support student curiosity to learn more about a given career or occupation/support student preview tools & expectations of a field or career (Q 1)</p> <p>Supports relevant applications of student interests and abilities in math and science (2)</p> <p>Activities that included visualization of the career/hands on activities and the functions performed in the career (Q 2)</p> <p>Activities that get large numbers of students through (Q 2)</p> <p>Not aware of any (Q 2)</p> <p>Students didn't identify obstacles to employer involvement/not aware of any (Q 3)</p> <p>Too few students participating in certain activities (Q 3)</p> <p>Student desire for more time (Q 3)</p> <p>Scheduling expectations (Q 3)</p> <p>Influence from relatives or others (Q 4)</p> <p>Promising employment market (Q 4)</p> <p>Range of salary in some jobs (Q 4)</p> <p>Ability to explore career opportunities first hand/explore careers related to student abilities (Q 4)</p> <p>Existing knowledge and insight</p>	<p>Supports relevant applications of student interests and abilities in math, technology and science (Q 1)</p> <p>Support student curiosity to learn more about a given career or occupation/support student preview tools & expectations of a field or career (Q 1)</p> <p>Preparing students for college (Q 1)</p> <p>Helping to prepare future workers (Q 1)</p> <p>Screening for future good employees (Q 1)</p> <p>Community involvement (Q 1)</p> <p>Exposure (Q 1)</p> <p>Not sure (Q 2)</p> <p>Inappropriate or negative involvement by teachers (Q 3)</p> <p>Age to be involved in certain activities (Q 3)</p> <p>Students didn't identify obstacles to employer involvement/not aware of any (Q 3)</p> <p>Existing knowledge and insight into the company (Q 4)</p> <p>Previous exposure (Q 4)</p> <p>Influence from relatives or others (Q 4)</p> <p>No expectations (Q 4)</p> <p>Career preparation and exposure (Q5)</p> <p>Structured learning opportunities (Q5)</p> <p>Helping students to narrow down and focus on their choices on potential careers/rule out choices (Q5)</p>	<p>Helping students to identify, eliminate & confirm career choices in the industry/debunk myths of a field (Q 1)</p> <p>Not sure (Q 1)</p> <p>Not aware of any (Q 2)</p> <p>Students didn't identify obstacles to employer involvement/not aware of any (Q 3)</p> <p>Interest only because it's a school requirement (Q 3)</p> <p>School influence gives broad view of careers (Q 4)</p> <p>No expectations (Q 4)</p> <p>Helping students to narrow down and focus on their choices on potential careers/rule out choices (Q5)</p> <p>Structured learning opportunities (Q5)</p> <p>No benefits (Q5)</p> <p>Set up the experience (Q6)</p> <p>Moral support & encouragement (Q6)</p>

	<p>into the company (Q 4)</p> <p>No expectations (Q 4)</p> <p>Exposure to multiple careers (Q5)</p> <p>Providing a targeted view of a career/field specific careers (Q5)</p> <p>Helping students to narrow down and focus on their choices on potential careers/rule out choices (Q5)</p> <p>Help students to ask critical questions and adjust their academics in preparation of careers (Q5)</p> <p>Encouragement and belief that some students could get involved in certain careers (Q5)</p> <p>Insight into the use of technology (Q5)</p> <p>Transportation (Q6)</p> <p>Assistance in finding WBL opportunities (Q6)</p> <p>Moral support & encouragement (Q6)</p> <p>Actively involved in school meetings on careers (Q6)</p> <p>No impact/mostly student (Q6)</p>	<p>careers/rule out choices (Q5)</p> <p>Learning and gaining insight from professionals (Q5)</p> <p>Moral support & encouragements (Q6)</p> <p>No impact (Q6)</p>	
Parent	<p>Helping students to identify, eliminate & confirm career choices in the industry/debunk myths of a field (Q 1)</p> <p>Screening for future good employees (Q 1)</p> <p>Getting students interested in the company (Q 1)</p> <p>Supports relevant applications of student interests and abilities in math and science (Q 1)</p> <p>Marketing the company; addressing image (Q 1)</p> <p>Learning about employer expectations (Q 1)</p>	<p>Helping to prepare future workers (Q 1)</p> <p>Support student curiosity to learn more about a given career or occupation/support student preview tools & expectations of a field or career (Q 1)</p> <p>Helping students to identify, eliminate & confirm career choices in the industry/debunk myths of a field (Q 1)</p> <p>Getting students interested in the company (Q 1)</p> <p>Learning about employer expectations (Q 1)</p>	<p>Helping students to identify, eliminate & confirm career choices in the industry (Q 1)</p> <p>Helping to prepare future workers (Q 1)</p> <p>Don't know (Q 1)</p> <p>Exposure to multiple careers through tours and shadows (Q 2)</p> <p>Lectures and other forms of info. Sharing (Q 2)</p> <p>Not aware of any (Q 2)</p> <p>Students wanting particular experiences not offered at the</p>

