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Impact of participation in experiential education curricula on career achievement

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CHAPTER 1

INTRODUCTION

Introduction

The Secretary's Commission on Achieving Necessary Skills (SCANS) report (1990), prepared for the Employment and Training Administration, U.S. Department of Labor, included research on identifying and describing the skills required by work. The administration felt there was a need for this report since throughout the history of this country there hasn't been an accepted statement of the skills necessary for work.

During World War II, analysis of key skills was necessary to develop training programs. During the 1960s, it was important to view skills needed for specific jobs in order to test for qualified candidates in a bias-free society. Now, there is a concern about whether schools prepare students for the current technologically advanced, high-performing work environment.

Usually, necessary skills are described either in "general human characteristics (e.g., intelligence, reasoning ability, reaction time) or on the characteristics of specific jobs (e.g., ability to assemble items, load ammunition, route packages)." When they are out of context, they are difficult to "translate" into what needs to be taught in the schools. The SCANS report took the opportunity to challenge society to "restructure schools and workplaces and greatly increase the skills of much of the current workforce-- especially those of our frontline, non- college educated workers."

The Commission visited corporate training centers to observe how their training was handled. They analyzed research that was done for the U.S. Army demonstrating the importance of learning in context. They held discussions with key researchers in a number of fields including education policy, labor force training, job analysis and assessment, work

and cognition. The report suggests a language for use in presenting the inventory of skills that is composed of three elements. “The functional skills that describe what people actually do at work: the enabling skills, that is, the specific knowledge and procedures developed through the traditional teaching and learning activities of schools; and the scenario, a communication device to demonstrate the way in which work integrates these skills into a productive outcome.”

The report noted that technology in the workplace has replaced learning that was based on visual observation through mathematics and verbal communication. Decisions must be made quickly at points of production and service, requiring critical thinking of front line workers. Employees are expected to work in teams, requiring much interpersonal communication and conflict resolution skills.

Implications for schools include changes in skills that are taught and the performance standards used in assessment. Educators must concur that learning actually occurs when the learner constructs, invents, and solves problems (SCANS, 1990). Learners must receive practice in applying and combining skills in context, putting to use skills learned in classes and transferring training to new settings. This brings harmony to the school/work relationship. Experiential education can be a conduit for this relationship.

“The National Council on Education Standards and Testing endorsed the workplace competencies defined by SCANS, suggesting that they be integrated into national standards and assessments of core academic subjects.”

The SCANS report for America 2000 (1992), a succeeding study, stresses that because of changes in the country’s economy and the global market, the workplace is now an area of high performance requiring high skilled workers. The “combination of foundation skills and workplace competencies- ‘workplace know-how’ is not taught in

many schools...” (SCANS, 1992).

Responsibilities of constituencies have changed. Schools must “...look beyond the schoolhouse to the roles students will play when they leave to become workers, parents, and citizens.” (SCANS,1992). All constituencies recognize that the purpose of schooling is not just to prepare young people for work, but to produce “a particular kind of learner, one who can put knowledge and skills into practice as a productive worker, as a responsible citizen, and as a more complete human being” for the 21st century.

“Economic change has made the high school diploma and what it represents less of a guarantee of a decent wage. The SCANS know-how, however, is correlated with high wages.” (SCANS, 1992, p.8) Teachers need to connect what they teach in class to what is needed in the work world. Students should learn content while solving realistic problems. There must be changes in how instruction is delivered and how students learn. This requires new pedagogical skills for active, collaborative learning environments. School administration and assessment must change. Reminiscent of the theories of Tyler, the “entire community must be involved.” SCANS workplace competencies should be embraced by colleges (in the classroom and through work-based education) and employment services so all are using the same vocabulary and agenda when preparing and placing workers.

Employers’ responsibilities include improving the way they organize work and developing the human resources in their community, firm and nation (SCANS, 1992). “They should adopt the standards of high quality and high performance that now characterize our most competitive companies. Firms should develop internal training programs to bring the proficiency in the SCANS competencies needed for high-performance work organizations.” (SCANS 2000, p. 19)

Besides formal schooling, it is necessary to consider work-based education which should continue for a lifetime. Employers and educators need to inform workers of the new competencies and assist front-line workers in attaining them through upgrading skills of the current workforce, putting knowledge to work, and producing a more confident, responsible, and trustworthy worker.

As research suggests, education needs to be more applied (Porter and McKibbin, 1988). Also, more attention should be given to teaching the critical transition skills necessary for adaptation from the culture of education to the culture of work...the non-task related elements of the job. Attention to these issues may make the difference between success rates of employees (Holton, 1992). Experiential education is a means of educating students in high school and college in such a way as to apply classroom knowledge to the work world and thus reinforce the skills necessary in the high performance workplace.

Discussions between the researcher and members of the National Association of Colleges and Employers (NACE) indicate that placement coordinators from colleges and universities are increasingly held accountable for higher employment percentages of graduates. These placement figures are touted in marketing and recruitment of students who are demanding education and training in fields which will offer secure, meaningful employment. Employers are seeking candidates who are proficient in content area skills as well as soft skills such as communication, ethics, and teamwork. Many full time positions require previous related experience which results in shorter training periods and immediate return on productivity of the worker.

Purpose

This study examines the effect of experiential education on particular aspects of the community college graduate's transition from college to the workplace. Academic

institutions and businesses can form partnerships which may impact this transition and provide graduates with exposure to the work culture issues necessary for success on the job (Johnston and Packer, 1987).

One form of partnership is collaboration in experiential education programs. Colleges and universities place students with employers who have jobs related to the major of the student. Employers agree to supervise and provide meaningful applied learning experience for students, with the prospect of hiring them as graduates. Employers value working collaboratively with colleges to train students to demonstrate flexibility, creativity, and endurance (Baker-Loges, Duckworth, 1991). The benefits of experiential education support its need in affording graduates the edge in employment and in adjustment to the work world.

Community colleges, in particular, support the cooperative education concept. A mission statement of a community college might include dedication to the education and enrichment of students and community, the value of teaching and learning, and a commitment to providing knowledge, communication skills, and cultural opportunities. The values of critical thinking, creativity, integrity, and self-esteem would be included in the mission. Also, a statement regarding the assessment of the success of the institution may include the importance of the employment of the college's graduates.

Community colleges have a variety of purposes to support their mission. One purpose is to supply skilled workers from applied programs for the technical needs of business and industry. Other purposes include : Providing the first and second years of college level education for students who wish to transfer to other educational institutions; providing one- to two-year career programs for students preparing for employment; providing courses and programs for those individuals who need or desire additional

technical knowledge and skills, job upgrading, or retraining. These purposes necessitate the proactive nature of the community college (or the college that grants certificates and associate degrees) to stay abreast of developments in business, technology, and health care that support community employers and to provide graduates with the skills necessary for success in the work environment. Experiential education enhances learning of the skills by direct application on the job, thus contributing to the career success of the graduate.

This study is designed to document graduates' perception of their success at work as a direct result of their participation in an experiential education curriculum, investigating the topics of transition from school to work, position and job changes, and personal satisfaction. It compares data from experiential education graduates to graduates who have not participated in experiential education to determine if there is value in taking an experiential education curriculum. History and research relating to experiential education, focussing on cooperative education, its relevance to learning, its effect on the participating graduates' adjustment to the workplace and its impact on graduates' success is presented in Chapter 2. Chapter 3 addresses the methodology used to gather data to support the hypotheses. An analysis of the data follows in Chapter 4. Conclusions are drawn and recommendations presented in Chapter 5.

Significance of the Study

The Cooperative Education Association is a national organization of co-op professionals from education and industry who share information regarding co-op and establish co-op agreements in hiring students. This organization has suggested that research is needed to determine the effects of experiential education on college graduates' career successes. More recent studies search for reasons why some graduates are more successful than others in becoming employed, meeting expectations of employers, and

advancing to higher levels of productivity and responsibility.

Information gathered from this study may be used by colleges in determining the value of experiential education to their graduates on the job. It may assist them in deciding if experiential education should be included in degree programs and its benefits to recruitment and retention.

This study may enable students to see the value of seeking the experiential education curriculum to gain work experience and to afford them an advantage over job applicants who have not taken this curriculum. The value is in the opportunity to apply the knowledge and skills they have obtained in the classroom to the work they wish to accomplish on the job. The learning experience of partaking in the work world previous to full time employment in a nonthreatening position as a student builds confidence and a feeling of belonging.

Results of this study could be used by the Cooperative Education Association, the Michigan Council for Cooperative Education, and other experiential education groups in promoting their mission of awareness of this curriculum and its importance to students, graduates, colleges, and employers. The Cooperative Education Association may publish this study in their journal of international research as evidence of the effects of co-op on graduates' careers, thus supporting the mission and purpose of the CEA. Community colleges may wish to use this information as an example of a curriculum with positive effects on post graduate employment and careers when recruiting students to their campuses. The discipline of education will recognize the value of this aspect of applied learning as a viable means of instruction to include when designing curricula, thus utilizing the contextual method of pedagogy.

In order to meet the challenges inherent in careers, colleges and experiential

education coordinators who are concerned about the success of their graduates on the job should encourage more students to enroll in the experiential education curriculum, build it into their programs, and possibly require it for graduation. The cost of running co-op departments is one that is readily cut when assessing the budget of many colleges. Colleges had grown dependent on federal dollars to support co-op department expenses. When the federal dollars disappeared, many colleges were reluctant to provide for a new expenditure in this form, thus laying off co-op coordinators.

Employers who are aware of the benefits of this curriculum recruit more co-op students and hire more graduates with this curriculum in their programs (Gooch, 1977). They utilize co-op as a screening tool for hiring experienced workers. They are exposed to the latest in technology and information regarding their field of expertise which the student brings to them. They experience the energy and fresh ideas that a college graduate brings to the table.

Cooperative education is a broad and significant curriculum with a rich history of success for its participants. Based upon preliminary research, it is apparent that bachelor degree graduates who have participated receive significantly higher starting salaries than those who have not taken an experiential education curriculum (Vickers, 1990). It is true that this work experience has been found to be positively associated with earnings a few years later (San, 1986). Inger (1995) and Daresh (1988) say that the experience obtained in cooperative education has a positive effect on graduates' performance and adjustment to organizational culture. All of these studies have been performed using bachelor level graduates. This study was conducted using associate degree graduates to determine the relative effects of experiential education on their careers. Associate degree students attend the community college specifically to train for employment, to transfer to a four

year school, or for retraining in specific areas. It would also be interesting to note other advantages to taking an applied learning program.

Definition of Terms

To aid in the understanding of this study the following terms have been defined:

Cooperative education (co-op) is a form of experiential education in which students, academic institutions, and employers agree to partner in a paid work experience which is related to the student's major. This may or may not be credit granting.

