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OMAHA BUSINESS SUPPORT FOR WORK-BASED LEARNING

By

Keith E. Bigsby

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska at Omaha

In Partial Fulfillment of Requirements

For the Degree of Doctor of Education

Major: Educational Administration

Under the Supervision of Dr. Jack McKay and Dr. Laura Schulte

Omaha, Nebraska

October, 2004

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DISSERTATION TITLE

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## ABSTRACT

### OMAHA BUSINESS SUPPORT FOR WORK-BASED LEARNING

Keith E. Bigsby, Ed.D.

University of Nebraska at Omaha, 2004

Advisors: Dr. Jack McKay and Dr. Laura Schulte

The purpose of this study was to examine the demographics of Omaha area employers that participate in and do not participate in work-based learning, to determine the reasons why Omaha area businesses participate in work-based learning and to identify the reasons why or why not companies participate in work-based learning.

Two thousand small, medium and large manufacturing and non-manufacturing metro Omaha companies were mailed surveys in reference to their perceptions of work-based learning. Seven hundred ninety-three companies returned surveys for a 39.7% overall return rate. The data were analyzed using SPSS. Descriptive statistics, Chi-square tests for independence and independent t-tests were used to analyze the data.

The results indicated that there is no prototypical business that participates in work-based learning in the Omaha area and that participation in work-based learning is not influenced by either size or type of company, manufacturing or non-manufacturing. The closest profile to an organization that would likely participate in work-based learning is a small, less than 50 employees, non-manufacturing company.

External motivators that impacted participation in work-based learning included contributing to the community, good public relations and as a long-term recruiting tool. Internal motivators that impacted participation in work-based learning included support by a company's senior management, department management, and company employees and company image.

The results indicate that both participating and non-participating companies have concerns about participating in work-based learning programs and activities. There were differences in the concerns that work-based learning participants had when compared to the concerns of non-participant companies. Both participant and non-participant companies expressed that work-based learning structural issues were their greatest concerns. These structural concerns included union opposition, employee resistance, economic climate, OSHA/labor laws and coordination problems. Concerns regarding students and their actual participation in work-based learning programs were secondary to the structural issues for both participating and non-participating companies. These secondary concerns included student might leave after training, student immaturity, student availability and student lacking skills. These concerns were more pronounced in the participating companies than the non-participating companies.

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## Chapter 1

### Introduction

Educational administrators are faced with the challenge of trying to meet the needs, requirements and demands of a variety of special interest groups. These groups include organizations of parents, students, post-secondary institutions, businesses, and the community at large. These groups have unique needs and agendas that they want to see the K-12 public educational system address. These agendas or needs can be social, economic, community, or personal in nature. An agenda item educators are currently addressing throughout the country is the business community's desire to have schools focus on preparing students to fill the shortage of skilled workers in both old and new economy industries. A 2002 study conducted by Virginia Polytechnic Institute and the Information Technology Association of America documented the need for information technology employees nationwide. According to the study, the current core of the information technology workforce was reported to be 4,126,000, including programmers, systems analysts and computer engineers. Approximately 12% or 494,000 of these positions remain unfilled today (Virginia Polytechnic Institute and the Information Technology Association of America, 2002). A study by the Joint Commission on Accreditation of Healthcare Organizations (2000) projected a shortage of 150,000 nurses nationwide by the year 2005. The study also projected the shortage would grow to 450,000 by the year 2020 (Joint Commission on Accreditation of Healthcare Organizations, 2000).

Omaha has not been spared this trained employee shortage. Two separate studies of over 62 area companies and 55 engineering firms conducted by the Applied Information Management (AIM) Institute (1999, 2003) documented similar shortages of

unfilled, skilled employee positions in the Omaha area. These studies showed internal growth rates of these companies create a demand for skilled employees that far exceeds the available supply. This internal demand has been driven by normal business growth plus an increasing number of jobs within firms that require new and updated technology training to perform expected job functions (AIM Institute, 1999). In addition to engineers, software developers, programmers, and other technology professionals, Omaha companies reported the need for accountants, clerks, and data entry employees who have a basic understanding of technology and technology firms (AIM Institute, 2003).

Historically, a major supplier of new entrants into these shortage positions has been new graduates from high schools as well as local and regional colleges and universities. The problem with this supply source is those high schools and the local and regional colleges and universities are not graduating enough students to meet the business community's demand for skilled employees (AIM Institute, 2003). One strategy touted by the business community as a solution for this problem is the increased use of work-based learning programs and activities. Work-based learning programs and activities include internships, job shadowing, career mentoring, career academies and site-based enterprises. The increased use of work-based learning strategies is viewed by the business community as a way to provide young people with early exposure to the career requirements and opportunities in the current and projected shortage areas.

During the 1990s, work-based learning gained prominence as one element of local, state, and federal school reform strategies to meet the challenge of a growing national labor shortage of skilled workers (Wieler & Bailey, 1998). The School-to-Work Opportunities Act of 1994, for example, called for redesigning educational programs to

include school-based and work-based learning. The act defined work-based learning as a planned program of work experience linked to a school and its curriculum offerings.

Work-based learning, under the 1994 Act, broadened the scope to incorporate all career fields and tied career education to academics. The 1994 Act required work-based learning programs to not only prepare students for relevant careers and occupations, but also prepare them for entrance into 4-year college or university programs. Thus, work-based learning is now intended for all students, whether they work after high school or pursue higher education (Urquiola, Stern, Horn, Dornsife, & Chi, 1997).

The K-12 educational system, in response to the business community and the requirements of the School-to-Work Opportunities Act (1994), developed curricula and programs to prepare students for careers and post-secondary education. Career academy programs, formalized career mentoring, internship programs, and school-based enterprises are just a few examples of the work-based learning activities used on a national level and by many of the Omaha area school districts in cooperation with local businesses to expose young people to the career requirements and opportunities in the identified shortage areas.

Research into work-based learning programs indicates work-based learning strategies may provide some solutions to the skilled employee shortage (Olson, 1994). But even with these signs of success for work-based learning programs, many school districts are still reluctant to invest any more of their limited resources in work-based learning until they have a better understanding of the "why and what" businesses need from their future employees (Bailey, Hughes, & Barr, 1998b). Many businesses are also reluctant to participate in work-based learning, until they can be shown that the secondary

school system will work with them in developing the types of employees they require for the 21<sup>st</sup> century (Bailey, Hughes, & Barr, 1998a).

### Statement of the Problem and Purpose of the Study

The current shortage of skilled employees in both old and new economy companies and industries has put metropolitan Omaha school districts under pressure from the local business community to expand their work-based learning programs and activities. These same school districts are reluctant to implement more work-based learning programs without conclusive evidence that the metropolitan Omaha business community will support increased numbers of work-based learning programs and activities with the adequate resources, opportunities and involvement required for these same programs to be successful.

This researcher examined the demographics of Omaha area employers who participate in and do not participate in work-based learning, identified the reasons why Omaha area businesses participate in work-based learning and determined the concerns that both participating and non-participating companies have about their involvement in work-based learning programs and activities.

### Research Questions

The research questions that serve as the basis for the proposed study are as follows:

1. Is there a significant relationship between the size and type of a company and its participation in work-based learning?
2. What are the reasons that Omaha companies choose to participate in work-based learning?

3. Is there a significant difference in the concerns of Omaha companies that participate in work-based learning and those that do not?

#### Significance of the Study

The study contributes to the understanding of which Omaha area companies are or are not involved in work-based learning, why these companies are involved in work-based learning and what concerns they have about participation in work-based learning programs and activities.

#### Delimitations of the Study

The following factors narrowed the field of investigation:

1. The study was conducted by surveying companies that are located in Douglas, Sarpy, Washington and Pottawattamie counties and are members of the Applied Information Management (AIM) Institute (2003) and Greater Omaha Chamber of Commerce (2003).

2. No individual members of the Applied Information Management Institute or Greater Omaha Chamber of Commerce were surveyed.

#### Definitions

The following definitions of terms give clarity to their use and meaning in this study:

1. Career Mentoring. A student is assigned an adult mentor with a job in the student's career interest area.

2. Cooperative Education. A student alternates high school or post-secondary studies with a job in a field related to his/her academic or occupational objective. Written training and evaluation plans guide the classroom and work experience.

3. **Internship.** A student works for an employer for a specified block of time to learn about a particular industry or occupation. Because the experience is tied to schoolwork, academic credit may be awarded.