<p>Not aware of any (Q 2)</p> <p>Didn't identify obstacles to employer involvement/not aware of any (Q 3)</p> <p>Feedback to parents on student progress (Q 3)</p> <p>Finding a way to involve parents (Q 3)</p> <p>Range of salary in some jobs (Q 4)</p> <p>Parental experience/influence gives broad view of careers (Q 4)</p> <p>Opportunity for hands on experience (Q 4)</p> <p>Structure and management focus (Q 4)</p> <p>No Comment (Q 4)</p> <p>Real world experience/hands on experience (Q5)</p> <p>Providing a targeted view of a career/field specific careers (Q5)</p> <p>Helping students to narrow down and focus on their choices on potential careers/rule out choices (Q5)</p> <p>Exposure to multiple careers (Q5)</p> <p>Insight into the use of technology, math & science (Q5)</p> <p>Not very helpful (Q5)</p> <p>Moral support & encouragement & being inquisitive (Q6)</p> <p>Providing information career & dept. info./help find experiences (Q6)</p> <p>Not much, student and school are key (Q6)</p> <p>Help students knit experiences together (Q6)</p> <p>Teach work ethics to students (Q6)</p>	<p>Not aware of any (Q 2)</p> <p>Inappropriate or negative involvement by teachers (Q 3)</p> <p>Didn't identify obstacles to employer involvement/not aware of any (Q 3)</p> <p>Previous exposure (Q 4)</p> <p>No Comment (Q 4)</p> <p>Career preparation and exposure (Q5)</p> <p>Exposure to multiple careers (Q5)</p> <p>Moral support & encouragement (Q6)</p> <p>Communications and discussions (Q6)</p> <p>Provide career guidance (Q6)</p> <p>No impact (Q6)</p>	<p>work site (Q 3)</p> <p>Providing hands on experience for students (Q 3)</p> <p>Didn't identify obstacles to employer involvement/not aware of any (Q 3)</p> <p>Follow-up on student issues and perceptions (Q 3)</p> <p>Parental experience/influence gives broad view of careers (Q 4)</p> <p>No Comment (Q 4)</p> <p>Exposure to multiple careers(Q5)</p> <p>Academic preparation (Q5)</p> <p>Helping students to narrow down and focus on their choices on potential careers/rule out choices (Q5)</p> <p>Exposure to employer expectations (Q5)</p> <p>Providing information career & dept. info (Q6)</p> <p>Role modeling/guidance/follow-up (Q6)</p> <p>Teach work ethics to students (Q6)</p> <p>Moral support & encouragement & being inquisitive (Q6)</p>
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Q 1 = Question 1