Cooperative Education Association (CEA) was founded in 1963. This organization has lead the field of cooperative education through professional services and support, research, public relations, and advocacy. It is the largest association of co-op professionals in the U.S., committed to advancing cooperative education as a premier model of work-integrated learning.

Experiential learning (also experiential education, applied learning) is a generic term for practical exposure to learning outside the classroom. It is a process where individuals are able to reflect on the implications of what they have witnessed in the field as a way to engage in personal construction of meaningful learning (Bandura, 1977). Learning through experience alone is seldom learning. There must be a dimension of personal reflection included (Dewey, 1938). Some forms of experiential learning are internships, cooperative education, practicums, apprenticeships, field experience, and community-based education (Althof, 1980).

Internship is a form of experiential education organized by an educational institution in which the student may or may not be paid. It is usually taken during the summer.

Michigan Council for Cooperative Education (MCCE) offers a unique approach to effectively unite executive leadership from Michigan business and industry, education, labor, state government and professional organizations to promote the expansion of cooperative education within the state. MCCE contributed support for this research project.

Midwest Cooperative Education Association (MCEA) is an organization of co-op professionals in the Midwest.

National Commission for Cooperative Education (NCCE) is dedicated to advancing cooperative education throughout the United States. Since 1962, the Commission and its college and business members have supported the development of quality work-integrated learning programs through national advocacy, executive outreach, public awareness, students and parents response center, and research and education.

Work experience program refers to an organized set of experiential education opportunities offered by an academic institution.

These and other topics have been researched and discussed in this report. The history of experiential education builds a foundation that encompasses many countries and academic environments.

CHAPTER 2

LITERATURE REVIEW

The review of literature for this study includes historical information regarding the concept of experiential education found in books and articles. It also includes research conducted on topics which are related to the application of experiential education in various settings with emphasis on cooperative education curricula at colleges and universities including Vickers' 1990 Southwest Missouri State University comparison of salaries and confidence levels of co-op versus non co-op graduates; Brown's 1984 Northeastern University Cooperative Education Research Center study comparing promotions, raises, and behavior patterns of co-op versus non co-op employees; and Edison's 1981 study of Wilberforce and Central State University co-ops versus non co-ops and the positive effects of them working in fields related to their majors.

History of Experiential Education

Experiential education is a field of practice which has a rich history. It is supported by psychology and education theorists for its value in enhancing learning. Experiential learning is not new. Experiential education has been implemented in higher education from the time of the middle ages when guild scholars changed their method of practical instruction to delivery by books and lectures. This format was adopted by colleges and universities for classrooms and seminars. Scholars who taught at the universities came with a wealth of technical knowledge which they shared with students. Practical training was the purpose for apprenticeships. Colleges and universities supplied formal education (Althof, 1980).

In some cultures, this form of education precedes formal education. In the past, students learned from families and churches what they needed to know to function in

everyday living in a practical sense on the job. When schools took them into the formalized classroom setting, the forum for learning became more remote. When industrialization took them back into the workplace, students were forced to make the transition from classroom to job on their own. A critical problem in education is described by James Coleman in 1972 as a “poverty of experience in life” because skills necessary for lifelong learning and problem solving were not incorporated into schools’ curricula (Althof, 1980). Graduates were able to find jobs but on-the-job training and company orientations and training were expected to ease the adjustment to the workplace.

John Dewey’s theory of experiences tied to scientific inquiry was a catalyst in developing the groundwork for the experiential learning movement. Dewey viewed experiential learning as a process for individuals to reflect on the implications of what they have observed at work as a means to engage in personal construction of meaningful learning. He noted a gap between theory and application which was felt the most by the professions (Dewey, 1938). Thus, practical experience was added to the medical curriculum in the early 1900s.

In 1919, the University of Cincinnati became the first major university to begin its cooperative education program. It was vocationally oriented rather than interrelated with academics. Following their lead, other colleges and community organizations began to work together to provide work experience for students. By 1921 liberal arts students were able to take part in cooperative education. Consequently, after World War II many other forms of experiential education were developed to assist students in dealing with everyday life in potential careers. Soldiers were returning from the war to find an economy that was industrialized to support the military effort. In the conversion to a family oriented society, goods were produced to support the family lifestyle. Government regulated

apprenticeships were a partial answer to supplying the special skills that workers needed.

During the 1970s there was a tremendous increase in the number of experience-based educational programs in colleges. Students wanted more relevance, colleges wished to better employ graduates, and experience was requested by industry. More mature college students and displaced workers who were being re-educated and entering more advanced careers needed the professional atmosphere which experiential education afforded them in increasing their occupational mobility. They sought achievement of knowledge and its application to assist them in the transition from school to work. They wished to be exposed to generic processes and skills which engendered application of theories and problem solving. Experiential education had a history of providing opportunities for applying classroom knowledge in the work environment, enhancing problem solving skills.

National and regional co-op organizations were formed by co-op advocates at colleges and universities to unite educational and business entities in partnering to promote the growth of co-op in the U.S. The National Commission for Cooperative Education (NCCE) was founded in 1962 to assist in establishing new cooperative education programs (Kysor, 1994). The Cooperative Education Association (CEA), formed in 1963, helped to organize and centralize co-op practitioners' efforts (Kysor, 1994). The Michigan Council for Cooperative Education (MCCE) was formed in 1983 to support the efforts of cooperative education professionals and to promote co-op in the state of Michigan.

In 1967, President Lyndon Johnson urged colleges to adopt cooperative education. This led to federal funding of co-op. With Title VIII funds available, cooperative education began to flourish. The NCCE reported 932 programs by 1978 at both junior and senior college levels. Other types of field experience followed. By 1989, over 1100 co-op

programs serviced over 200,000 students in higher education across the country. This brought applied education to students nationwide. Forty to seventy percent of co-op programs offered college credit (Baker-Loges, Duckworth, 1991).

Research on Experiential Education

Investigation of the development of experiential learning theory followed by its application to college curricula as a means of connectivity between school and work brings a clearer understanding of the place cooperative education holds in academia.

Theorists involved in experiential learning include Bruner, Dewey, Coleman, and Kolb. They stressed the importance of activities, acting, experiencing, observing, reflecting, and testing in the educational process in order for learning to occur. Bruner (1966) referred to instruction as “an optimum set of activities organized by an outside agent for the purpose of bringing about learning”. Structured experiential learning programs would meet this criteria. James Coleman (1972) defined experiential learning as a situation which “proceeds through acting or in some cases observing another person in action and then experiencing and understanding the consequences of action”. David Kolb (1975) developed an experiential learning model with steps a learner must complete to achieve desired learning outcomes. These steps include concrete experience, observations and reflections, the formation of abstract concepts and generalizations, and testing implications of concepts in new situations. Testing the concepts in new situations is a weakness in which most college students are not able to apply what they have learned in the classroom. Students’ success in this aspect on the job has not been studied at length.

Many renowned theorists explained how moving from theory to experience to reflection culminates in the type of learning which is important to student development (Linn, 1993). The “experience” portion of field work consisting of doing, helping, and

problem solving is as valuable as the reading, reflecting, and analyzing of the classroom (Hursh and Borzak, 1979).

Some theorists believe that reflection must take place both in and out of the classroom for effective learning. Bandura (1977) and Dewey (1938) stated that there must be a dimension of personal reflectivity included in experiential education in order for learning to occur and that people will learn better by doing (Daresh, 1988). Partnerships such as cooperative education where schools and employers work together to provide an environment for application and reflection may be essential to the learning process.

Benefits of Co-op:

Throughout its history, cooperative education has proven to be of benefit to students, employers, and colleges. Advantages to students include enhancing learning in college, higher grade point averages (McNutt, 1974), higher GRE scores (Stanton, 1988), maturing and developing, increasing motivation, enhancing communication and human relation skills (Deighton, 1971), orientation to the work world, financial support, development of a greater sense of responsibility, establishing job placement contacts, and ability to demonstrate flexibility, creativity, and endurance (Baker-Loges and Duckworth, 1991). Students may add to their resumes and test out career plans (Linn, 1993). Co-op experiences increase students' intellectual and social skills, values, and career development (Linn, 1993). They develop necessary work habits and attitudes and discover their interests and abilities.

Many studies show that co-ops acquire higher starting salaries than non co-op students and their confidence level is increased. Seven hundred and seventy-four (774) graduates from Southwest Missouri State University between 1987-88 and 1988-89 were surveyed . Mean salaries were compared for the two groups. Sixty-seven percent (67%) of

the salaries for the non co-op group were \$18,873 as opposed to the co-op group which reported \$21,057 (Vickers, 1990). San (1986) found that college students' work experiences during college have "a significant positive effect on their post college earnings for at least five years" (p. 75). There was no indication that this experience positively influenced employment levels after college. Therefore, it may behoove researchers to differentiate salary from level and investigate these variables separately as accomplished in this study.

Co-op graduates are hired more quickly and hold more jobs in their majors than non co-op graduates (Hamlin, 1978). An NCCE report from 1992 indicates that 80% of co-op graduates received permanent employment offers from their co-op employers when they graduated (Kysor, 1994). Sylvia Brown (1984) found that due to the patterns of promotions and raises of co-ops versus non co-ops, "the behavior of employees who were once co-ops is different and somehow superior to that of the typical new college hires. Evidence suggests that employers view former co-ops with higher regard than other new employees." (p. 6)

Brown (1984) found that graduates of co-op programs reported a greater sense of power or autonomy in their jobs than other new college hires. She hypothesized this was due to better organizational socialization and greater perceived relevance of job to career plans. Co-op graduates also are able to participate in decision-making and have access to needed resources for their jobs. Co-op graduates have more realistic expectations regarding their first job after college than other graduates and display more commitment to their employers. More co-op graduates chose jobs relevant to their career plans. Co-op experiences facilitated the critical transition from student to employee. Co-op graduates received more responsibility initially when entering the workforce. Other results indicated

that the more co-op experiences, the more profound the effects on the individual's performance. Work experience other than co-op did not lead to the same outcomes. If the benefits of work were more financial than career related for students, their career experiences were not as relevant, meaningful and productive. Their expectations of the job were not as realistic, and their attitudes and commitment were at a lower level.

The first year out of college and in the labor force requires special skills and strategies. These special requirements, not taught in college but expected by employers (Holton, 1992), are necessary for success in the first year on the job. Many colleges believe that a course on these topics is unnecessary and adds to the number of credits required for graduation in an already filled program schedule. They expect employers to prepare graduates for work by providing new hires with information necessary to corporate survival. Employers expect new hires to know about the culture of the organization, politics, attitude, professionalism, relationships, stress management, and personal transition issues. A cooperative education arrangement provides the opportunity for development of these requirements in a less threatening environment where expectations may not be as high as in a career position.