4. **Job Shadowing.** A student learns about the demands of a particular job by spending a part of a day or longer period of time observing an employee on the job.

5. **Site-based Enterprises.** A student learns about a career or business by operating one either on- or off-campus.

6. **School-to-Work.** School-to-Work is a broad based partnership program that integrates school-based learning and work-based learning along with connecting activities to help prepare students for careers and/or continuing education.

7. **Work-Based Learning.** Work-based learning is a set of employment activities involving pre-determined work experiences that are connected to a student's classroom learning.

8. **Service Learning.** Service learning is a work-based learning program that combines meaningful community service with a student's academic learning, personal growth, and civic responsibility.

9. **Career Academies.** A Career Academy is a school that is organized around a single employer or consortium of employers in an industry and designed to increase awareness of career opportunities within particular occupational areas and teach basic life and employment skills required for jobs or further training.

## Chapter 2

### Review of Literature

Cooperative education between schools and businesses has been federally recognized since the Smith Hughes Vocational Education Act (1917). The intention of this Act and subsequent related programs was the promotion of work-based learning to assist students in moving from vocational training in school to relevant occupations as adults.

Work-based learning took on renewed significance with the passage and implementation of the School-to-Work Opportunities Act (1994). Since the inception of the School-to-Work Opportunities Act (1994), 49 states and approximately 275 local and regional partnerships have received grants to build work-based learning systems that link classroom learning to the workplace (Cutshall, 2001).

#### Work-Based Learning

Work-based learning includes a number of activities that can be identified along a continuum from shorter-term introductory types of experiences to longer-term, more intensive ones, including paid work experience and formal training (Naylor, 1997). As presented in the National Employer Survey Results (Institute for Research on Higher Education, 1997), the most common primary work-site/community-based work-based learning activities include: job shadowing, mentoring, internships, cooperative education, registered apprenticeships, and youth apprenticeships.

The National Employer Leadership Council (NELC) (1995) offers four guiding principles as important to all work-based learning efforts. The organization believes every work-based learning initiative should be available to all students; be a voluntary,



collaborative effort among all stakeholders; include a structured worksite program with measurable outcomes; and help young people make career choices.

In *An Employer's Guide to Internships*, author Alice Potter (1994) states:

The mission of any work-based learning program is to provide students with meaningful work experience while giving companies the opportunity for an in-depth performance evaluation before considering these prospective employees for permanent employment or offering employment referrals. (p. 5)

Work-based learning can serve as a vehicle for getting short-term projects done by organizations with limited staff using students who seek to gain practical experience in their chosen career fields. Work-based learning can also serve as a feeder program to career employment, offering employers an effective way of attracting quality candidates and demonstrating a prospective employee's job skills and performance (Potter, 1994). Other benefits that work-based learning can provide employers include a reduction in person costs, improvement in the management of human resources, and improvement in staff performance (Potter, 1994).

In their report, *Learning How to Learn at Work: Lessons from Three High School Programs*, authors Stasz and Kaganoff (1997) reveal potential benefits to students. However, if viewed from an employer's standpoint, these same benefits appear to ultimately benefit firms as well. These student/firm benefits include increased technical skills; improved problem solving skills; enhanced communication skills; development of teamwork and teamwork problem solving; enhancement of work-related attitudes, including punctuality, reliability, and attendance; enhanced personal and social skills; development of broad career/industry knowledge; and useful connections with school learning. Work-based learning students, because of increased skills and knowledge

levels, contribute to the organization in a more superior capacity than non-work-based learning students (NELC, 1995; Potter, 1994; Stasz & Kaganoff, 1997).

Additional insight is gained to the value of work-based learning when considering the merits of work-based learning for students who do not go immediately into the workplace after graduating from high school. Bailey and Merritt (1997) explored the benefits of work-based learning for college-bound students and found opinions divided. Although work-based learning programs have long been regarded as crucial for pre-professionals in the fields of medicine, teaching, law, and architecture, work-based learning has not been perceived to be effective in teaching academic materials or preparing students for college.

Bailey and Merritt (1997), however, provide several examples of highly regarded work-based learning programs specifically designed for college-bound students. In these programs, students are given hands-on experience in projects centering on biology, environmental technology, computer science, cardiac patient care, space-flight research, army research, and more. Interns were given the opportunities to research existing literature, establish hypotheses, design and perform experiments based on those hypotheses, collect and analyze data, draw conclusions, document their findings, research medical texts, provide medical reports to staff concerning actual cardiac patients, and conduct yearlong research projects at institutions such as the Carnegie Institute, the National Institutes of Health, the Goddard Space Flight Center, and the Army Research Labs (Bailey & Merritt, 1997).

In an evaluation by Kopp, Kazis, and Churchill (1995), three youth apprenticeship programs had postsecondary enrollments of between 69% and 84%. The most dramatic finding of their study was the highest enrollment rate was achieved by an

inner city school where percentages of students enrolling in any educational program after high school were historically very low.

Career exploration is an obvious benefit to students who participate in work-based learning programs. Bailey and Merritt (1997) differentiate between two types of students:

In our fieldwork, we have met students who joined a school-to-work program because they wanted to be pediatricians, executives in the travel industry, nurses, or engineers. Through STW programs, these students get a chance to develop their interests and try them out. They sometimes find that their original career goals are not what they wanted.... practical knowledge of career demands, when gained prior to college entrance and the declaration of a major, has the potential to eliminate many wasted dollars and years spent.

Another group of students... do not do well in their classes. They often become convinced that they do not have the ability to succeed in an academic environment. We have found students who had no intention of going on to college but joined STW programs because they saw them as an alternative to boring class work. Once they began to work in a concrete setting that sparked their interest, they found that in fact they were effective learners. Many students told us that... they had been thinking about dropping out but were now enthusiastic. (p.19)

The conclusion to be drawn for businesses trying to increase their pool of highly trained employees is work-based learning programs go a long way towards making it happen.

### Business Participation Reasons

The literature suggests three overall reasons for businesses becoming involved in work-based learning programs: (1) philanthropic, (2) economic, and (3) combination (both). The resource bulletin, Engaging Employers in School-to-Work Systems, reported a study conducted by the National School-to-Work Learning and Information Center (NSWLIC) (1996), in which 75% of work-based learning employers, particularly those from large establishments, agreed they were (at least) motivated by an interest in performing a community service. Bailey et al. (1998a) in their study, Achieving Scale and Equality in School-to-Work Internships: Findings from an Employer Survey, found that more than half of the firms surveyed were motivated by a desire to contribute to the community and/or improve public education.

Bailey et al. (1998a) found philanthropy was not the overriding motivation for all employers. The researchers identified a strong minority (41%) of firms reporting that bottom-line motivations, such as having access to a pool of qualified workers, caused them to become involved in work-based learning programs. The survey also found many firms that chose not to participate would need more “bottom-line oriented” arguments to convince them to enter work-based learning partnerships.

The NSWLIC (1996) reported the opinion of John Tobin at Siemens Corporation, a leading international manufacturing firm. Tobin stated Siemens’ involvement in their work-based learning program is driven by the direct link between education and training, productivity, and the corporation’s bottom line. Siemens has shown its productivity increases with education and training initiatives and concluded the return investment in work-based learning is well worthwhile (NSWLIC, 1996).

A former apprentice who is now president of the Wendell-based Siemens Power Transmission and Distribution Company also stated:

A strong partnership between schools and industry benefits both and can improve national solidarity. Education becomes more relevant; students become more motivated, [and] graduating students possess skills desired by employers.

Employers who make better products are more competitive, and everyone's bottom lines benefit. (Van Dokkum, 1997, p. 14)

The National Employer Leadership Council (NELC) (1998) echoes this optimistic view by stating, "There are many reasons for the growing involvement of employers in the work-based learning movement. The reasons for business interest in work-based learning are as varied as the companies themselves" (p. 6).

Some reasons mentioned most frequently for a firm's involvement in work-based learning include the reduction of the costs of recruiting, selecting, and training new workers; the development of a high-quality, diverse workforce; the increased skill and employability levels of students; the attainment of higher levels of productivity; improved performance levels of incumbent workers who participate as mentors; and the ability of meeting the demand for new skills required by rapid technological changes (NELC, 1998).