Q 2 = Question 2

Q 3 = Question 3

Q 4 = Question 4

Q 5 = Question 5

Q 6 = Question 6

BIBLIOGRAPHY

- American Management Association. (2000). *U.S. Corporations Find Prospective Employees Lack Basic Skills*. Retrieved from <http://www.amanet.org/research/specials/lackskl.htm>.
- Anonymous. (1998). *60 HR predictions for 2008*. *Workforce*, 77 (1), 50-51.
- Anonymous. (1992). *The changing nature of work*. *Financial World*, 161 (13), 66-75.
- Ascher, C. (1994). *Cooperative Education as a Strategy for School-to-Work Transition*. Centerfocus No. 3. University of California, Berkley, National Center for Research in Vocational Education.
- Barlow, M. (1990). Historical background of vocational education. *Vocational Education in the 1990's: Major Issues*. 5-24. Ann Arbor, MI: Prakken Publications.
- Bassi, L.J., Feeley, T., Hillmeyer, J., & Ludwig, J. (1997). *The Incentives for School-to-Work Programs in the United States: What's In It for Firms?* (Report for the National Education Leadership Council). Alexandria, Virginia: American Society for Training and Development.
- Bailey, T., Hughes, K., & Barr, T. (1998). *Achieving scale and quality in school-to-work internships: Findings from an employer survey*. Columbus: Ohio State University, National Center for Research in Vocational Education.
- Ballen, J., Casey, J.C., DeKanter, A. (1998). *The Corporate Imperative, Results and Benefits of Business Involvement in Education, Executive Summary*. United States Department of Education: Washington, D.C.
- Bennis, W., & Nanus, K. (1985). *Leaders The Strategy For Taking Charge*. New York: Harper & Row.
- Bills, D.B. (1995). *The New Modern Times: Factors Reshaping the World of Work*. State University of New York Press.
- Bishop, J., Blakemore, A., & Low, S., (1985). *High School Graduates in the Labor Market: A Comparison of the Class of 1972 and 1980*. Columbus: Ohio State University, National Center for Research in Vocational Education.
- Borg, W. R., & Gall, M. D., (1989). *Educational Research An Introduction*. Longman: New York.

- Brinkerhoff, R. & Apking, A. (2001). *High Impact Training: Strategies for Leveraging Business Results From Training*. Cambridge, Mass.: Perseus.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Campbell, D.P. (1991). *Manual for the Campbell Leadership Index*. Minneapolis, MN: National Computer Systems, Inc.
- Cappelli, P., & Iannozzi, M. (1995). *Rethinking the Skills Gap: Is it Craft or Character?* (Issue no 9). Philadelphia, PA: University of Pennsylvania, The National Center on the Educational Quality of the Workforce.
- Cappelli, P., Shapiro, D. & Shumanis, N. (1998). *Employer Participation in School-to-Work Programs*. Stanford University, National Center for Postsecondary Improvement.
- Coffin, T. E. (1944). A three component theory of leadership. *Journal of Abnormal Social Psychology*, 63-83.
- Crawford, D., Johnson, A., & Summers, A. (1995). *Schools and Labor Market Outcomes* (EQW Working Paper, No. 33). Philadelphia, PA: University of Pennsylvania, National Center on the Education Quality of the Workforce.
- Csikszentmihalyi, M., & and Schneider, B. (2000). *Becoming Adult*. New York: Basic Books.
- Denzin, N.K., & Lincoln, Y.S. (1994). *Handbook of Qualitative Research*. Sage Publications: Thousand Oaks, CA.
- Draze, D. (2000). *The study of the relationship between epistemic style and evaluation practice*. Unpublished doctoral dissertation, Western Michigan University.
- Drucker, P. (1996). *The Leader of the Future*. San Francisco: Jossey-Bass.
- Engibous, T.J., & Rust Jr., E.B. (2000, September 7). The Nation's 'Help Wanted' Crisis. *The Washington Post*, p. A25.
- Fraze, V. (1998). World business leaders target top workforce issues. *Workforce*, (8), 3.
- Glesne, C., & Peshkin, A. (1992). *Becoming Qualitative Researchers An Introduction*. Longman: New York.
- Gray, K.C., & Herr, E.L. (1998). *Workforce Education: The Basics*. Boston: Allyn & Bacon.

- Gregson, J.A. (1995). The School-to-Work Movement and Youth Apprenticeship in the U.S.: Educational Reform and Democratic Renewal? *Journal of Industrial Teacher Education* 32(3), 7-29.
- Griffin, L.J., & Alexander, K.L. (1978). Schooling and Socio-economic Attainments: High School and College Influences. *American Journal of Sociology*, 36, 1, 73-87.
- Henderson, A.T. & Burla, N. (1994). *A New Generation of Evidence: The Family is Critical to Student Achievement*. St. Louis, MO: Danforth Foundation and Flint MI: Mott (C.S.) Foundation.
- Hershey, A. M., & Silverberg, M. K. (1993). *Employer Involvement in School-To-Work Transition Programs: What Can We Really Expect?* Princeton, N.J.: Mathematica Policy Research.
- Hinkle D. E., Wiersma, W., & Jurs, S. G. (1994). *Applied Statistics For The Behavioral Sciences* (3rd ed.). Boston: Houghton Mifflin Co.
- H.R. 2884, 103d Congress, 2nd Session, (1994).
- Johnson, A.W., & Summers, A.A. (1993). *What Do We Know About How Schools Affect the Labor Market Performance of Their Students?* Office of Educational Research and Improvement: U.S. Department of Education.
- Johnson, W. B., (1991). Global Workforce 2000: The New World Labor Market. *Harvard Business Review*, 115-118.
- Judy, R.W., & D'Amico, C. (1997). *Workforce 2020*. Indianapolis, IN: Hudson Institute, Inc.
- Kaufmann, B., (1998). *What Business Organizations Say About School-to-Work: An Analysis and Compendium of Organizational Materials*. Washington, DC: Center for Workforce Development, Institute for Educational Leadership and American Youth Policy Forum.
- Krueger, R.A., & Casey, M.A. (2000). *Focus Groups, a Practical Guide for Applied Research*. Sage Publications: Thousand Oaks, CA.
- Kushner, S., (2000). *Personalizing Evaluation*. Sage Publications: Thousand Oaks, CA.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry*. Beverly Hills, Calif.: Sage Publications.