There are several benefits for colleges in offering the co-op curriculum. Some advantages to colleges are that co-op is cost effective in delivery of desired educational content. Co-op can provide training in current technology by expert instructors in the field (Grossman et al, 1988). A relationship is built between education and industry. Student retention is increased (Stadt and Gooch, 1977). Better educated graduates are placed in good jobs (Deighton, 1971). When students bring back knowledge to the classroom from business, they have input in updating the curriculum. A curriculum update has its advantages including attracting new students to the college (Tyler, 1971).

Business and industry gains from cooperative education are that co-op students handle routine tasks and free up regular employees for complex tasks, training costs are lower with qualified co-ops on staff, potential employees are identified, and taking co-op students builds good will with the community (Stadt and Gooch, 1977). Higher employee retention, greater productivity, and faster advancement of co-op graduates are employer benefits (Hunt, 1974). This is why many employers use their co-op programs as their primary source of entry-level employment. Students are often more highly motivated, productive, and innovative (Kysor, 1995). They can be taught from the formative level established employment practices.

There are many advantages for students in taking an experiential education curriculum. Co-op supports self-directed learning in which students are actively involved. Students learn work attitude, ethics, and values which make them more acceptable to employers; the affective elements of education. Kaplan (1986) states that affective education facilitates learning, brings commitment, and allows the student to organize and internalize values in such a way that it affects the individual's behavior. As a result, students develop more confidence, contributing to increased successes, and resulting in higher levels of self esteem. Taking an affective curriculum such as experiential education supports students' efforts to gain knowledge. It facilitates the development of students' working relationships and their eventual adjustment to the work world.

Other advantages of co-op for students are that co-op students learn on the most updated technology available in their field that is available at the worksite and may be too expensive for their college to continually upgrade. Also, they earn money to subsidize their education. Another benefit is that experiential education gives them the experience which some employers require for jobs after graduation. These outcomes may meet the general

education goals of academic institutions (Wilson, et al, 1996).

Similar studies reveal interesting results. According to the National Commission for Cooperative Education (1975), co-op graduates receive merit raises and promotions more frequently than non co-op graduates. Another study (Krupar, 1987) quoted that 94% of the co-op graduates received at least one merit increase in salary as opposed to 67% of the regular college graduates. A study at Boston College related the same results (Nielson, 1984). Edison (1981) in a study of Central State University and Wilberforce University in Ohio, concluded that in comparing co-op to non co-op alumni, co-ops were more apt to apply knowledge and skills gained in college to their first jobs, started at higher wages, received promotions and merit pay increases, and earned 18% more than non co-ops. More non co-ops changed their career direction since their first full time jobs. Co-ops felt they had more opportunity for advancement since their jobs were more related to their major, held leadership and management responsibilities, and were more satisfied with their jobs. Co-op graduates had more “career development prospects” resulting from their co-op assignments as a result of working in an area related to their major, interacting with professionals in their field, earning money to support their education, and acquiring confidence in themselves as professionals. Over time, co-op graduates performed well, earned more, increased their self-esteem, and reached leadership and management positions more readily.

Cooperative education has proven to be a catalyst in the employability of graduates who have participated in this curriculum. Research has indicated that it has provided graduates, colleges, and employers with many benefits. This study explores other effects which cooperative education has on its participants while employed in full time positions after graduation, testing hypotheses and determining their validity with reference to

graduates from other post secondary institutions.

Disadvantages of Co-op:

Amid the benefits touted by co-op supporters, there are perceived disadvantages of co-op which must be considered as reasons why colleges and businesses are not in total support of this applied learning concept. An “opposing scenario” (Wilson, et al, 1996) exists in considering the pressure for cost containment resulting in budget cuts for co-op in many colleges. Many institutions view co-op as an “add-on program” to which most faculty are “at best indifferent...and at worst hostile”. Cuts in this area would be a positive cost saving measure. Schaafsma (1996) calls this one of the “political footballs” in which direct involvement of the faculty as observed in the U.S. and Canada increased pressure to downsize into leaner organizations. Costs related to experiential education programs include the basic staffing and office related expenditures, employer development, visits to the students’ work sites, and faculty mentors. These expenditures, though real, need to be considered when weighing the advantages of co-op as previously mentioned.

Lack of research regarding the value of co-op as an educational component has left its various stakeholders (faculty, administrators, employers, and students) with contrasting goals and objectives for their co-op programs. Research regarding specific majors, job types, and industries would provide these stakeholders with more useful information about the application of co-op to accomplishing relevant objectives.

Researchers (Ricks, Stull, Gardner, Page) believe that some existing problems relate to how co-op practitioners define co-op. Co-op coordinators do not identify themselves as intrinsic to the educational mission of institutions and instead are seen as career, service, and placement units. Lack of funding and integration with academics has made co-op very vulnerable (Page, et al, 1995). “We must conceive, define, and present

cooperative education as a curriculum model that links work with academics- a model that is based on sound learning theory and one that will fit with the traditional academic curriculum. In this context, curriculum is understood to be an organized body of content (subject matter) and strategies (experiences) designed to help students to achieve specified learning objectives.” Co-op should be in academics, not student services. Coordinators are educators who guide students in the process. They should give students meaningful work assignments which allow them to learn and reflect (Wilson, et al, 1996). Co-op personnel should be leaders at the college and community levels rather than just developing and assigning sites. The educational philosophy of the institution may need to be addressed in order to promote a collaborative strategy whereby students, faculty, coordinators, supervisors and administrators work toward programs which require “new learning, stretching, realizing, and imagining...not winning. Co-op educators are in the education business.” They are teaching faculty, specialists who do more than job placement. They are involved in “co-op work site educational experiences” involving thinking, communication, problem solving, and negotiation skills and strategies used in self directed learning. They need to learn about curriculum development (Ricks, 1996) and learning theory. More research needs to be conducted. Credit should be granted. They should be able to express the benefits of co-op to the institution in order to receive adequate funding. As a student earns credit through co-op, costs of the student’s program are reduced. Some of this cost is absorbed by the business community.

Another problem faced by co-op educators is the availability of appropriate work experiences. Many times the type and number of jobs depends on the state of the economy, industries within the geographic area, market supply and demand for workers, networking of co-op staff and their training of students regarding finding a site. For

example, in Michigan, manufacturing is becoming more advanced technologically. There is a demand in manufacturing for workers who have computer skills necessary to operate manufacturing equipment. Manufacturing technology programs are being developed by colleges to provide workers with skills necessary to the manufacturing industry. Co-op staff need to establish co-op relationships with employers in the manufacturing industry to offer co-op positions at their facilities. Twenty years ago, the need for technology positions in manufacturing was almost non-existent. Thus, co-op staff, like those in other programs, must continually reassess the economy and the requirements of industries within their geographic area.

Current Research:

Despite the controversy and problems inherent in the curriculum, literature attests to the fact that experiential education fills the gap between theory and application for colleges and universities, enhances learning through application, and provides the experience desired by industry. Experiential education gives students the “worldly wisdom” they lack, orients them to what is expected after graduation, and helps them to make better career choices so graduates encounter less reality shock on their first jobs. Experiential education provides a clearer professional self-concept, good decision-making abilities, and realization of the value of communication skills (Spinks & Wells, 1994) and is a valuable program in terms of monetary rewards to students. Experiential education proves more frequently to provide graduates with additional employability skills and benefits such as those being discovered in more recent studies.

A recent study of computer science graduates (Dubick, et al, 1996) demonstrated that co-op students had significantly higher starting and current salaries, found their first jobs more rapidly, and had fewer job changes than non co-ops. Many found employment

with their co-op employer. And yet, they did not report higher satisfaction with their undergraduate experiences or of their institution than non co-ops.

Wessels and Pumphrey (1996) in a study of North Carolina community colleges, found that cooperative education has a positive effect since it raised the wages of female graduates on campuses which offer co-op. This effect persists for at least five years. Forty percent of co-op graduates were placed with their co-op employer, thus expediting the job search process. This reduced the turnover rate and the probability of changing jobs. Co-op graduates reported using their skills learned in college and had significantly more job advancements resulting in better pay, more responsibility, and more related work. Wessels and Pumphrey's study also indicated a progression for co-op students in the workplace to "catch up with their peers" who had been on the job longer.

A study in 1995 (Taylor) reported that twice as many engineering co-op graduates from 1991, 1992, and 1993 had jobs closely related to their majors than non co-ops. There was a dramatic difference in starting and current salaries for the two groups with former co-ops earning much more. Co-op students were more satisfied with their current pay as it was higher than non co-ops, thus supporting perceived advantages of co-op.

A large sampling of 7,575 1990 graduates (Letourneau, et al, 1995) indicated that post-secondary cooperative education has a positive effect on graduates' earnings and employment. They reported a rate of pay for co-ops that was \$5,175 greater on average than non co-ops; women faring better than men. Their proportion of time employed is almost three percentage points higher as well. Surprisingly, they found no evidence that co-op graduates found jobs more quickly after graduating.

In 1994, Kysor compared four groups: co-ops, related work experience and unrelated non co-ops, and those with no pre-graduation work experience. His study found

“indirect evidence supporting co-op”. Comparing SAT scores, co-ops scored lower than others before entering college. Although this put them at a disadvantage, they seemed to catch up per their grade point average. Comparing salaries for the initial job, no differences were found. For current jobs, co-ops made significantly more, and those with related work more than those with no work. Those with a higher percent of related work found work at a faster rate and the work was more likely to be related. Following graduation, their “career progress” was taking place at an equal rate.

Capelli (1990) demonstrated that work experience is important whether co-op or not. Those with related work experience found work much more quickly than those without and were more likely to be employed in their field, and more satisfied with their work, enhancing their career outcomes.

Career Progress

In 1993, Gardner and Motschenbacher conducted a study that examined graduates' career progress and the relationship between co-op and career successes. They found that “fifty-two percent of the respondents were still with the company that hired them upon graduation. The average number of promotions was 2.7. Nineteen percent had not received any type of promotion and twenty-two percent had only received one. There were no differences between co-op and non co-op engineers. Length of time in the labor force explained most of the differences.” The level at which they were hired into the organizations depended on the size of the company and the type of discipline they had chosen. Those with no related work experience stayed in their positions longer than those with work experience. Co-ops were frustrated to find that their jobs were less challenging, and even changing jobs did not correct the situation. Current salaries of those with work experience were higher than those without, especially for those who had longer co-ops.

Gender Differences

Gender differences and size of companies play specific roles in determining salary and position (Gardner, et al, 1993). Women fared better than men in larger companies, while men received higher salaries and positions than women in smaller companies. There was conclusive evidence that “co-op experiences have little influence on career progress compared to other experiential learning options”. Co-ops excel in salary, percentage gained when moving, and understanding of the workplace.