Perhaps the best measure of long-term benefits can be found in the results of the firms' participation. The National Center for Research in Vocational Education (Bailey et al. 1998a) reports:

Most of the early employer participants are continuing their involvement, and new ones have been recruited, so employer participation is not seen as the overriding barrier to the proliferation of work-based learning efforts. The researchers also

believe that benefits to employers grow the longer they are involved in a program.  
(p. 23)

#### Participating Company Profiles

The U.S. Census Bureau's National Employer Survey II (NES-II) (1997) examined the characteristics of manufacturing and non-manufacturing companies that participated in work-based learning. The survey results showed of those manufacturing establishments involved in work-based learning programs, the firms were more likely to participate in community activities; have increased the size of their permanent workforce in the last 3 years; rate their local high school(s) as adequate or better in preparing students for the work force; and use teachers' references in making hiring decisions.

Of those NES-II (1997) participants that were non-manufacturing establishments, the firms were more likely to participate in community activities; rate their local high school(s) as adequate or better in preparing students for the workforce; have increased the size of their permanent workforce over the last 3 years; and use teachers' references in making hiring decisions.

As demonstrated in the NES-II (1997), a significant link may exist between employer satisfaction and how well educational institutions are preparing their students to be interns in the work force. What is not clear, however, is if the employers' respect for the schools (a) provides a reason for participating, (b) happens because of participating, or (c) both. The NES-II (1997) survey also found although national participation is not significantly limited to establishments of any particular size or number of employees, as illustrated in Table 1, it is more common for the nation's larger employers to engage in work-based learning activities.

Table 1

Percentage of Establishments Participating in Work-Based Learning Partnerships  
by Number of Employees

<u>Number of Employees</u>	<u>% of Employers Participating in Work-Based Learning</u>
20-49	24%
50-99	24%
100-249	33%
250-999	42%
1,000 or more	60%

Note. Bringing School-to-Work to Scale: What Employers Report (First Findings from the New Administration of the National Employer Survey II (NES-II, 1997).

Cappelli, Shapiro, and Shumanis (1997), using the NES-II data, showed among manufacturing-based participants, the top three areas of participation were in transportation equipment, primary metals, and printing/publishing. Among those participants who were non-manufacturers, the top three areas were communications, health services, and utilities, closely followed by finance and hotels.

Bailey et al. (1998b) found, through the employer survey they conducted, a disproportionate percentage of participating firms are nonprofit or from the public sector. While for-profit firms accounted for 90% of the nonparticipating employment sectors of the communities in which the survey took place, less than 50% of the participating firms were for-profit. The researcher's conclusions concerning this finding point to the possibility that nonprofit and public-sector firms tend to be associated with philanthropic ventures and, therefore, respond more readily to requests to "help out" the community or school that solicits their involvement. Another factor for their apparent willingness to participate could certainly be cost savings, because nonprofits are often very short of cash, and the inexpensive labor of interns may indeed be advantageous.

Bailey et al. (1998a) also asked participating firms to identify the most important factor that motivated them to participate. As with previous surveys and findings, philanthropy slightly outweighed bottom-line interests. Findings by Wieler and Bailey (1998) suggest that several work-based learning programs that had achieved a certain-size of work-based learning student and company participation were able to emphasize bottom-line more than philanthropy when soliciting new firms for their programs.

Created in 1970 LaGuardia Community College in New York City runs one of the



largest co-op programs in the U.S, placing an average of 2,000 students with about 350 employers per year. LaGuardia faculty argue self-interest and cost savings are the most important motivations for employer participation and thus market their program as a source of mature, inexpensive, and at least partly-trained employees. A community college has an advantage in using this marketing strategy, because its students are simultaneously studying within their career field, unlike high school students. However, the extensive experience of the LaGuardia program provides valuable insights to those concerned with developing and marketing high-school work-based learning programs. In addition to appealing to the bottom-line interests of firms, LaGuardia also avoids demanding too much of the employers, reserving the academic aspect of the project for the school alone.

In an Institute on Education and the Economy brief (1998), findings were presented from a 3-year research project by Jobs for the Future's National Youth Apprenticeship Initiative that focused on whether sufficient numbers of employers could be recruited to create and maintain a substantial national work-based learning program. Of 10 programs studied between 1991 and 1994, the initiative found employer recruitment and retention were less difficult to attain than many researchers expected. Most of the programs began with a focus in one industry, but almost all increased the number of participating industries and "the intensity of employer involvement has increased over time" (Kopp et al., 1995, p.16).

Hughes and Moore (1999), in their study of work-based learning, worked to determine why employers chose to participate in work-based learning programs. Of the 12 programs researched, several experienced difficulty recruiting enough students despite adequate employer participation. Others had difficulty providing enough placements for

interested students, and several others enjoyed a balanced supply-and-demand condition. Hughes concluded, "Recruiting enough employers is not the salient problem. The main hurdle is getting all the various constituencies to buy into creating an integrated, quality work-based learning system" (p. 12).

Corson and Silverberg (1994) identified advantages and disadvantages confronting partnerships involving large firms versus small firms:

Larger firms can generally employ more students and thus minimize variation in participants' work site experiences (multiple internship locations). Larger firms, which usually have more departments, diversified operations, and staff engaged in different types of work, can offer students a broader exposure to industry skills. They also tend to have greater discretionary resources that can be used to support the (work-based learning) effort — paying for special events, release time for staff, or work site positions that serve a long-term or even philanthropic rather than a short-term production purpose . . . Larger firms are also more likely to be unionized, however, and face some constraints to their participation. (p. 13)

Many manufacturing participants have a problem in placing interns in the direct work environment due to union constraints, even though many of these unions appear to play significant supportive roles within the work-based learning movement.

In contrast, smaller firms offer more individualized attention and guidance to their interns. Interns in larger and more-unionized shops are allowed to use equipment only under supervision (often only in training headquarters and not in the real work-site environment). Interns in smaller establishments are allowed, and even expected, to work independently on small projects, thereby, making their training more immediate and personally rewarding. A disadvantage of partnerships with small employers, however, is

the intern has limited exposure to the occupation or industry, because smaller businesses tend to specialize in a particular aspect of their field and use a narrower range of equipment and procedures than the industry as a whole (Corson & Silverberg, 1994).

### Employer Participation Concerns

Bailey et al. (1998b) examined concerns related to employer participation in work-based learning. Eleven factors of participation to which both participating and non-participating employers responded in a broad survey are listed in Table 2 (Bailey et al., 1998a). Participants of work-based learning programs are much more concerned with students' lack of basic skills and unreliability than are non-participants; whereas, work-based learning non-participants are far more concerned with lost productivity and fear of wasting their resources in the training of students who may not stay with them. These results are interesting when noting non-participants' low concern with the cost of student wages. The reduced fear among participants of losing trained students, can be viewed in two ways: participants may have been involved in work-based learning programs long enough to realize this situation is not as big a problem as non-participants believe, or employers may have an inherent lack of this fear, which is why they have become participants in the first place (Bailey et al., 1998b). The literature does not provide a definitive answer to this disparity.

Employer expectations are a crucial key to whether work-based learning succeeds or fails. Stephen Hamilton, cofounder of the Cornell Youth Apprenticeship Demonstration Project, states, "This is not a gift of minimum wage to a kid. They're earning their keep. And I see that as really crucial, because this isn't going to work if it's

Table 2

Employers' Concerns Related to Work-Based Learning Participation

Concern	Participants' Responses	Non-participants' Responses
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%

Note.  $n = 208$  for participants, 279 for non-participants. Standard error of estimates are under 1.9%.

based on altruism” (Olson, 1994, p. 23). But he adds, “There has to be an optimal balance between the work and the learning. If it becomes a way for employers to get cheap labor, that’s not right either. There’s a real fine line to be drawn” (Olson, 1994, p. 24).

Olson’s article went on to describe two very different pictures of what can happen in the workplace with interns based on employer/supervisor attitudes. The first example was from Robert Kage, an electrical-design group leader at Anitec, who was the mentor for a high school senior intern. After working with the youth for 5 months, he stated, “Boy, I’d like to have him here forty hours a week, if I could get him. He’s become a real asset to the group” (Olson, 1994, p. 29). The young man had helped create a crucial computer database for the plant; a task Kage insisted would not have been easily accomplished without the intern’s help.

The second example comes from Lourdes Hospital where the director of Human Resources said, “Sometimes, what happens with these kids, quite honestly, they get stuck somewhere, and they’re forgotten about. They’re not learning any skills. They’re a ‘gofer’” (Olson, 1994, p. 34).