- Lynn, I., & Wills, J. (1994). *School Lessons Work Lessons – Recruiting and Sustaining Employer Involvement in School-to-Work Programs*. Washington, DC: Institute for Educational Leadership.
- Malott, T., (1998). *Advantages of creating your own workforce*. Executive Speeches, 1-5. CEO of Siemens, Remarks presented at the “Industry Week” Managing for Innovation Forum in Chicago, Illinois, March 31, 1998.
- Matton, R. & Testa, W. A. (1996). *Workforce Issues*. Chicago Fed Letter, n111, 1-3.
- Meyer, R., & Wise, D. (1982). High School Preparation and Early Labor Force Experience. In R.B. Freeman & D. Wise (Eds.), *The Youth Labor Market Problem: Its Nature, Causes and Consequences*. Chicago: National Bureau of Economic Research.
- Miller, V. (1996). The History of Training. In *The ASTD Training and Development Handbook* (4th ed.). New York: McGraw-Hill.
- Miles, M., & Huberman, M. (1994). *Qualitative Data Analysis*. Sage Publications: Thousand Oaks, CA.
- Mosteller, F. & Moynihan, D.P. (1972). *On Equality of Educational Opportunity*. New York: Vintage Books.
- National Center on the Educational Quality of the Workforce, (1995). *On Connecting School and Work*. Philadelphia, PA: University of Pennsylvania, National Center on the Educational Quality of the Workforce.
- National Alliance of Business. Workforce Economics. (1998, May). *Volume 15, issue 5*, 2-6.
- National Alliance of Business. Workforce Economics. (1999, February). *Volume 5, issue 1*, 4-11.
- National Center on the Educational Quality of the Workforce, (1995). *First Findings from the EQW National Employer Survey*. Philadelphia, PA: University of Pennsylvania, National Center on the Education Quality of the Workforce.
- National Center on the Educational Quality of the Workforce, (1994). *Survey Instrument for the EQW National Employer Survey Phase I*. Philadelphia, PA: University of Pennsylvania, National Center on the Education Quality of the Workforce.

- National Center for Postsecondary Improvement. (1997). *Bringing School-to-Work to Scale: What Employers Report. First Findings from the New Administration of the National Employers Survey (NES II)* (agreement number R309A60001,CFDA 84.309A). Stanford University: Author.
- National Employers Leadership Council. (1999, June). *The Bottom Line Return on School-to-Work Investment for Students and Employers: Intuitions Confirmed*. Washington, DC: Author.
- National Employers Survey-II, (1997). *Bringing School-to-Work to Scale: What Employers Report*. U.S. Department of Education.
- National Employers Leadership Council. (1999, June). *The Bottom Line Return On School-To-Work Investment for Students and Employers: Intuitions Confirmed*. Washington, DC: Author.
- National School-to-Work Office. (1997). *School-to-Work Glossary of Terms*. (4th ed.) [Glossary]. Washington, DC: Author.
- Northouse, P.G. (1997). *Leadership Theory and Practice*. Thousand Oaks: Sage Publications.
- Office of Technology Assessment. (1995). *Learning to Work: Making the Transition From School to Work*. Washington, DC: U.S. Government Printing Office.
- Osterman, P. (1995). Involving Employers in School-to-Work Programs. In T.R Bailey (Ed.), *Learning to Work: Employer Involvement in School-to-Work Transition Programs*. Washington, DC: The Brookings Institution.
- Ouchi, W. (1993). *Theory Z: How American Businesses Meet The Japanese Challenge*. New York: Avron.
- Owens, R.G. (1998). *Organizational Behavior in Education*. Allyn & Bacon.
- Patton, M. (1997). *Utilization focused evaluation*. Beverly Hills, CA: Sage.
- Pauly E., Kopp, H. & Haimson, J. (1995). *Home Grown Lessons: Innovative Programs Linking School and Work*. San Francisco: Jossey- Bass.
- Rich, D. (1996). *Learning and Working: Basics for Children*. National Education Association: Washington, D.C.
- Salzman, H. (1998). *The New Corporate Landscape and Workforce Skills* (Publication number NCPI-2-07). Stanford University, National Center for Postsecondary Improvement.