A similar study conducted in 1994, demonstrated that eighty-eight percent of the co-op participants were employed as compared to eighty-one percent of the non participants. The unemployment rate for co-ops was four percent; non co-ops was thirteen percent. More co-ops were employed in positions that required a degree and that were related to their major. Ninety two percent of the co-ops and seventy-nine percent of the non co-ops held jobs that required a college degree. Eight percent of the co-ops and twenty percent of the non co-ops said their jobs were not related to their majors. A larger percent of co-ops held managerial, technical, and professional positions and felt their jobs had career potential. Each month of work experience added to the average salary of graduates (Somers, Harrington, 1994).

Summary

In summary, research has demonstrated that experiential education provides students with financial support, orientation to the work world, job placement contacts, helps develop work habits, test career plans, and facilitates the transition of school to work. Other benefits include enhanced learning, higher grade point averages, increased motivation (although students who opt for experiential education programs may be inherently more highly motivated), enhanced communication and human relation skills, jobs

related to their major, more frequent merit raises and promotions, and more leadership and management jobs.

Disadvantages of experiential education include resistance of faculty and administration to the concept, additional costs, shortage of funding, minimal integration with academics, lack of meaningful assignments, and need for clarification of co-op practitioners' roles.

This study considers many of the areas that were already researched, specifically involving business and technical majors who attend community colleges. The philosophy of the community college differs from that of a four year college since the community college is more applied and career oriented. Students attend a community college to train for employment, transfer to a four year school, or retrain in specific courses for employment.

The resultant discoveries may rightfully be challenged based upon the background of the reader. Co-op does not always produce what it promises and is dependent on the individual scenario based upon the match of the student to the co-op position, how far along the student is in the academic program, and other variables. Such limitations are discussed giving insight into the framework for this particular study.

CHAPTER 3

RESEARCH

Design of the Study

This study explores the effect of experiential education on graduates' successes on the job as documented by them as employees. The study researches the impact which the participation in experiential education has on graduates, as compared to those who have not participated, while employed in full time positions.

The individuals involved in this study were business and technical associate degree graduates from the 1991, 1992, and 1993 graduating classes of Henry Ford Community College and Baker College of Flint. Henry Ford Community College, Dearborn, Michigan is a comprehensive, public, non-residential community college with 16,000 full and part time students. Its curriculum lists forty-five associate degree programs accredited by the North Central Association of Colleges and Schools as well as other program specific accreditations. Baker College of Flint, Michigan is an independent, private, non-profit education institution with an enrollment of 4,100 full and part time students. It is a part of a system of fourteen campuses and extensions throughout the state of Michigan. It offers associate, bachelor, and master degrees in fifty-two different programs, is accredited by the North Central Association of Colleges and Schools as well as other program specific accreditations.

The sample was asked basic questions such as gender, age, type of degree, college attended, and highest degree. This information is useful when comparing successes of males to that of females; traditional graduates (those who went directly to college after high school) to non-traditional (those students who did not attend college directly after high school). It is interesting to note the percentages of associate degree graduates who

went on to complete advanced degrees in order to move to higher levels in their careers.

Respondents were also asked a number of questions relating to their graduate employment history and their professional growth in specific areas such as number of promotions, full or part time positions, jobs related to their major, levels and salaries, length in positions, and changes of organizations for use in analyzing the differences between experiential and non-experiential education graduates. The study reviews the development of their careers through questions regarding job characteristics, work experiences, and career expectations. It also queries individuals' satisfaction with career progress and perceptions of successfulness, all of which will aid in analyzing the differences in the experiential education and non-experiential education graduates.

Research Methodology

For this research study, information was collected from business and technical associate degree graduates with a variety of majors. One hundred twenty-eight (128) of the graduates have taken an experiential education curriculum. They were asked about their levels in the organizations in which they have worked, starting salaries for each position, satisfaction with their career progress, speed at which they received raises, the number of promotions, and their perception of their own successfulness in their careers. Their responses were compared to those of graduates who had not enrolled in experiential education.

Sample Population

The sample used in the study included all of the 1991, 1992, and 1993 business and technical graduates of two colleges in the state of Michigan: Henry Ford Community College, a public institution, and Baker College of Flint, a private, not-for-profit institution. These colleges were selected to participate because they are typical colleges

which offer associate degrees and their administrations support program evaluation. They offered students the option of participation in their cooperative education and internship programs. They were chosen as the population sources because they have a large group of students obtaining a variety of degrees who continue to reside in the state of Michigan. They have an impact on the school- to- work program in the state of Michigan, and the entry-level job market as well as the potential for continuing education at institutes of higher learning. In the best interest of the Michigan Council for Cooperative Education which has contributed to the support of this research, interested member institutions were selected as participants.

Names and addresses of the graduates were provided by co-op coordinators at the respective campuses from files the colleges have maintained. The beginning sample included 2,100 graduates dating back to their 1991, 1992, and 1993 graduating classes. It is difficult for college alumni and research offices to maintain current addresses of graduates. Therefore, 319 surveys were non-deliverable and 1781 were delivered. Three hundred seven (307) surveys were returned, amounting to a 17% return rate. The makeup of the sample was diverse, including a variety of degrees and majors. The majors were grouped according to the business and technical divisions.

Measurement Instrument

There is support in the research to indicate that a survey is an appropriate tool for use in studying large, diverse populations. Surveys have many objectives including description, explanation or exploration. Surveys are flexible because they allow many questions to be asked on a topic and can collect prospective or hypothetical ideas (Babbie, 1989).

The instrument used in this study was as a survey questionnaire which was used in a

similar study conducted by Dr. Philip Gardner (1993), a research administrator for the Collegiate Employment Institute, located in the division of student affairs and services at Michigan State University. His study addresses some of the same variables as those examined in this study. His survey instrument includes baseline scales built from a 1988 study conducted by Nicholson and West which researched quality of work for male and female managers. They reported reliability alpha levels of 0.64 to 0.93 for their basic key scales. These scales were made of ten to eighteen items scored on Likert-type response 5-point scales. (See Appendix B.)

The demographic information requested of the graduates included gender, age, marital status, which college they attended, whether in business or technical majors, and whether they participated in co-ops and internships. The employment overview investigates the number of companies they have worked for, number of promotions and raises they received, number of job changes, and their starting salaries.

Hypotheses

The null hypothesis was used in this study because it asserts that the variables are independent (There is no statistically significant difference between the two groups even after the treatment is given; or in this case, after the students had taken the experiential education curriculum. Apparent differences are no larger than expected from chance fluctuations.) unless proven otherwise and that if there is not enough evidence at a 95% level of statistical significance (significance of .05 or less) to disprove their independence, the assumption is that the variables are independent.

The survey instrument was designed to test the following null hypotheses:

1. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding levels at which they are hired

into organizations.

2. There is no statistically significant difference in starting salaries between experiential education graduates and non-experiential education graduates.
3. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding satisfaction with their career progress.
4. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding their perception of their own successfulness in their careers.
5. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding the number of promotions they receive.

Data Collection

The sample selected for the study was mailed a letter, a survey form, and a return envelope. They were mailed on January 15, 1998 with a return requested for February 9. On January 30 a reminder postcard was mailed to those who hadn't responded. A number was assigned to each survey form to coincide with the names on the mailing list to identify nonrespondents. Responses were entered into SPSS, a statistical computer data file.

Data Analysis

The purpose of the data analysis was to bring together data relevant to the hypotheses being tested. The Statistical Package for Social Sciences (SPSS) computer program was used for the completion of the statistical analyses. Data from the surveys was plugged into this computer program and the appropriate statistical analyses were run. Chi square analysis is used when there are two categories in which to classify subjects and a

distribution consisting of a dichotomous (yes/no) frequency count for the subjects classified within those two categories. In this case, chi square was used to compare the experiential education group to the non experiential education group to determine if there was a significant difference in scores for each variable and whether the variables are independent, thus confirming the null hypotheses. The Mann-Whitney U, a nonparametric equivalent of the t test, was used for rank ordered data (non normal) where ranges are used as item selections (as in the salary range item) when the chi squares were invalid (if more than 25% of the expected frequency is less than 5). The demographic data was analyzed using cross tabulations and frequency distributions; thus, an attempt to show the effect of experiential education on the success of participating graduates with generalizations based upon demographic groupings and specific dependent variables.

Statistics (Mann-Whitney U and chi squares) were used to determine the degrees of significance and thus the extent of usefulness of this study to post secondary institutions, students, graduates, and employers.

CHAPTER 4

DATA ANALYSIS

Introduction

This research was developed to identify the areas in which experiential education graduates are able to experience successes on the job and internalize them in such a way to provide a positive satisfaction level with their career progress and successfulness. As a result, many colleges would encourage students to enroll in experiential education programs, students would voluntarily participate in experiential education, and employers would realize the benefits to their businesses by hiring experiential education students.

During the week of January 5, 1998, 2,100 letters, surveys, and self-addressed return envelopes were sent to the 1991, 1992 and 1993 business and technical associate degree graduates from Baker College of Flint, Michigan and Henry Ford Community College, Dearborn, Michigan. A reminder postcard was mailed to non-respondents on January 30, 1998. Of the 2,100 surveys mailed, 319 were returned for improper or undeliverable addresses, 1781 were delivered, and 307 were returned for a seventeen percent (17%) return rate. The large number of undeliverable surveys was more than expected but can be explained by the fact that graduates from five to seven years ago do not update their addresses with their colleges.

The participants were asked a series of questions relating to their career progression since graduation. The survey was specifically designed to explore the differences between experiential education graduates and non-experiential education graduates regarding levels at which they were hired into organizations, starting salaries in all positions, satisfaction with their career progress, number of promotions, and the perception of their own successfulness in their careers.

NOTE: The tables in this chapter display cross tabulations and comparisons between experiential education (Ex. Ed.) graduates and non-experiential education (Non-E. E.) graduates regarding the information explored in this study. Percentages for each group are documented as compared to each variable being considered.

The survey asked a number of demographic questions to assist in analysis.

Table 1

Comparison of Demographics to Experiential Education (Percent)

	Experiential Ed	Non Exp. Ed	Total
Women	77	64	66
Men	23	36	34
Business	73	74	73
Technical	27	26	27
Baker	79	63	69
Henry Ford	21	37	31
Bachelor Degree	38	29	30

Sixty-six percent (66%) of the respondents were women. Seventy-seven percent (77%) of the experiential education group were women and sixty-four percent (64%) of the non-experiential education group were women. Forty-seven percent (47%) of the experiential education participants were in the twenty to thirty year age range. Thirty-seven percent (37%) of the non-experiential education group were in the thirty to forty age range. This implies that the non-experiential education group was older, a point to consider in the forthcoming analysis. Others were dispersed into the remaining age ranges.