### Summary

In reviewing the work-based learning literature, it is apparent that labor shortages in critical employment areas like nursing, information technology, and engineering, and the development and onset of new economy careers have given work-based learning a renewed emphasis by business and education. The literature also identified many of the correlates and components that are present in successful work-based learning programs and how those components and correlates benefit companies that participate in work-based learning programs. The work-based learning literature also provided some general clues of the motivations for those organizations that participate in work-based learning.

The work-based learning literature review also showed that to help facilitate the overall growth of work-based learning activities and programs to meet the growing labor shortages, Congress, in passing the School-to-Work Opportunities Act (1994), expanded the target market of work-based learning programs and activities from non college-bound students to include both non-college- and college-bound students. The passage of this Act required a significant increase in the number of businesses and employers who actively participate in local and national work-based learning activities and programs. The work-based learning literature also revealed that for work-based learning to continue to achieve the scale of business and employer participation needed for on-going successful programs, work-based learning business proponents and educators need to answer several questions about the current status of work-based learning.

## Chapter 3

### Methods

#### Introduction

Chapter 3 describes the methods and procedures used to conduct the study. Topics include the purpose, design, target population, sampling plan, survey instrument, data collection procedures, research questions and data analyses.

#### Purpose

The purpose of this study was to examine the demographics of Omaha area employers who participate in and do not participate in work-based learning and to identify the reasons why or why not companies participate in work-based learning. Research findings from the National Center for Research in Vocational Education (NCRVE) study, Achieving Scale and Quality in School-to-Work Internships: Findings from an Employer Survey, (Bailey et al., 1998a) and the National Employer Survey II (NES-II), administered by the U.S. Census Bureau (1997) provided guidance in the development of the methods and procedures that were used in this study.

#### Design

A survey method was used to study a cross-section of metropolitan Omaha businesses and employers (see Appendix A). Because of the Omaha business communities' diversity in size, industry, and work-based learning implementation, opinions were obtained from a representative sample of companies and employers. The questionnaire/survey method allows for the collection of data that may be generalized to the entire metropolitan Omaha business community. The study was approved by the university's Institutional Review Board (see Appendix B).

### Population and Sample

The sample for this study was a sub-group of the metropolitan Omaha business community. The sample included a total of 2,000 small (0 – 24 employees), medium (24 – 99 employees), and large (100+ employees) businesses. Each size category represents approximately 33% of the Omaha area companies and their representatives (e.g., hiring managers, CEOs, Human Resource personnel) who may or may not be involved in work-based learning. The firms sampled were also re-categorized into manufacturing or non-manufacturing companies. Firms that were categorized as manufacturing were determined to either manufacture or value-add to a tangible product. Non-manufacturing companies were determined to be involved with or provide a service activity. Approximately 35% of the Omaha area companies are involved in manufacturing products with the remaining 65% involved in non-manufacturing activities.

The Applied Information Management (AIM) Institute in cooperation with the Greater Omaha Chamber of Commerce (2003) provided its membership directory of business individuals and firms for survey use (see Appendix C). The AIM membership directory (2003) consists of small, medium, and large companies in a variety of industries that are members of the Greater Omaha Chamber of Commerce and the Applied Information Management Institute.

Of the 2,000 companies surveyed, 793 (39.7%) responded. The company respondents provided information that described each company's size and industry. Table 3 presents a demographic breakdown of the respondents by size and type of company, manufacturing or non-manufacturing.



Table 3

Characteristics of Company Respondents, n=793Size

Employees	<u>n</u>	<u>%</u>
0-50	594	74.9
51-250	164	20.7
250+	35	4.4

Type of Company

	<u>n</u>	<u>%</u>
Non-manufacturing	526	66.3
Manufacturing	267	33.7

### Data Collection Procedures

Study data were collected by a mail survey (see Appendix A). The survey was developed by the researcher using questions drawn from the literature review and through consultation with experts in the field of work-based learning. Two weeks after the mailing, a non-respondent follow-up letter and survey were sent to companies and individuals who did not complete and return the initial survey.

### Instrumentation

To conduct the study, a survey instrument was developed for collecting data from the 2,000 businesses that may or may not be involved in work-based learning. The review of the literature on effective work-based learning participation and practices helped to provide evidence of the survey's content validity.

The first objective of the survey was to collect demographic information about the organization to determine what common attributes exist in those companies that participate or do not participate in work-based learning. After the demographic information was collected, the instrument asked those respondents who do not participate in work-based learning to continue on to the third part of the survey.

The second part of the survey was concerned only with employers who were currently participating in work-based learning activities and programs. Questions from the National Center for Research in Vocational Education (NCRVE) study, Achieving Scale and Quality in School-to-Work Internships: Findings from an Employer Survey, (Bailey et al., 1998a) provided a partial basis for the development for this part of the survey. Respondents to this part of the survey were asked to identify those items that contribute to their decisions to participate or not to participate in work-based learning, the types of work-based learning activities they offer and participate in, and their future view

of their company's participation in work-based learning. Both employers who are and are not participating in work-based learning programs completed the last part of the survey. Questions from the NCRVE study, Achieving Scale and Quality in School-to-Work Internships: Findings from an Employer Survey (Bailey et al., 1998a) provided a partial basis for the development for this part of the survey. Respondents were asked to identify the concerns and issues they have or perceive about participating in work-based learning activities and programs.

### Validity

To validate the content of the study instrument, 15 representatives from the Omaha business community were asked to review the instrument and determine if other targeted individuals would understand and be able to respond to the instrument. As a result of comments provided by this group, survey questions 4, 16, 32-39 were modified and rewritten.

### Reliability

Reliability of the survey instrument was established by using a pilot study. The survey was mailed to 30 Omaha businesses, 10 to each size category, to complete, make comments about and return. Twenty-two completed pilot surveys were returned. The returned surveys were statistically analyzed using the SPSS package to provide an estimate of the survey questions' reliability. The reliability analyses provided the following alpha coefficients: .9464 (external company motivations), .8367 (internal company motivations), and .8547 (company participation concerns).

### Research Questions

The following research questions were addressed in this study:

1. Is there a significant relationship between the size and type of a company and its participation in work-based learning?
2. What are the reasons that Omaha companies choose to participate in work-based learning?
3. Is there a significant difference in the concerns of Omaha companies that participate in work-based learning and those that do not?

#### Data Analysis

Data for research question 1, provided by survey questions 2 and 4, were examined by using descriptive statistics and a Chi-square Test for Independence. Data for research question 2, provided by survey questions 16-28 and 32-39, were examined by using descriptive statistics. Research question 3 data, provided by survey questions 40-51, were examined by using independent t-tests. The SPSS package was used to organize and analyze the collected data.

## Chapter 4

### Results

The purpose of this dissertation study was to examine and profile the Omaha business communities' support of and participation in work-based learning programs and activities. Chapter 4 presents the results and findings.

The study posed three research questions:

1. Is there a significant relationship between the size and type of company and its participation in work-based learning?
2. What are the reasons that Omaha companies choose to participate in work-based learning?
3. Is there a significant difference in the concerns of Omaha companies that participate in work-based learning and those that do not?

#### Research Question 1

*Is there a significant relationship between the size and type of company and its participation in work-based learning?*

Research question 1 was answered using descriptive statistics and a Chi-square Test for Independence. Table 4 presents a statistical breakdown of company size, manufacturing or non-manufacturing status, and participation in work-based learning or not. Results from the descriptive statistics analysis indicate that the company profile that most likely would participate in work-based learning is a small company involved in non-manufacturing activities. The results of the Chi-square analysis indicate that there is no relationship between the size and type of company and its participation or non-participation in work-based learning programs and activities. Chi-square results

Table 4

Descriptive Statistics, Size of Companies, Manufacturing or Non-manufacturing and Participation in Work-Based Learning

<u>Participates in Work-Based Learning</u>						
Employees	Manufacturing		Non-manufacturing		Total	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
0-50	58	20.8	120	43.0	178	63.8
51-250	25	9.0	47	16.8	72	25.8
250+	12	4.3	17	6.1	29	10.4
Total	95	34.1	184	65.9	279	100.0

Does Not Participate in Work-Based Learning

Employees	Manufacturing		Non-manufacturing		Total	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
0-50	140	27.2	276	53.7	416	80.9
51-250	34	6.7	58	11.2	92	17.9
250+	0	0.0	6	1.2	6	1.2
Total	174	33.9	340	66.1	514	100.0

for those companies that participate in work-based learning were  $\chi^2(2) = 0.0879$ ,  $p = .645$ . Chi-square results for non-participating companies were  $\chi^2(2) = 3.474$ ,  $p = .176$ .