- Sergiovanni, T.J., & Starratt, R. J. (1993). *Supervision a Redefinition*. New York: McGraw-Hill. Inc.
- Shapiro, D., & Iannozzi, M. (1998). *The Benefits to Bridging School and Work*. Stanford University, National Center for Postsecondary Improvement.
- Shapiro, D. (1999). *School-to-Work Partnerships and Employer Participation: Evidence on Persistence and Attrition from the National Employer Survey*. Stanford University, National Center for Postsecondary Improvement.
- Shapiro, D., & Zemsky, R. (1996). *Education and the workplace: From school-to-work to schooling-at-work*. Philadelphia, PA: University of Pennsylvania, National Center on the Educational Quality of the Workforce.
- Sommers, P. C. (1995). Workforce 2000. *Industry Week*, 244 (10), 21.
- Stern, D., (1995). Employer Options for Participating in School-to-Work Programs. In T.R. Bailey (Ed.), *Learning to Work: Employer Involvement in School-to-Work Transition Programs*. Washington, DC: The Brookings Institution.
- Spradley, J. P. (1979). *The ethnographic interview*. New York: Holt, Rinehart, and Winston.
- Stowe, E. (1999). *Focused Economic Development for the New Millennium: The Louisville (KY) Example*. June 8, 1999. Source: Greater Louisville Inc.
- The Grand Rapids Area Manufacturers Council. (1999). *1999 Regional Manufacturers Directory*. (available from the Grand Rapids Area Chamber of Commerce, 111 Pearl Street NW, Grand Rapids, MI 49503).
- Thompson, J. A. (1997). The contingent workforce: The solution to the paradoxes of the new economy. *Strategy & Leadership*, 25 (6), 44-45.
- U.S. Bureau of the Census. (1997). *The National Employers Survey Phase II* (Agreement number R308A60003, CFDA 84.309A). Washington, DC: Author.
- U.S. Department of Labor. (1991). *What Work Requires of Schools: A SCANS Report for America 2000*. (A publication of the Secretary's Commission on Achieving Necessary Skills). Washington, DC: Author.
- United States. National Commission on Excellence in Education. (1984). *A Nation At Risk: The Full Account*. Cambridge, Mass: USA Research.
- United States Department of Labor. (1987). *Workforce 2000*. Washington, DC: U.S. Department of Labor.

- United States General Accounting Office. (1990). *Case Study Evaluations*. (Transfer Paper 10.1.9). Washington, DC: U.S. Government Printing Office.
- United States Office of Education. (1966). *Equality of Educational Opportunity*. Washington, DC: U.S. Government Printing Office.
- Wills, J. L. (1998). *Employers talk about building a school to work system: Voices from the field*. (ISBN: 1-887031-61-8). Washington, DC: Center for Workforce Development, Institute for Educational Leadership and American Youth Policy Forum.
- Witkin, B.R., & Altschuld, J.W. (1995). *Planning and Conducting Needs Assessments A Practical Guide*. Sage Publications: Thousand Oaks, CA.
- Yin, R. K. (1994). *Case Study Research Design and Methods*. Sage Publications: Thousand Oaks, CA.
- Yukl, G. (1994). *Leadership in Organizations*. Prentice Hall, N.J.
- Zemsky, R. (1994). *What Employers Want: Employer Perspectives on Youth, the Labor Market, and Prospects for a National System of Youth Apprenticeships*. Philadelphia, PA: University of Pennsylvania, National Center on the Educational Quality of the Workforce.