Seventy-three percent (73%) of the participants received business associate degrees and twenty-seven percent (27%) received technical associate degrees. Sixty-three percent (63%) were Baker College graduates and thirty-seven percent (37%) were

graduates of Henry Ford Community College. Forty-two percent (42%) of them participated in an experiential education program. Seventy-three percent (73%) of the experiential education group were business graduates. Thirty percent (30%) of the graduates went on to complete bachelor degrees. This was thirty-eight percent (38%) of the experiential education group and twenty-nine percent (29%) of the non-experiential education group. Two percent (2%) completed master degrees. Additional demographic data will be presented as deemed necessary for comparisons between specific variables and groups.

Table 2
Comparison of Full Time Positions to Experiential Education
(Percent per Number of Positions)

Number of Positions	Experiential Education	Non-Experiential Education
1	22	21
2	17	22
3	24	31
4	16	9
5	6	5
6+	11	8

Twenty-two percent (22%) of the experiential education graduates and twenty-one percent (21%) of the non-experiential education graduates held one full time position since graduation. Apparently, the larger percentage of each group held three positions since graduation.

Table 3

Comparison of Number of Organizations to Experiential Education (Percent)

Number of Organizations	Experiential Education	Non-Experiential Education
1	32	41
2	24	23
3	18	17
4	12	7
5+	10	8

Thirty-two percent (32%) of the experiential education group and forty-one percent (41%) of the non-experiential education group worked for one organization. Twenty-four percent (24%) of the experiential education group and twenty-three percent (23%) of the non-experiential education group worked for two organizations. This data differs from that of Dubick (1996) who found that non-co-ops changed jobs more frequently than co-ops.

Table 4

Comparison of Job Type to Experiential Education (Percent in Each Category)

Type	Position 1 Ex. Ed.	Position 1 Non-E. E.	Position 2 Ex. Ed.	Position 2 Non-E. E.	Position 3 Ex. Ed.	Position 3 Non-E. E.
Full Time	68	58	66	58	82	79
Part Time	18	11	7	5	6	6
Self Empl.	0	1	0	.5	1	2
Contract	1	2	2	.5	1	.5

For their first positions after their associate degrees, sixty-eight percent (68%) of the experiential education group and fifty-eight percent (58%) of the non-experiential education group held full-time jobs. Fifty-eight percent (58%) of the females and sixty-

seven percent (67%) of the males worked full time in their first positions. For their second position, sixty-six percent (66%) of the experiential education group and fifty-eight percent (58%) of the non-experiential education group were full-time. For their third position eighty-two percent (82%) of the experiential education and seventy-nine percent (79%) of the non-experiential education group worked full-time. Of the graduates in their twenties, thirty-two percent (32%) held full time jobs and forty-one percent (41%) held part time jobs after graduation; of those in their thirties, thirty-five percent (35%) were full time and nineteen percent (19%) were part time; of those in their forties, twenty-three percent (23%) were full time and twenty-seven percent (27%) were part time.

Table 5

Comparison of Employer Changes to Experiential Education (Percent)

Status	Position 2 Ex. Ed.	Position 2 Non-E. E.	Position 3 Ex. Ed.	Position 3 Non-E. E.
Same	31	29	39	46
New	42	35	48	38

In changing positions, thirty-one percent (31%) of the experiential education group and twenty-nine percent (29%) of the non-experiential education group worked for the same employer. Eleven percent (11%) more experiential education graduates than non-experiential education graduates worked for new employers than for the same employer. In changing positions for the third time, forty-four percent (44%) of the total were with the same employer. In order to change positions, experiential education graduates apparently sought other employers or were offered better positions with new employers.

Fifty-four percent (54%) of the first jobs held by graduates were related to their majors. Sixty-nine percent (69%) of the experiential education group were related and

forty-seven percent (47%) of the non-experiential education group. The higher figure for the experiential education group may have resulted from the previous related experience they had acquired, making them more qualified for related work. By their third position, however, sixty-nine percent (69%) of the experiential education graduates and sixty-five percent (65%) of the non-experiential education graduates were working in positions that were related to their majors. With more time on the job, the non-experiential education group was working in their majors at an amount equal to the experiential education group.

Table 6
Comparison of Tenure in Positions to Experiential Education (Percent)

Tenure Years	Position 1 Ex. Ed.	Position 1 Non-E. E.	Position 2 Ex. Ed.	Position 2 Non-E. E.	Position 3 Ex. Ed.	Position 3 Non-E. E.
0-1	39	43	32	35	39	33
2-3	44	26	51	43	46	27
4-5	14	16	13	14	10	16
6+	10	4	1	7	5	23

Thirty-nine percent (39%) of experiential education graduates and forty-three percent (43%) of the non-experiential education graduates stayed in their first position for up to one year. A third of each group held their second positions for less than a year while nearly one half of each group held the second position for two to three years. Thirty-nine percent (39%) of the experiential education group and thirty-three percent of the non-experiential education group held their third positions for up to one year while forty-six percent (46%) of the experiential education group and twenty-seven percent (27%) of the non-experiential education group held their third positions for two to three years. Apparently, most of the graduates kept each position for less than four years. In the current economy, it is necessary to change positions more frequently in order to advance in

one's career. Temporary positions through contract agencies support the lack of longevity with certain organizations. It seems that loyalty is less important in today's workplace.

Restating the Problem

Following is an analysis of the five hypotheses under investigation in this study:

Hypothesis 1: There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding levels at which they are hired into organizations.

Table 7

Comparison of Hiring Level to Experiential Education (Percent per Level)

Level	Position 1 Ex. Ed.	Position 1 Non- E. E.	Position 2 Ex. Ed.	Position 2 Non- E. E.	Position 3 Ex. Ed.	Position 3 Non-E.E.
Entry	59	42	11	19	14	16
Experience	23	21	46	31	49	40
Supervisor	3	8	4	6	8	15
Manager	1	4	12	6	20	16

Upon graduation forty-eight percent (48%) of the graduates held entry-level positions; fifty-nine percent (59%) of the experiential education group and forty-two percent (42%) of the non-experiential education group; sixty-eight percent (68%) of the males and sixty percent (60%) of the females. A large majority of younger people held entry level positions. Those in their forties and fifties held entry level and experienced positions. By their third position, forty-three percent (43%) of them had moved into the "experienced" level; forty-two percent (42%) of the males and fifty percent (50%) of the females. Around half of all age groups were experienced. Thirteen percent (13%) were supervisors; twenty-three percent (23%) of the males and thirteen percent (13%) of the females; twenty-seven percent (27%) of those in their thirties. Seventeen percent (17%)

were managers; twenty-one percent (21%) of the males and nineteen percent (19%) of the females; twenty-six percent (26%) of those in their thirties and twenty-three percent (23%) of those in their fifties. Twenty percent (20%) of the experiential education graduates and sixteen percent (16%) of the non-experiential education graduates were managers.

Perhaps the experiential education program gave them an edge with skills necessary for management. The experiential education group had changed positions more which may have helped them to locate management positions. These findings differ from those reported by San (1986) who found no indication that co-op positively influenced employment levels after college.

There was a statistically significant difference between experiential education graduates and non-experiential education graduates ($.028 < .05$) regarding the levels at which they were hired into organizations for their first job after graduation. There was also significance ($.043 < .05$) in the level of the experiential education graduates for their second position. By their third position, however, it did not seem to matter that they had taken an experiential education program since there was no significance ($.089 > .05$) indicated by the Mann-Whitney test. This may be the result of the length of time they spent working in their field. Therefore, the null hypothesis was rejected for positions one and two and accepted for position three.

Hypothesis 2: There is no statistical difference in starting salaries between experiential education graduates and non-experiential education graduates.

Table 8 a.

Salaries For Total Sample (Percent per Range)

Salary (\$) Thousands	Position 1	Position 2	Position 3
0-15	30	9	8
16-20	24	14	8
21-25	10	19	18
26-30	4	8	17
31-35	3	5	13
36+	5	7	22

Thirty percent (30%) of the graduates received \$15,000 or less per year in their first position; thirty-three percent (33%) of the males and forty-seven percent (47%) of the females. Eleven percent (11%) of the males and three percent (3%) of the females earned \$36,000 or more for their first position. Nine percent (9%) received \$15,000 or less for their second position; and eight percent (8%) for their third position. Their salaries increased for their second and third positions as expected. For their second position, twenty-two percent (22%) of the males and 5 percent (5%) of the females earned \$36,000 or more. For their third position, thirty-five percent (35%) of the males and sixteen percent (16%) of the females earned \$36,000 or more.

As far as comparing ages to salaries received, for their first position, a larger percentage of those in their twenties earned \$15,000 or less. There was an equal percentage (thirty-two percent) for each age group earning \$16,000-\$20,000 except for the 50 and above age group. There was a higher percentage of them earning \$26,000 and above. For their second position, a larger percentage of the older workers were still earning higher wages.

Table 8b.

Comparison of Salaries to Experiential Education (Percent per Range)

Salary (\$) Thousands	Position 1 Ex. Ed.	Position 1 Non-E. E.	Position 2 Ex. Ed.	Position 2 Non-E. E.	Position 3 Ex. Ed.	Position 3 Non-E. E.
0-15	36	28	10	8	9	8
16-20	29	20	19	13	11	7
21-25	11	9	19	18	20	17
26-30	4	4	11	7	19	15
31-35	2	3	8	4	10	15
36+	3	5	7	8	22	22

Twenty-five percent (25%) of the respondents chose not to share information regarding salaries. Thirty-six percent (36%) of the experiential education and twenty-eight percent (28%) of the non-experiential education group earned \$15,000 or less for their first positions.

Regarding starting salaries, Chi-Square and Spearman correlations were run for each position. Participants showed no statistically significant differences in the amount of starting salaries for both groups, concluding there is no association between taking an experiential education curriculum and the amount of salaries received. Therefore, the null hypothesis was accepted.

Hypothesis 3: There is no statistically significant difference between experiential education graduates and non-experiential graduates regarding satisfaction with their career progress.

Table 9

Comparison of Satisfaction With Career Progress to Experiential Education (Percent)

Level	Experiential Education	Non-Experiential Education
Very Dissatisfied	3	0.5
Dissatisfied	7	8
Somewhat Dissatisfied	12	7
Neither Satisfied Nor Dis.	3	8
Somewhat Satisfied	23	26
Satisfied	32	34
Very Satisfied	19	14

Fifteen percent (15%) of the graduates are very satisfied; nineteen percent (19%) of the experiential education group and fourteen percent (14%) of the non-experiential education group. Thirty-four percent (34%) are satisfied; thirty-two percent (32%) of the experiential education group and thirty-four percent (34%) of the non-experiential education group. Twenty-five percent (25%) are somewhat satisfied; twenty-three percent (23%) of the experiential education group and twenty-six percent (26%) of the non-experiential education group. Nine percent (9%) are somewhat dissatisfied; Twelve percent (12%) of the experiential education group and seven percent (7%) of the non-experiential education group. Eight percent (8%) are dissatisfied; seven percent (7%) of the experiential education group and eight percent (8%) of the non-experiential education group. Ten percent (10%) of the males and eighteen percent (18%) of the females were very satisfied with their career progress. Age did not appear to have an effect on satisfaction levels.