### Research Question 2

*What are the reasons that Omaha companies choose to participate in work-based learning?*

Research question 2 was answered using descriptive statistics. To answer this question two sets of related survey questions were asked of companies that indicated that they currently participate in work-based learning programs and activities. The first set of questions was used to determine what external factors might motivate a company to participate in work-based learning. The first set of questions used a Likert scale ranging from 1-5 with 1 equaling not a motivating factor to 5 equaling a strong motivating factor. The mean scores of the 12 survey questions relating to external motivators were calculated to analyze the reasons that Omaha companies participate in work-based learning (see Table 5). The mean participation scores ranged from a low of 1.75 to a high of 3.85. A higher mean score indicated that the external motivator factor had a stronger influence on a company's participation in work-based learning programs and activities. The results indicated that the major external reasons that Omaha companies participate in work-based learning are community support and public relations with mean scores of 3.85 and 3.84, respectively. Other external influences with mean scores above 3.0 included: long-term recruiting tool (3.42), chance to test potential employees (3.16), chance to improve public education (3.08) and access to a qualified labor pool (3.04). These results indicate there are a variety of external reasons that determine why companies participate in work-based learning.

Table 5

Descriptive Statistics of Company Responses to Survey Questions 16-27 Relating to  
Company External Motivators for Participation in Work-Based Learning

Survey Question	<u>n</u>	<u>M</u>	<u>SD</u>
Contributing to community	278	3.85	1.14
Good public relations	278	3.84	1.19
Long-term recruiting tool	268	3.42	1.37
Opportunity to test potential employee	277	3.16	1.40
Improving public education system	279	3.08	1.45
Access to pool of qualified workers	268	3.04	1.40
Local labor shortage	264	2.43	1.42
Access to pre-screened applicants	271	2.56	1.32
Part-time/short term hiring	273	2.50	1.35
Reduced training	262	2.25	1.28
Encouragement from industry groups	266	2.11	1.32
Reducing benefits expenses	262	1.75	1.13



Work-based learning participants were also asked what internal factors motivate them to participate in work-based learning. Internal factors include those motivators that are based within a company's organizational structure, mission statement and management philosophy. The second set of survey questions was answered using a Likert scale ranging from 1-5 with 1 equaling strongly disagree to 5 equaling strongly agree. The mean scores of the seven internal motivator questions were calculated to analyze the internal reasons that Omaha companies participate in work-based learning (see Table 6). The mean participation scores ranged from a low of 2.89 to a high of 4.20. A higher mean score indicated that the internal motivator factor had a stronger influence on a company's participation in work-based learning programs and activities. The results from the analysis indicated that the major internal motivators were work-based learning support by a company's senior management and work-based learning support by department management with mean scores of 4.20 and 4.19, respectively. Other internal motivators with mean scores above 4.0 included: support by company employees (4.07) and company image (4.03). The results indicated that only one internal factor, formal corporate policies (2.89), did not play an important role in the surveyed company's choice to participate in work-based learning.

### Research Question 3

*Is there a significant difference in the concerns of Omaha companies that participate in work-based learning and those that do not?*

Independent t-tests were used to examine the differences in the concerns between companies that participate in work-based learning and those that do not. A set of related survey questions was answered using a Likert scale that ranged from 1-5 with 1

Table 6

Descriptive Statistics of Company Responses to Survey Questions 32-39 Relating to  
Company Internal Motivators for Participation in Work-Based Learning

<u>Survey Question</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Work-based learning is supported by my company's senior management.	272	4.20	0.86
Work-based learning is supported by my company's department level management.	163	4.19	0.76
Work-based learning is supported by my company's employees.	277	4.07	0.79
Work-based learning is valuable to my company's image and public relations.	272	4.03	0.81
Work-based learning provides my company a good source of future employees.	272	3.96	0.91
Work-based learning is valuable to my company's bottom-line profit.	275	3.14	1.21
My company has formal corporate policies about work-based learning.	275	2.89	1.20

equaling not a concern to 5 equaling a very strong concern. A .01 significance level was used because multiple t-tests were conducted. Results from the t-tests showed that of the 12 participation concerns asked of work-based learning participants and non-participants, 10 of the concerns showed significant differences at the .01 level between companies that participate and those that do not (see Table 7). Results of the t-tests showed the only participation concerns that were not found to be significantly different between companies that participate in work-based learning and those that do not were union opposition to work-based learning,  $t(713) = 2.492$ ,  $p = .013$  and students' lacking necessary skills  $t(727) = 1.895$ ,  $p = .058$ . Overall, the analyses indicate there are differences in the work-based learning participation concerns between those companies that currently participate in work-based learning programs and activities and those that do not.

Table 8 presents the rank order list of participation concerns of companies that participate in work-based learning and those that do not. The first six concerns of the participants and non-participants were in the same order with similar mean scores that were well above the Likert scale score of 3.0. The first six concerns for participants and non-participants were: union opposition, employee resistance, economic climate, OSHA laws, student wages and coordination issues. The second set of concerns not only differed in rank order but also differed in mean scores. The second six concerns for participants were: students might leave (4.05), student immaturity (3.87), cost of program (3.86), lost productivity (3.83), student availability (3.76) and students' lack skills (3.66). The mean score for participants' second set of concerns were all above 3.0. These results indicated that all the surveyed concerns were important to the work-based learning participants. The non-participants' second six concerns were: students' lack

Table 7

t-tests for Work-Based Learning Participants' and Non-Participants' Ratings of ConcernsAbout Work-Based Learning

Concerns	Group	<u>M</u>	<u>SD</u>	<u>t</u>	<u>df</u>	<u>p</u>
Students' lack skill	Participant	3.66	1.22	1.895	727	.058
	Non-participant	3.48	1.21			
Union opposes	Participant	4.86	0.60	2.492	713	.013
	Non-participant	4.71	0.88			
Student availability	Participant	3.76	1.18	4.450	706	<.0005*
	Non-participant	3.34	1.22			
Employee resistance	Participant	4.46	0.79	4.512	713	<.0005*
	Non-participant	4.14	1.00			
Student immaturity	Participant	3.87	1.17	5.257	714	<.0005*
	Non-participant	3.30	1.24			
Coordination issues	Participant	4.22	1.35	5.414	791	<.0005*
	Non-participant	3.60	1.61			
OSHA laws	Participant	4.35	1.16	5.740	713	<.0005*
	Non-participant	3.74	1.44			
Students might leave	Participant	4.05	1.12	5.900	713	<.0005*
	Non-participant	3.46	1.26			
Economic climate	Participant	4.40	1.00	5.904	711	<.0005*
	Non-participant	3.88	1.20			
Student wages	Participant	4.32	0.94	6.951	711	<.0005*
	Non-participant	3.71	1.21			
Cost of program	Participant	3.86	1.57	8.810	791	<.0005*
	Non-participant	2.83	1.56			
Lost productivity	Participant	3.83	1.07	8.903	717	<.0005*
	Non-participant	2.98	1.32			

Table 8

Descriptive Statistics for Work-Based Learning Participant and Non-Participant Concerns About Participating in Work-Based Learning

Work-Based Learning Participant Concerns Ranking			Work-Based Learning Non-participant Concerns Ranking		
	<u>M</u>	<u>SD</u>		<u>M</u>	<u>SD</u>
Union opposes	4.86	0.60	Union opposes	4.71	0.87
Employee resistance	4.46	0.79	Employee resistance	4.14	1.00
Economic climate	4.40	1.00	Economic climate	3.88	1.20
OSHA laws	4.35	1.16	OSHA laws	3.74	1.44
Student wages	4.32	0.94	Student wages	3.71	1.21
Coordination issues	4.22	1.35	Coordination issues	3.60	1.61
Students might leave	4.05	1.12	Students' lack skills	3.48	1.28
Student immaturity	3.87	1.17	Students might leave	3.46	1.26
Cost of program	3.86	1.57	Student availability	3.34	1.22
Lost productivity	3.83	1.07	Student immaturity	3.30	1.24
Student availability	3.76	1.18	Lost productivity	2.98	1.32
Students' lack skills	3.66	1.22	Cost of program	2.83	1.56

skills (3.48), students might leave (3.46), student availability (3.34), student immaturity (3.30), lost productivity (2.98), and cost of program (2.83). These results indicated that work-based learning non-participants had slightly less concern than the participating companies about the majority of the secondary participation issues and not as much concern about the areas of lost productivity and cost of program concerns that had mean scores below 3.0.