The experiential education graduates were more satisfied with their career progress than the non-experiential education group as indicated by a .017 (<.05) significance level

for the Mann-Whitney test. Therefore, the null hypothesis was rejected.

Hypothesis 4: There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding their perception of their own successfulness in their careers.

Table 10

Comparison of Perception of Career Successfulness to Experiential Education (Percent)

Level	Experiential Education	Non-Experiential Education
Not Successful	2	0.5
Somewhat Unsuccessful	11	10
Neutral	12	21
Somewhat Successful	56	54
Completely Successful	19	14

Fifteen percent of the graduates (15%) feel they are completely successful; nineteen percent (19%) of the experiential education group and fourteen percent (14%) of the non-experiential education group. Fifty-four percent (54%) feel they are somewhat successful; fifty-six percent (56%) of the experiential education group and fifty-four percent (54%) of the non-experiential education group. Eighteen percent (18%) are neutral. Ten percent (10%) feel they are somewhat unsuccessful; eleven percent (11%) of the experiential education group and ten percent (10%) of the non-experiential education group. Eighteen percent (18%) of the males and fourteen percent (14%) of the females feel they are completely successful. Fifty-three percent (53%) of the males and fifty-seven percent (57%) of the females feel they are somewhat successful. Twenty-one percent (21%) of those in their fifties, fifteen percent (15%) of those in their forties, twelve percent (12%) of those in their thirties, and seventeen percent (17%) of those in their twenties feel that they

are completely successful. Fifty-two percent (52%) of those in their fifties, sixty percent (60%) of those in their forties, fifty percent (50%) of those in their thirties, and sixty-one percent (61%) of those in their twenties feel they are somewhat successful.

Experiential education participants perceived themselves to be more successful in their careers than non-experiential education participants as indicated by a Mann-Whitney significance of .037 (<.05). Therefore, the null hypothesis was rejected.

Hypothesis 5: There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding the number of promotions they received.

Table 11

Comparison of Number of Promotions to Experiential Education Graduates (Percent)

Promotions (Number)	Experiential Education	Non-Experiential Education
None	29	32
One	24	22
Two	18	22
Three	15	13
Four	7	5
Five	6	2
Six or More	2	4

At the time the survey was taken, twenty-nine percent (29%) of the experiential education graduates and thirty-two percent (32%) of the non-experiential education graduates had not been promoted. Twenty-four percent (24%) of the experiential education graduates and twenty-two percent (22%) of the non-experiential education graduates received one promotion. Males and females received the same percentages of promotions. The experiential education graduates did not receive significantly more

promotions than the non-experiential education graduates as indicated by a .752 p value (>.05). Therefore, the null hypothesis was accepted. These results are not in agreement with the findings of Krupar (1987) and Edison (1981) . A reason for the difference may be that the respondents in this study changed jobs frequently to reach higher levels rather than stay at the same company to receive promotions. At the time Krupar and Edison conducted their research, companies were more loyal to employees and promoted from within the organization. The total number of promotions that respondents received are as follows: one promotion, twenty-three percent (23%); two promotions, twenty percent (20); three promotions, fourteen percent (14%); four promotions, five percent (5%); five promotions, three percent (3%); six or more promotions, three percent (3%).

Career Evaluation and Outlook

Participants were asked how they feel about their careers at this point in time.

Table 12

Comparison of Perception of Career Line to Experiential Education
(Percent for Each Group)

Status	Experiential Education	Non-Experiential Education
Beginning	25	27
Blocked	15	25
Steady Progress	40	35
Pinnacle	21	13

Twenty-six percent of the graduates (26%) feel their career line is just beginning and they are finding their way in their organization. Twenty-five percent (25%) of the experiential education group and twenty-seven percent (27%) of the non-experiential education group feel this way. Twenty-one percent (21%) feel their careers are blocked and they are “stuck” in their present position. Fifteen percent (15%) of the experiential

education group and twenty-five percent (25%) of the non-experiential education group feel this way. Thirty-seven percent (37%) feel their career consists of steady progression within their organization. Forty percent (40%) of the experiential education group and thirty-five percent (35%) of the non-experiential education group feel this way. This is the largest group and may be a positive sign that respondents feel a steady progression which will hopefully continue. Sixteen percent (16%) feel their upward career has reached a “pinnacle”, the highest position they wish to attain. Twenty-one percent (21%) of the experiential education group and thirteen percent (13%) of the non-experiential education group feel this way.

It is interesting to note that a large number of the experiential education group feel they have reached their highest potential, possibly contributing to self-actualization and satisfaction.

Participants were asked how satisfied they are with their progress in their careers. See hypothesis three.

In comparing themselves to other people their age who are involved in the same or similar occupations, participants were asked how successful they feel they are. See hypothesis four.

Experiential education graduates were asked how much their career opportunities were influenced by their co-ops or internships during their associate degree programs. Three percent (3%) feel their opportunities were influenced a great deal. Eighteen percent (18%) feel their opportunities were influenced quite a bit. Twenty percent (20%) feel they were moderately influenced. Twenty-eight percent (28%) feel they were little influence. Thirty-one percent (31%) feel they were no influence. Sometimes it is difficult for an individual to note the effects of variables on one's life. Collectively, some positive effects

of experiential education are reported in this research, some of which were not apparent to the participants or at least not attributed to completing an experiential education program.

Summary

This chapter presented a review of the data gathered in connection with each of the five hypotheses of the study and presented additional measures regarding the graduates' employment history and career evaluation and outlook.

The first hypothesis presented the thesis that there would be no statistically significant difference between college graduates who participated in an experiential education curriculum and graduates who had not participated regarding levels at which they are hired into organizations. Support for this hypothesis did not exist for their first and second positions as indicated by a Mann-Whitney U of .027 ($<.05$). Experiential education graduates were hired into positions that required more experience, as would be expected. Work experience in their fields during their college years most likely gave them an advantage as far as skill level and work savvy, thus enhancing desirability to employers. This experience kept them ahead into the second positions. By the third position, differences were less obvious and both groups held more supervisory and managerial positions. The null hypothesis was rejected for positions one and two and not rejected for position three at a .05 level of statistical significance.

The second hypothesis dealt with starting salaries for three consecutive positions held by each person. No direct statistically significant evidence existed, therefore, indicating that those who participated in experiential education were not likely to start at higher salaries than the non-experiential education group. The null hypothesis was not rejected at the .05 level of statistical significance.

Hypothesis three theorized that experiential education participants would express

no difference in satisfaction with their career progress than non-experiential education participants. There was, in fact, a statistical significance of .016 indicating that the experiential education group was more satisfied with their progress than the non-experiential education group. More of the experiential education group were “very satisfied” than the other group. Therefore, the null hypothesis was rejected at the .05 level of statistical significance.

Hypothesis four considered the perception of the graduates’ own successfulness in their careers for the experiential education group as compared to the non-experiential education group. With a statistical significance of .037, it was confirmed that more of the experiential education participants felt “completely successful” or “somewhat successful” than the non-experiential education group. Therefore, the null hypothesis was rejected at the .05 level of statistical significance.

It would be interesting to see what criteria were used by these graduates in determining their own successfulness. Current and future projections note that wages will no longer be benchmarks of success in our society. The overall contributions one makes to the community and the country will be more important.

The fifth hypothesis theorized that there would be no statistically significant difference in the number of promotions for the experiential education group as compared to the non experiential education-group. This was supported by a .752 p value at the .05 level of significance. Therefore, the null hypothesis was not rejected.

The experiential education curriculum is beneficial since its graduates are hired into higher level positions than those who have not participated. This curriculum gives them a feeling of success and satisfaction with their careers, both positive feelings that will support them throughout their work history.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this investigation was to determine the relative effectiveness of an experiential education curriculum on the career achievement of college graduates and their satisfaction with their progress. Two groups of students were compared: graduates who participated in a co-op or internship program and those who did not participate. Five hypotheses were investigated dealing with:

1. Levels at which graduates are hired into organizations
2. Starting salaries
3. Satisfaction with their career progress
4. Perception of their career successfulness
5. Number of promotions received

The hypotheses were designed to analyze outcomes for the initial work position after graduation and two succeeding positions to determine the effect of experiential education on their careers over time.

The data gathering technique used in the study was a mail survey. A seventeen percent (17%) rate of response was achieved. The large number of undeliverable surveys was more than expected but can be explained by the fact that graduates from five to seven years ago do not update their addresses with their colleges.

Data was analyzed using Chi-Squares and the Mann-Whitney U test. Statistically significant differences between the experiential education and non-experiential education groups were found in the levels at which they were hired into organizations and in their perception of their successfulness in their careers. The experiential education group scored higher in both areas. They were more satisfied with their career progress than the non-experiential education group.

This study does not support some prior literature presented regarding starting salary. Vickers (1990) and San (1986) report that those completing related work experience during college start at higher wages than those who have no related experience. This study found no relationship between the two variables. Many of those surveyed in this study worked full time during their college years. They were adult “non-traditional” students rather than the traditional high school graduate who went directly to college. Perhaps working during college was a factor contributing to higher wages before graduation. Many of them had been in the workforce for a number of years and returned to college as required to advance within the company or industry. Some of them had been displaced from previous positions and needed to be retrained in high demand fields.

Far more experiential education graduates (sixty-nine percent) were hired into positions related to their majors than non-experiential education graduates (forty-seven percent). Hamlin (1978) and Kysor (1994) reported similar findings. Being hired in their fields may contribute to experiential education graduates’ job satisfaction, supporting Brown’s findings (1984) which indicated higher levels of self esteem and pride in themselves and their work. Also, more co-op graduates chose jobs related to their majors.

A large percentage of the experiential education graduates were females (seventy-seven percent) who were under thirty years old (forty-seven percent). In general, experiential education graduates were hired full time (sixty-eight percent) in entry level positions (fifty-nine percent) that were related (sixty-nine percent) to their majors (seventy-three percent in business). They stayed with the same company for two to three years (forty-four percent). They received up to three promotions. They continued their education and completed bachelor degrees (thirty-eight percent). The young women who took the experiential education program started at the beginning levels of jobs that their

degrees prepared them for. They were proficient enough to be promoted and wise enough to continue their education.

Conclusions

It was the goal of this research project to investigate the impact of participation in experiential education on career achievement. This was attempted by considering salaries, promotions, job levels, and the individuals' perceptions of their career progress as compared to others and their satisfaction with that progress.

The first hypothesis presented the thesis that there would be no statistically significant difference between college graduates who participated in an experiential education curriculum and graduates who had not participated regarding levels at which they are hired into organizations. Support for this hypothesis did not exist for their first and second positions. Their experience kept them ahead into the second positions. By the third position, differences were less obvious and both groups held more supervisory and managerial positions.

The second hypothesis dealt with starting salaries for three consecutive positions held by each person. No direct statistically significant evidence existed, therefore, indicating that those who participated in experiential education were not likely to start at higher salaries than the non-experiential education group.

Hypothesis three theorized that experiential education participants would express no difference in their satisfaction with their career progress than non-experiential education participants. There was, in fact, a statistical significance of .016 indicating that the experiential education group was more satisfied with their progress than the non-experiential education group.

Hypothesis four considered the perception of the graduates' own successfulness in

their careers for the experiential education group as compared to the non-experiential education group. With a statistical significance of .037, it was confirmed that more of the experiential education participants felt “completely successful” or “somewhat successful” than the non-experiential education group.

The fifth hypothesis theorized that there would be no statistically significant difference in the number of promotions for the experiential education group as compared to the non experiential education-group. This was supported by a .752 p value at the .05 level of significance. Therefore, the null hypothesis was not rejected.

The data was inconclusive, however, because it does not strongly demonstrate the impact of experiential education on the career success of business and technical associate degree graduates. Since their salaries were not higher than the non participants and they did not receive more promotions, it is questionable whether students would choose to take this curriculum.

Experiential education graduates have related experience and bring the skills they have acquired to their full time positions. Beneficial skills include content area, communication, and human relations as well as work readiness. As a result, the transition period from school to work is shorter for experiential education graduates and they are more readily adaptable to the work environment. They have been exposed to work culture issues that are needed for success on the job. The positive effects of having the experiential education background reinforce the results of this study in the areas of hiring levels, full time positions after graduation, jobs related to their majors, satisfaction with their career progress, perception of successfulness in their careers, and the feeling of reaching their highest potential in their careers. In light of the data and statistics available from this study and previous research, it is interesting that the experiential education

graduates feel their work experience had no influence on their career opportunities.

Colleges and universities should consider plausible positive outcomes engendered from promoting experiential education as a marketing tool to prospective and current students for recruitment and retention. Their marketing would encourage students to attend their institutions and enroll in experiential education since they are able to look forward to full time jobs in their fields when they graduate before enrolling at a college or university, giving them an edge over non-experiential education graduates. A return on investment is secured by parents and students, many of whom utilized loans to finance their education. Current students would realize via documentation by their colleges that more experiential education graduates are hired into occupations that are related to their majors. They would also note the higher success levels past experiential education graduates had reached in their careers and the higher satisfaction they received with their career progress as demonstrated by this study and those of Edison (1981), Brown (1984), and Linn (1993). This information would encourage them to strive for graduation, as a larger percentage of experiential education graduates went on for bachelor degrees, thus, increasing the retention rates of the colleges.

Recommendations for Future Study

1. Since many of the graduates were “non-traditional students” and had worked full time for a number of years, isolating the effects of some variables as compared to their work and life experiences impacting their careers can be difficult. As more mature adults pursue college degrees, applied learning still holds its value, whether in a formal academic program or in on-the-job experiences. Questions should be asked that could assist in identifying individuals with years of experience. Then the outcomes of the study may indicate results more in favor of experiential education graduates as compared to other

more traditional students with no related work experience, thus resulting in more favorable statistical significance in the areas of salaries and promotions.

2. Since most bachelor level studies of co-op have involved engineering graduates, additional studies dealing with non-engineering bachelor degree graduates with traditional backgrounds may be desired by universities to observe the effect of experiential education on the career successes of their graduates. Studies involving associate degree graduates may not be totally relevant to bachelor degree graduates. At many universities, students participate in multiple work experiences. Research into the effects of experiential education on career successes of bachelor level graduates may indicate more support of experiential education through a number of variables.

3. A longitudinal study tracking individual graduates over a period of time may produce usable data especially regarding specific majors. This information would be valuable in assessing a particular program and the benefit of taking experiential education for its graduates.

4. A study asking employers of experiential education graduates specific questions regarding their performance and the benefits of hiring them would bring more empirical evidence of the impact of experiential education on career successes of graduates. College officials may wish to note the impact that experiential education has on their graduates' careers. Building an alumni organization that is strong in members who have attained high levels in organizations in fields relative to the programs offered at the college would provide more opportunity for current graduates when seeking jobs at those organizations. A group that is strong in its loyalty to its alma mater may be more generous in contributions of time and money. It makes sense for colleges to take a serious look at the effect of experiential education on their graduates' perception of successfulness and

satisfaction with their careers, components to strong self concepts and thus solid foundations for their future.

Experiential education is a proven method of combining cognitive and affective learning through application of skills acquired in the classroom to the real world in the work environment. High school co-op programs, sometimes viewed as less than adequate, are offered to students in vocational programs. In the past, school districts have placed their least motivated and productive students in vocational programs. Hence, the cooperative education curriculum at the high school level holds a stigma that needs to be eradicated. When planned and administered appropriately, co-ops in high school can have good results including related employment. School districts may wish to conduct studies to determine the effectiveness of cooperative education at the high school level.

Results of this and similar studies have supported and sometimes negated the effects of collegiate experiential education on specific variables. However, when viewing the positive outcomes engendered by this medium of instruction, it is no wonder that higher educational institutions continue to offer experiential education to their students. Seeking business partnerships that require specific skills may lead to programs focused at particular industries. A more proactive approach for four year colleges would be to continue the existing work experiences as transferred from community colleges or seek more challenging positions for the last two collegiate years. For new students, the four year college should build experiential education curricula into each program, thus promoting participation by a larger number of students. One method could be to utilize the engineering model of one semester per year in the classroom and one semester on the job. Another method could place the student in the related work experience during the summer to gain needed application and experience. Utilizing the co-op as a capstone experience for

any program offers advantages for students in obtaining employment directly after graduation; provides the employer with an experienced, knowledgeable employee who fits the corporate culture; and increases the employment rate for the graduate's alma mater.

APPENDIX A

LETTER OF TRANSMITTAL

January 15, 1998

Dear Alumnus:

We are studying the impact of cooperative education and internships in relationship to career progression. The enclosed survey reviews the development of your career through questions that cover job characteristics, work experiences, and career expectations. The information from this project will be used to evaluate experiential learning and to better understand the transition from college to work. The results will be used to assist students in their program selections and career choices.

Your participation in this study, although voluntary, is important. We would appreciate your answering all of the questions in order to minimize the amount of missing information that makes it difficult to analyze data. This should take approximately 20-30 minutes.

The return of the survey constitutes your informed and voluntary consent to participate in this research which will be used by Judith Dimmer to complete requirements for her Doctor of Education degree at Wayne State University.

After completing the survey, please return it in the postage paid envelope provided by February 9, 1998. Your responses will be kept strictly confidential.

If you have any questions about this project, please contact Judith Dimmer, researcher, at (810) 766-4210.

Sincerely,

Nancy Stupsker, Henry Ford Community College
Melissa Latner, Baker College

APPENDIX B

SURVEY FORM

SURVEY OF CAREER DEVELOPMENT

INSTRUCTIONS

The questions in this survey relate to your career progression since receiving your Associate Degree unless specified otherwise. Please complete all five sections of this survey. Begin with section A, Experiential Learning, giving information on your work experiences while in college. Section B will cover your Career Evaluation and Outlook. Section C is demographic information needed for analysis. Section D is the Work Summary and Section E is the Employment History.

A. EXPERIENTIAL LEARNING: Questions in this section concern your work experiences while obtaining your Associate Degree.

1. Did you complete a co-op? Yes ___ No ___
If this does not apply, continue with question 2.
- a. How many cooperative education experiences did you have (consider a term of co-op as one experience)?
_____ experiences
 - b. Did you take a position with your co-op employer after graduation (your first job)? Yes ___ No ___
If no, can you briefly describe why you did not go to work for your co-op employer?

2. Did you complete an Internship? Yes ___ No ___
If this does not apply, continue with question 3.
- a. How many months of internship were you involved in prior to graduating? _____ total months
 - b. Did you receive pay for your internship? Yes ___ No ___
 - c. Did you go to work for your internship employer?
Yes ___ No ___

If no, can you briefly describe why you did not go to work for your co-op employer?

3. Did you complete a Summer or Part-Time Employment? (Consider only the employment that was related to your academic major or career.)

Yes ___ No ___

- a. How many months of employment did you participate in while in college? _____ total months
- b. Did you go to work full-time for one of your employers?
Yes ___ No ___

B. CAREER EVALUATION AND OUTLOOK: Questions in this section ask you to evaluate your career and the prospects for your career over the next few years.

1. We would like to know how you feel about your career at this point in time. For each of the career descriptions provided below, indicate whether you agree or disagree with the statement. (Place appropriate response to the left of each item).

Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1	2	3	4	5

- ___ a. There has been no pattern or plan to my career. I have simply picked up opportunities as they occurred.
- ___ b. My current career line is just beginning, and I am finding my way in my organization.
- ___ c. My career has consisted of one or more changes in fields as I search for a better fit between myself and my work role.
- ___ d. My career is blocked. I feel "stuck" in my present condition.
- ___ e. My career has consisted of rapid upward moves within my organization.
- ___ f. My career has consisted of moves designed to broaden my experience in a variety of settings while making progress towards a career goal.
- ___ g. My career was upward and has now reached a plateau. (A plateau is a position which is blocked from further advancement in this organization.)
- ___ h. The jobs that I have had do not really form a career.
- ___ i. My career has consisted mainly of steady progression within my organization.
- ___ j. My work history has consisted mainly of choices based on personal interests rather than on ambition.
- ___ k. My career was upward and has now reached a pinnacle. (A pinnacle is the

highest position one wishes to attain; further advancement may not be blocked.)

- l. My work history has consisted of modifying my career plans to fit with the needs of my spouse/partner/family.
- m. I have done the same kind of job throughout my working life and my career has consisted of learning how to do it better.
- n. My professional skills have declined in value during my career.

2. Now think about your career to date. Overall how satisfied are you with your progress? (Circle appropriate number.)

- 1 Very Dissatisfied
 2 Dissatisfied
 3 Somewhat Dissatisfied
 4 Neither Satisfied or Dissatisfied
 5 Somewhat Satisfied
 6 Satisfied
 7 Very Satisfied

3. As you look ahead to the next eighteen months, to what extent do you expect to experience these actions? (Place appropriate response to the left of each item.)

Very Unlikely	Unlikely	Sure	Not Likely	Very Likely
1	2	3	4	5

- a. Expect lateral move within company
- b. Expect promotion within company
- c. Expect added job responsibilities
- d. Expect no change in position
- e. Expect to change employers
- f. Expect reorganization to make this position obsolete
- g. Expect to return to school
- h. Expect to leave the work place

4. Do (did) you have a mentor who helps(ed) your career advancement in your organization? Yes _____ No _____

5. Compared to other people your age and who are involved in the same occupation or similar work, how successful do you feel you are? (Circle one response.)