### Summary

The purpose of this study was to examine the demographics of Omaha area employers that participate in and do not participate in work-based learning, to determine the reasons why Omaha area businesses participate in work-based learning and to identify the reasons why or why not companies participate in work-based learning.

The results indicated that there is no prototypical business that participates in work-based learning in the Omaha area and that participation in work-based learning is not influenced by either size or type of company, manufacturing or non-manufacturing (see Table 4). The closest profile to an organization that would likely participate in work-based learning is a small, less than 50 employees, non-manufacturing company (see Table 4).

External motivators that impacted participation in work-based learning included contributing to the community well-being, good public relations and as a long-term recruiting tool (see Table 5). Internal motivators that impacted participation in work-based learning included support of a company's senior management, support by department management, support by company employees and company image (see Table 6).

The results indicate that both participating and non-participating companies have concerns about participating in work-based learning programs and activities. There were differences in the work-based learning participant concerns when compared to the concerns of non-participants (see Table 7). Both participant and non-participant companies expressed that work-based learning structural issues were their greatest concerns. These structural concerns included union opposition, employee resistance, economic climate, OSHA/labor laws and coordination problems (see Table 8). Concerns regarding students and their actual participation in work-based learning programs were secondary to the structural issues for both participating and non-participating companies. These secondary concerns included student might leave after training, student immaturity, student availability and student lacking skills. These concerns were more pronounced in the participating companies than the non-participating companies (see Table 8).

It is important to note that the results of this study need to be applied carefully. Work-based learning programs and activities can be highly individualized and differ from company to company. For example one company may participate in work-based learning by offering an internship program while another participates by providing career mentoring. Because of the ongoing development and changing nature of work-based learning programs and activities it would also be inappropriate to make general assumptions that all companies have access to the same work-based learning knowledge base as well as understand work-based learning programs and activities in a similar fashion. Chapter 5 presents an interpretation of these results as well as a discussion of the study's implications for work-based learning in Omaha.

## Chapter 5

### Summary

Cooperative education between high schools and businesses has been federally recognized since the Smith Hughes Vocational Education Act (1917). The intention of this Act and subsequent related programs was to promote work-based learning in order to assist students in moving from vocational training in high school to relevant occupations as adults.

During the 1990s, work-based learning gained prominence as one element of local, state, and federal school reform strategies to meet the challenge of a growing national labor shortage of skilled workers (Wieler & Bailey, 1998). This continued need of earlier student introduction to work force skills and aptitudes was recently reinforced by Alan Greenspan, the Chairman of the Federal Reserve Board in a speech to the Omaha Chamber of Commerce. Greenspan stated, "We need to be forward-looking to adapt our educational system to the evolving needs of the economy by discovering the means to enhance the skills of our work force and to further open markets here and abroad" (Greenspan, 2004, p. 23).

Work-based learning includes a number of activities that can be identified along a continuum from shorter-term introductory types of experiences to longer-term, more intensive ones, including paid work experience and formal training (Naylor, 1997). As presented in the National Employer Survey Results (Institute for Research on Higher Education, 1997), the most common primary work-site/community-based work-based learning activities include: job shadowing, mentoring, internships, cooperative education, registered apprenticeships, and youth apprenticeships.



This research examined the demographics of Omaha area employers who participate in and do not participate in work-based learning, identified the reasons why Omaha area businesses participate in work-based learning and examined the concerns that both participating and non-participating companies have about their involvement in work-based learning programs and activities.

The study posed three research questions:

1. Is there a significant relationship between the size and type of company and its participation in work-based learning?
2. What are the reasons that Omaha companies choose to participate in work-based learning?
3. Is there a significant difference in the concerns of Omaha companies that participate in work-based learning and those that do not?

The sample for the study was drawn from 2,000 metro-Omaha area businesses and companies that are members of the Greater Omaha Chamber of Commerce and the Applied Information Management (AIM) Institute. Because participation in these organizations is voluntary, one can assume that the member organizations are interested in work force development. Data were collected using a mailed survey. Of the 2,000 surveys sent out, 793 companies and businesses responded for a 39.7% return rate.

### Discussion and Implications

As the data were collected and analyzed, three themes emerged about the Omaha business community's participation in and support for work-based learning. First, in regard to employer participation in work-based learning, there is no relationship between the size and type of company and its participation in work-based learning. Second, internal motivations, rather than external motivations, may have more to do with why a

company participates in work-based learning programs and activities. The third theme addresses the differences in the concerns of Omaha-area companies and their participation or non-participation in work-based learning programs and activities. These themes guide the discussion and implications of this study.

#### Employer Participation in Work-Based Learning

Several national studies have been conducted to identify a national profile for the typical work-based learning participant company (Bailey et al., 1998a; Cappelli et al., 1997; NES-II, 1997). The U.S. Census Bureau's National Employer Survey II (NES-II) (1997) examined the characteristics of manufacturing and non-manufacturing companies that participated in work-based learning. The NES-II (1997) survey found national participation is not significantly limited to establishments of any particular size or number of employees. Bailey et al. (1998a) in their study of school to work employer participation also found that participation is not limited to establishments of any particular size or number of employees, but did identify that it is more common for the nation's larger employers to engage in work-based learning activities. Cappelli et al. (1997), using the NES-II data, found that among manufacturing-based participants, the top three areas of participation were in transportation equipment, primary metals, and printing/publishing. Among those participants that were non-manufacturers, the top three areas were communications, health services, and utilities, closely followed by finance and hotels.

This study's results were similar to the national studies. The study showed that Omaha work-based learning programs and activities were not limited to companies of any particular employee size or industry. In contrast to the national findings the study's results indicated that work-based learning programs might be more common in smaller

Omaha area employers than the larger ones. The Omaha study also identified that for manufacturing-based participants the top three industries were printing/publishing, construction and agriculture. The top three non-manufacturing participant industries were education/training, financial services and health care. Because the national studies focused on cities that were larger, located on the east and west coasts and have a higher percentage of heavy industries, Omaha's size, geographical location and its lighter industry base may explain the differences in this study's results when compared to the national studies.

#### Reasons Companies Participate in Work-Based Learning

In order to understand work-based learning's status in the metro-Omaha business community it is important to understand why companies choose to participate or not participate in work-based learning. The literature suggests three overall reasons for businesses becoming involved in work-based learning programs: (1) economic, (2) philanthropic, and (3) combination (both) (Bailey et al., 1998a; National School-to-Work Learning and Information Center, 1996). The resource bulletin, Engaging Employers in School-to-Work Systems, prepared by the National School-to-Work Learning and Information Center (NSWLIC) (1996), found that 75% of employers, particularly those from large establishments, agreed they were (at least) motivated by an interest in performing a community service. While more than half of the firms surveyed for MDS-902 (Bailey et al., 1998a) were motivated by a desire to contribute to the community and/or improve public education, the researchers found philanthropy was not the overriding motivation for all employers. Bailey et al. (1998a) identified a number of firms reporting that bottom-line motivations, such as having access to a pool of qualified workers, caused them to become involved in work-based learning programs. The survey

also found many firms that choose not to participate might need more “bottom-line oriented” arguments to convince them to enter work-based learning partnerships.

This study, like the other studies, examined the external motivations of a company’s participation in work-based learning. External motivations are defined as the extrinsic reasons that a company does something. These reasons include a desire for good public relations, increased profit and sales and enhanced access to trained workers. Unlike the other studies, this study also reviewed the internal motivations of a company’s participation in work-based learning programs and activities. Internal motivations are defined as being intrinsic to the organization and speak to the internal philosophy of how the company operates. Internal motivations include the company’s organizational structure, company values and organizational mission.

In terms of external motivations, this study’s results were similar to the national findings; there is a difference in the external motivations of companies that participate in work-based learning. The majority of Omaha area companies, like the national studies, participate in work-based learning to either contribute to the community or to gain good public relations. Also, like the national findings, the study’s results indicate that Omaha does have a number of firms that are looking for bottom-line results in return for their participation. These returns include long-term recruiting and the ability to test potential employees.