Not Successful	Somewhat Unsuccessful	Neutral	Somewhat Successful	Completely Successful
1	2	3	4	5

6. How much do you think your career opportunities were influenced by these factors? (Place the appropriate number to the left of each statement.)

Not At All 1	Little Influence 2	Moderate Influence 3	Quite A Bit of Influence 4	A Great Deal of Influence 5
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- ___ a. Individual Performance: How well I perform my job.
 ___ b. Career Experience: Having the correct type and sequence of jobs.
 ___ c. Organizational Politics: Knowing and influencing the right people.
 ___ d. Luck: Being at the right place when opportunities arise.
 ___ e. Formal Qualifications: Having specific academic/professional training.
 ___ f. Corporate Planning: Impersonal decisions made at higher level.
 ___ g. Length of Service: Depending upon seniority and time in the job.
 ___ h. Prejudice: Belonging to a group that is discriminated against.
 ___ i. College Work Experience: Co-ops or internships taken during your Associate Degree program.

7. Consider for a moment the general skills and competencies necessary for success in your chosen endeavors.

- a. Which of these skills or competencies were effectively developed in your associate degree? (Please list these skills.)

- b. From your co-op? _____
 c. From your internship? _____
 d. From summer/part-time employment? _____
 e. Other, explain: _____

8. Since receiving your Associate Degree, your employment may have been interrupted for one of the following reasons: additional schooling, family responsibilities, unemployment, illness. Complete all sections that may apply to you.

- a. If you have completed a bachelor degree, how long did it take after you received your associate degree?
 ___ Years ___ Months
 ___ No bachelor degree
- b. Did you continue to work while in school?
 Yes ___ No ___. If yes, did you work Full time ___ or Part time ___?

- c. Family Responsibilities: How long were you in this situation?
 ___ Years ___ Months
- d. Unemployed: How long were you in this situation?
 ___ Years ___ Months
- e. Illness: How long were you in this situation?
 ___ Years ___ Months
- f. Other: How long were you in this situation?
 ___ Years ___ Months

Describe the situation _____

C. DEMOGRAPHIC INFORMATION: This information will be used for descriptive purposes only. All individual responses will be kept confidential.

1. In what year were you born? 19___
2. What is your sex? Male___ Female___
3. What is your current marital status? (Check one)
 Single___ Married___ Separated___ Divorced___ Widowed___
4. How many children do you have? _____
5. What is the highest level of education you have obtained? (Check one)
 AS/AB___ BS/BA___ MA/MS___ MBA___ Ph.D. ___ Other: ___
6. In which area did you graduate?
 Business___ Technical___
7. Which college did you attend?
 Baker College___
 Henry Ford Community College___

D. WORK SUMMARY: Since receiving your associate degree you may have had more position changes than you will be able to list in the history. Please summarize your work history by completing these questions.

1. On what date did you enter full-time employment?
 Month___ Date___ Year___
2. How many positions have you had? ___ Positions

3. How many organizations have you worked for? _____ Organizations
4. How many promotions have you received? _____ Promotions
5. How many position changes have you experienced that you would not consider promotions? _____ Changes
6. How many times have your job responsibilities been restructured even though you did not change jobs?
_____ Responsibilities restructured

E. **EMPLOYMENT HISTORY:** This section includes your first position after you graduated with your associate degree, one position change, and your current position. If you have had more changes, please select those changes most important to your career. A definition of position change is given below.

A position change is one of these three actions:

*New employer: You change employers; your job responsibilities may or may not be different.

*Change positions within same company: You move between positions with different responsibilities.

*Change position responsibilities: You experience major alteration to the content of your duties and activities.

Place the appropriate response in the column corresponding with each position since you received your associate degree.

Question	1st Position	2nd Position	Current Position
<p>1. This position is (was): (Select the appropriate letter.) a. Full time b. Part-time c. Self-employment d. Fixed term contract</p>			
<p>2. Is (was) this position with: a. Same employer b. New company</p>			
<p>3. How many people are (were) employed by this organization? (Select the appropriate letter.) a. 0-25 b. 26-100 c. 101-300 d. 301-500 e. 501 or more</p>			
<p>4. Is (was) your position related to your major? <u>Yes</u> or <u>No</u></p>			
<p>5. Briefly describe your job responsibilities.</p>			
<p>6. Would you consider yourself to be (have been): (Select the appropriate letter.) a. Entry-level b. Experienced c. Supervisor d. Manager</p>			
<p>7. How long were you in each position? (Select the appropriate letter.) a. Up to 1 year b. 2-3 years c. 4-5 years d. 6 or more years</p>			
<p>8. What is (was) your annual salary (including bonuses)? (Select the appropriate letter for each position.) a. \$15,000 or less b. \$16,000 - 20,000 c. \$21,000 - 25,000 d. \$26,000 - 30,000 e. \$31,000 - 35,000 f. \$36,000 or more</p>			

Question	1st Position	2nd Position	Current Position
<p>9. How much freedom do (did) you have in each position? (Indicate a response for each item.)</p> <p>No Freedom Most Freedom 1 2 3 4 5</p>	<p><input type="checkbox"/> Independent of Supervisor</p> <p><input type="checkbox"/> Set own work objectives</p> <p><input type="checkbox"/> Chose methods for achieving objectives</p> <p><input type="checkbox"/> Chose order in which tasks were performed</p> <p><input type="checkbox"/> Chose whom to deal with to carry out work duties</p>	<p><input type="checkbox"/> Independent of Supervisor</p> <p><input type="checkbox"/> Set own work objectives</p> <p><input type="checkbox"/> Chose methods for achieving objectives</p> <p><input type="checkbox"/> Chose order in which tasks were performed</p> <p><input type="checkbox"/> Chose whom to deal with to carry out work duties</p>	<p><input type="checkbox"/> Independent of Supervisor</p> <p><input type="checkbox"/> Set own work objectives</p> <p><input type="checkbox"/> Chose methods for achieving objectives</p> <p><input type="checkbox"/> Chose order in which tasks were performed</p> <p><input type="checkbox"/> Chose whom to deal with to carry out work duties</p>
<p>10. How useful are (were) each of the following in letting you know what to do on the job? (Indicate a response for each item.)</p> <p>Not Useful Most Useful 1 2 3 4 5</p>	<p><input type="checkbox"/> Immediate supervisors</p> <p><input type="checkbox"/> Colleagues</p> <p><input type="checkbox"/> Mentor</p> <p><input type="checkbox"/> Subordinates</p> <p><input type="checkbox"/> External professional (i.e. Skills course)</p> <p><input type="checkbox"/> Company literature</p> <p><input type="checkbox"/> In-company training</p> <p><input type="checkbox"/> Previous co-op or work experience</p>	<p><input type="checkbox"/> Immediate supervisors</p> <p><input type="checkbox"/> Colleagues</p> <p><input type="checkbox"/> Mentor</p> <p><input type="checkbox"/> Subordinates</p> <p><input type="checkbox"/> External professional (i.e. Skills course)</p> <p><input type="checkbox"/> Company literature</p> <p><input type="checkbox"/> In-company training</p> <p><input type="checkbox"/> Previous co-op or work experience</p>	<p><input type="checkbox"/> Immediate supervisors</p> <p><input type="checkbox"/> Colleagues</p> <p><input type="checkbox"/> Mentor</p> <p><input type="checkbox"/> Subordinates</p> <p><input type="checkbox"/> External professional (i.e. Skills course)</p> <p><input type="checkbox"/> Company literature</p> <p><input type="checkbox"/> In-company training</p> <p><input type="checkbox"/> Previous co-op or work experience</p>
<p>11. On a scale of 1-5 (5 is the highest) how much feedback do (did) you receive from these sources on your work performance?</p>	<p><input type="checkbox"/> Supervisors</p> <p><input type="checkbox"/> Mentors</p> <p><input type="checkbox"/> Colleagues</p> <p><input type="checkbox"/> Clients, customers</p> <p><input type="checkbox"/> Job indicators (i.e. outputs)</p>	<p><input type="checkbox"/> Supervisors</p> <p><input type="checkbox"/> Mentors</p> <p><input type="checkbox"/> Colleagues</p> <p><input type="checkbox"/> Clients, customers</p> <p><input type="checkbox"/> Job indicators (i.e. outputs)</p>	<p><input type="checkbox"/> Supervisors</p> <p><input type="checkbox"/> Mentors</p> <p><input type="checkbox"/> Colleagues</p> <p><input type="checkbox"/> Clients, customers</p> <p><input type="checkbox"/> Job indicators (i.e. outputs)</p>
<p>12. How quickly did you receive a monetary raise? (Select an appropriate letter for each position.)</p> <p>a. 1st year</p> <p>b. 2-3 years</p> <p>c. 3-4 years</p> <p>d. 4 or more</p> <p>e. N/A</p>			
<p>13. How quickly did you receive a promotion to a new position? (Select an appropriate letter for each position.)</p> <p>a. 1st year</p> <p>b. 2-3 years</p> <p>c. 3-4 years</p> <p>d. 4 or more</p> <p>e. N/A</p>			

Thank you for your time and effort. Please return this survey in the postage paid envelope provided. If you have any questions, please contact Judith Dimmer at (810) 766-4210 or your college co-op department.

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ABSTRACT

IMPACT OF PARTICIPATION IN EXPERIENTIAL EDUCATION CURRICULA ON CAREER ACHIEVEMENT

by

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May 1999

Advisor: Leonard Kaplan

Major: Curriculum and Instruction

Degree: Doctor of Education

The purpose of this study was to determine the effects of experiential education on particular aspects of associate degree graduates' careers as well as their resulting level of personal satisfaction. It compares data from experiential education graduates to graduates who have not participated in experiential education to determine if there is value in taking an experiential education curriculum. Three hundred seven (307) surveys were returned, giving a seventeen percent (17%) return rate. Statistics were used to determine the degree of significance and thus the usefulness of this study to post secondary institutions, students, graduates, and employers.

This study tested the following null hypotheses:

1. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding levels at which they are hired into organizations.
2. There is no statistically significant difference in starting salaries between experiential education graduates and non-experiential education graduates.
3. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding satisfaction with their

career progress.

4. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding their perception of their own successfulness in their careers.
5. There is no statistically significant difference between experiential education graduates and non-experiential education graduates regarding the number of promotions they receive.

This study found that experiential education had an effect on the levels at which experiential education graduates were hired into their first and second jobs after graduation; that experiential education graduates were more satisfied with their career progress; they perceived themselves to be more successful and more of them were hired into positions related to their majors.

The data was inconclusive, however, because it does not strongly demonstrate the impact of experiential education on the career successes of business and technical associate degree graduates. Since their salaries were not higher than the non participants and they did not receive more promotions, it is questionable whether students would choose to take this curriculum.

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