This study’s review of internal company motivations provided insight into the participation question and may shed some light on how greater Omaha-area company participation can be generated for work-based learning programs and activities. When Omaha companies were asked to rate internal factors related to work-based learning participation on 5-point Likert scale with 1 being strongly disagree and 5 being strongly

agree, three areas scored, on average, above a 4.0. These three factors were (a) work-based learning is supported by senior management with a mean of 4.20, (b) work-based learning is supported by the department level management with a mean of 4.19, and (c) work-based learning is supported by the company's employees with a mean of 4.07.

These results indicate that the internal motivation of company structure and support for work-based learning may be a greater determinant of participation in work-based learning programs and activities than either the external motivations of contribution to the community or public relations.

#### Company Concerns about Participating in Work-Based Learning

Bailey et al. (1998b) examined concerns related to employer participation in work-based learning. The authors examined 12 factors of participation to which both participating and non-participating employers responded to in a broad survey. Mean scores for the 12 concern factors were very similar between the two groups, but there were differences. Results showed participants of work-based learning programs are much more concerned with the cost of programs and lost productivity than are non-participants; whereas, non-participants are more concerned with lost productivity and fear of wasting their resources in the training of students who may not stay with them.

This study, using the same 12 factors of participation that the Bailey et al. (1998b) study did, asked both work-based learning participants and non-participants to rate 12 concerns using a 5-point Likert scale, with 1 being not a concern and 5 being a strong concern. Of the 12 concerns asked of companies about their work-based learning participation, 10 of them indicated significant differences between companies that participate in work-based learning and those that do not. Only on students' lacking skills and union opposition to work-based learning concerns were there no significant differences

between work-based learning participants and non-participants (see Table 7).

Rank order results for the Omaha work-based learning participants and non-participants were different from the Bailey et al. (1998b) findings, but the overall study findings were similar, indicating that there is a significant difference between the concerns of work-based learning participants and non-participants. For both Omaha work-based learning participants and non-participants the first six concerns were the same. Concerns in order were union opposition, employee resistance, economic climate, OSHA/child labor laws, student wages and coordination problems. This list of concerns, for both participants and non-participants, shows that other than student wages, both groups focused on work-based learning organizational concepts such as legal, public relations, program structure and implementation issues rather than work-based learning employee and training concerns. Work-based learning organizational concerns were especially high among work-based learning participants who gave all six of their concerns a mean score above 4.20. In contrast, work-based learning non-participants gave only the first two of their six organizational concerns mean scores above 4.0.

For this study, the second set of six concerns, student maturity, students' leaving after training, students' lacking skills, student availability, lost productivity and cost of program, were ranked differently by the work-based learning participants and non-participants. As mentioned earlier, the second set of concerns, except for cost of program, dealt with concerns about the actual work-based learning student/employee. Again the work-based learning participants gave all six of the second set of concerns a score above a 3.0 mean while the work-based learning non-participants ranked just four of the second six concerns above a 3.0 mean with two concerns scoring below 3.0. These results indicate that the work-based learning non-participant companies, on average, had less concerns

about the student/employee who is involved in the work-based learning programs than did the participating companies.

Overall this research showed that there is a difference in concerns between companies that participate in work-based learning and those that do not. But, the focus on work-based learning structural concerns by both participants and non-participants rather than training and productivity concerns may be stronger indications that there is a lack of understanding of how work-based learning is organized and properly implemented within a company.

### Recommendations for Practice

There are many reasons for companies to get involved with work-based learning. Reasons mentioned most frequently for a firm's involvement in work-based learning include the reduction of the costs of recruiting, selecting, and training new workers; the development of a high-quality, diverse workforce; the increased skill and employability levels of students; the attainment of higher levels of productivity; improved performance levels of incumbent workers who participate as mentors; and the ability of meeting the demand for new skills required by rapid technological changes (NELC, 1998). Based on this study's findings, to increase the number of Omaha area businesses participating in work-based learning programs and activities the following recommendations for practice are suggested:

1. The study's findings indicate that there is no relationship between the size and type of company and its involvement in work based learning programs. With no real profile of the typical work-based learning participant, the recruitment of these small, medium and large sized, manufacturing or non-manufacturing companies to participate in work-based learning activities takes on a formidable challenge. To help meet this

challenge, an employer recruitment campaign could be created to target specific sized companies within specific industry categories. The campaign would explain the purpose of work-based learning, opportunities for a company's participation in work-based learning and how a company can go about setting up its own individual work-based learning program.

2. This study's results indicate there are significant differences in the internal and external reasons a company participates in work-based learning programs. The results seem to indicate that it is important to help a company identify what are its possible participation motivations. To help companies identify their motivations for participating in work-based learning, a work-based learning implementation rubric should be created. This participation rubric would help companies determine which external and internal motivation factors were in place and if these motivation factors made a company a good candidate for involvement in work-based learning programs and activities. The rubric would also help companies determine what elements of successful work-based learning motivators were missing and/or needed to be developed for successful participation.

3. The study's results indicate that there are also significant differences in the work-based learning concerns of both participating and non-participating companies. To increase Omaha area business participation in work-based learning, concerns most cited by both groups must be addressed. These concerns include: student availability, employee resistance, cost of programs, economic climate and lost productivity. To help address these participation concerns and encourage increased participation in work-based learning by both groups it is important to create a forum to provide answers regarding work-based learning program and activity involvement. The development and implementation of work-based learning employer recruitment and training seminars



would be useful to introduce both participating and non-participating companies to the concepts of work-based learning. The seminar would address the concerns and issues that those same companies might have about their involvement in work-based learning.

#### Recommendations for Further Research

The increased use of work-base learning is and will continue to be an emerging topic in education. This study was exploratory and collected the perceptions of one group of businesses about their participation or non-participation in work-based learning programs and activities. These perceptions were gathered to determine if the use of work-based learning programs could be expanded in the Omaha business community. Further research is needed to determine additional attitudes and perceptions held by the Omaha business community. Specifically the following should be considered:

1. Because the study focused on a narrow group of select businesses, the study should be replicated using a broader base of metro-Omaha companies. For example, the survey could be sent to all incorporated businesses in Douglas, Washington, Sarpy and Pottawattamie counties.
2. Because the survey was paper based and required that it be completed and mailed back, it should also be replicated using more advanced methods such as web-based surveying. The use of a web-based survey would speed up survey delivery, completion and return time, possibly increasing the number of businesses participating in the study. In addition, a web-based survey would also reduce the survey's cost for delivery and return.
3. This study, in determining the reasons why companies participate in work-based learning, only asked those companies that were currently providing work-based learning activities to complete the second part of the survey. For comparative reasons, it

is recommended that future studies have non-participants also complete this part of the survey to determine why they chose not to participate in work-based learning.

4. This study was quantitative. Further studies should include a qualitative data component that allows businesses to elaborate on their work-based learning involvement and participation status.

5. Using study results, it could not be determined whether or not there was Omaha business support for expanding work-based learning programs and activities. Future studies need to develop a specific set of questions regarding the Omaha business communities' interest in and support of expanding work-based learning programs.

### Summary

The specific purposes of this study were to examine and profile the Omaha business communities' support of and participation in work-based learning programs and activities. The study was able to determine that there is no relationship between the size and type of company and its participation in work-based learning in the Omaha area. Furthermore, the research showed that the companies that do participate in work-based learning programs and activities do so for a variety of external and internal reasons. The results indicated there is a difference in the external company motivations for participation in work-based learning, such as public relations, company support for programs, long term recruitment, reduced training costs and company culture. Findings from the study indicate the most important external motivators were a desire to contribute to the community and garnering good public relations. The findings also identified that there are significant differences in a participating companies' internal motivations for participating in work-based learning. The most important internal motivators for those companies that participate in work-based learning programs and activities included the

support of senior and department levels of management and the support of company employees. Finally, the research indicated that there are differences in the concerns of Omaha companies, both participating and non-participating, in work-based learning programs. Worries about unions, labor laws and economic climate were the leading concerns regarding company participation in work-based learning.

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Appendix A  
Company Survey

## Survey: Omaha Employers Perceptions of Work-Based Learning

**PART I  
DEMOGRAPHICS**

Please answer the following questions about your company's demographics.

1. Company name \_\_\_\_\_

2. Please circle the letter that represents your company's approximate number of employees.

- A. 0-10
- B. 11-25
- C. 26-50
- D. 51-100
- E. 101-250
- F. 251-500
- G. 501-1000
- H. 1001-2500
- I. 2500+

3. Please circle the county where your company has the majority of its employees located. (please circle all that apply).

- A. Washington County
- B. Douglas County
- C. Sarpy County
- D. Pottawattamie County
- E. Other \_\_\_\_\_



4. Please circle the letter of the primary industry in which your company is involved (please circle all that apply).

- A. Agricultural and Natural Resources
- B. Arts, Audio-Visual Technology and Communications
- C. Information Technology Systems
- D. Business and Administrative Services
- E. Construction
- F. Education and Training Services
- G. Financial Services
- H. Health Services
- I. Hospitality and Tourism
- J. Human Services
- K. Information Technology Services
- L. Legal and Protective Services
- M. Manufacturing
- N. Public Administration and Government
- O. Retail/Wholesale Sales and Service
- P. Scientific Research, Engineering and Technical Services
- Q. Transportation, Distribution and Logistics Services

5. Does your company currently provide Work-Based Experiences for Students?

- A. Yes
- B. No

(If you answered "No" to question 5, please go to Part III question 39, page 6 of this questionnaire. If you answered "Yes" to question 5 please go on and complete Part II and Part III)

## PART II

Please check the following work-based learning activities your company offers to students.

		Offered
6.	Paid Internships/externships	_____
7.	Unpaid Internships/externships	_____
8.	Job Shadowing	_____
9.	Site-based Enterprises	_____
10.	Workplace Tours	_____
11.	Guest speakers	_____
12.	Service Learning	_____
13.	Career Placement	_____
14.	Career Mentoring	_____
15.	Other (please specify) _____	_____
	_____	

Please use the following scale to rate motivation factors for your company's participation in work-based learning.

	1. Not a motivating factor					
	2. Could be a motivating factor					
	3. Somewhat a motivating factor					
	4. Motivating factor					
	5. Strong motivating factor					
16.	Local labor shortage	1	2	3	4	5
17.	Opportunity to test potential employee	1	2	3	4	5
18.	Part-time/short term hiring	1	2	3	4	5

19. Improving public education system	1	2	3	4	5
20. Encouragement from industry groups	1	2	3	4	5
21. Reducing benefits expenses	1	2	3	4	5
22. Contributing to community	1	2	3	4	5
23. Access to pre-screened applicants	1	2	3	4	5
24. Increased training is necessary	1	2	3	4	5
25. Access to pool of qualified workers	1	2	3	4	5
26. Long-term recruiting tool	1	2	3	4	5
27. Good Public Relations	1	2	3	4	5
28. Other (Please specify)_____					
_____	1	2	3	4	5

29. Please circle the letter that best represents how many work based learning students were involved with your company during the past 12 months (Year 2002-03).

- A. 1 to 5
- B. 6 to 10
- C. 11 to 15
- D. 16 to 20
- E. 21 to 25
- F. More than 25

30. Please circle the departments or business units of your company involved with work-based learning programs and activities (please circle all that apply).

- A. Accounting
- B. Administration
- C. Office/Clerical Support

- D. Customer Service
- E. Information Technology
- F. Marketing
- G. Manufacturing
- H. Research and Planning
- I. Other (please specify) \_\_\_\_\_

Please use the following scale to rate the following statements

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 32. Work-based learning is valuable to my company's bottom line profit.                | 1 | 2 | 3 | 4 | 5 |
| 33. Work-based learning is valuable to company's image and public relations.           | 1 | 2 | 3 | 4 | 5 |
| 34. Work-based learning provides my company a good source of future employees.         | 1 | 2 | 3 | 4 | 5 |
| 35. My company has a corporate culture that encourages the use of work-based learning. | 1 | 2 | 3 | 4 | 5 |
| 36. My company has formal corporate policies about work-based learning.                | 1 | 2 | 3 | 4 | 5 |
| 37. Work-based learning is supported by my company's senior management.                | 1 | 2 | 3 | 4 | 5 |
| 38. Work-based learning is supported by my company's department level management.      | 1 | 2 | 3 | 4 | 5 |
| 39. Work-based learning is supported by my company's employees.                        | 1 | 2 | 3 | 4 | 5 |

40. Please circle the letter of the school districts you currently work with in providing students work-based learning activities? (Please circle all those that apply)

- A. Omaha Public Schools
- B. Millard Public Schools
- C. Bellevue Public Schools
- D. Westside Community Schools
- E. Ralston Public Schools
- F. Papillion LaVista Public Schools
- G. Elkhorn Public Schools
- H. South Sarpy District 46 Public Schools
- I. Council Bluffs Community School District
- J. Blair Community Schools
- K. Fort Calhoun Public Schools
- L. Arlington Public Schools
- M. Louisville Public Schools
- N. Plattsmouth Public Schools
- O. Gretna Public Schools
- P. Bennington Public Schools
- Q. Riverside Community School District
- R. Lewis Central Community School District
- S. Underwood Community School District
- T. Treynor Community School District
- U. Bennington Public Schools
- V. Valley Public Schools
- W. Waterloo Public Schools
- X. Hancock-Avoca Community School District
- O. Other (Please List) \_\_\_\_\_

## PART III

Please use the following scale to rate concerns your company has or might have about participating in work-based learning activities and programs.

1. Not a Concern
2. Slight Concern
3. Moderate Concern
4. Strong Concern
5. Very Strong Concern

41. Employee resistance.	1	2	3	4	5
42. Student might leave after training.	1	2	3	4	5
43. Lost productivity for involved employees.	1	2	3	4	5
44. Union opposition	1	2	3	4	5
45. Uncertain economic climate.	1	2	3	4	5
46. Students' lack basic skills	1	2	3	4	5
47. OSHA/child labor laws	1	2	3	4	5
48. Students' not always available	1	2	3	4	5
49. Students' wages are too costly	1	2	3	4	5
50. Students' are unreliable or too immature	1	2	3	4	5
51. Problems working with the school	1	2	3	4	5
52. Overall cost of work-based learning programs.	1	2	3	4	5

53. Would you like a copy of the results from this survey?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

If Yes, please complete the following information:

Your name \_\_\_\_\_

Company name \_\_\_\_\_

Address \_\_\_\_\_

E-Mail \_\_\_\_\_

Appendix B  
IRB Approval Letter





NEBRASKA'S HEALTH SCIENCE CENTER  
A Partner with Nebraska Health System

Institutional Review Board (IRB)  
Office of Regulatory Affairs (ORA)

September 11, 2003

Keith Bigsby  
Educational Admin. KH 414  
UNO - VIA COURIER

IRB#: 319-03-EX

TITLE OF PROTOCOL: Work-Based Learning in Omaha: A Study Comparing Omaha Business Support for Work-Based Learning to National Business Support for Work-Based Learning

Dear Mr. Bigsby:

The IRB has reviewed your Exemption Form for the above-titled research project. According to the information provided, this project is exempt under 45 CFR 46.101b, category 5. You are therefore authorized to begin the research.

It is understood this project will be conducted in full accordance with all applicable sections of the IRB Guidelines. It is also understood that the IRB will be immediately notified of any proposed changes that may affect the exempt status of your research project.

Please be advised that the IRB has a maximum protocol approval period of three years from the original date of approval and release. If this study continues beyond the three year approval period, the project must be resubmitted in order to maintain an active approval status.

Sincerely,

*Ernest Prentice, PhD/gdk*

Ernest D. Prentice, Ph.D.  
Co-Chair, IRB

EDP/gdk

Academic and Research Services Building 3000 / 987830 Nebraska Medical Center / Omaha, NE 68198-7830  
402-559-6463 / FAX: 402-559-3300 / Email: irbora@unmc.edu / <http://www.unmc.edu/irb>

Appendix C

Permission Letter

August 10, 2003

Keith Bigsby  
Assistant Principal  
Bryan Middle School  
Omaha, NE 68147

RE: Usage of AIM Member and Greater Omaha Chamber Database

Keith:

The AIM Institute is pleased to provide you access to the AIM and the Greater Omaha Chamber of Commerce member mailing list for the purpose of research into work-based learning. We look forward to the results of your study and using the information to design AIM programs. Good luck with the completion of your dissertation and let us know if there is anything else we can do to help you with the process.

Sincerely,

Kandace R. Miller  
Senior Vice President/Chief Operating Officer