

COOPERATIVE TRAINING PROGRAMS THAT EXIST BETWEEN
BUSINESS AND INDUSTRY AND SCHOOLS IN
THE PONCA CITY, OKLAHOMA AREA .

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1969

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
May, 1985

Thesis
1985
S4286
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ACKNOWLEDGMENTS

Completion of this thesis was a very important step in my life and will, I hope, be my start of a new phase of experiences in the adult education field. None of the last two years of school would have been possible if not for the patience, love, sacrifice, and financial backing of my husband, Jim, son, Sam, and my mother, Eleanor Fehring. I want to thank also Dr. John Baird, major adviser, Dr. Gene Smith, Dr. Bill Venable, members of my committee; Kay Porter, my typist; and my fellow students in graduate studies for their advise, concern, and help during this important growth period of my life.

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CHAPTER I

INTRODUCTION

Lancaster (1980) strongly stressed that:

Employers face people who are unemployable, cannot read, cannot communicate, irresponsible shifters who couldn't care less, and job jumpers. Educators face students without motivation or understanding of what it takes to function in the work-a-day world (p. 35).

This is why one of the main goals of education today is to establish viable adult education programs that train, retrain, and upgrade the present work force. This study looked at adult education programs being conducted by business, industry, and education in a small community.

According to Lynton (1982), there have been basic differences in the goals and purposes of training between the corporate world and the educational institution. Cooperative goals for training are stated that training be a cost-effective operation, that participants in training programs be chosen on the basis of corporate priorities, other than individual needs and that the format and content be tailored to produce tangible returns to the company.

Education institutions exist to foster individual development. Students are admitted on the basis of who is most likely to profit from the educational program. The curriculum is designed, at least in principle, to bring about the greatest long-range enhancement of the individual.

Singer (1974) stated that many companies feel that what is being taught at local technical colleges or community colleges is often irrelevant to the real work of those who attend. These schools try to anticipate the needs of industry and industry will not let their future training needs be known soon enough for schools to adjust to those needs.

Friano (1975) stated that educators must realize that education does not merely take place within the walls of formal institutions. Education takes place whenever a desire to learn is present. It is the duty of educational leaders to identify the desire to learn and to assist in fulfilling that goal.

Castellucis (1976) stressed that if educators are to "tool up" for the remainder of the twentieth century they need to know not only the educational requirements of the work force, but the business commitment to fulfill those needs.

Statement of the Problem

In an effort to meet the educational and training needs of the growing numbers of adult students, cooperative programs have been established between the business and industry and education community. These programs have been organized quickly and often suffer from scarcity of funds, space and time, and the duplication of effort.

The problem with which this study is concerned is the lack of communication and planning between educational institutions and business and industry consumers of training programs.

Purpose of the Study

The purpose of this study was to determine the types of cooperative

training programs that exist between local business and industry, the community college, and the vocational-technical school in the Ponca City area. It also determined the level of commitments made to the continuation of these programs from both education and business and industry.

The Objectives of the Study

The specific objectives of this study were to:

1. identify programs that exist as cooperative programs in the schools.
2. identify the types of training required by business and industry in the area.
3. identify the types of programs in the schools that address the needs of business and industry, and
4. determine the level of commitment of schools and industry to cooperate with programs.

The Need for the Study

Individual businesses may benefit directly from the study. They may also benefit indirectly from the data given to the training institutions such as the community college and vocational-technical schools for anticipating future training needs. The training institutions will derive benefit from the study in establishing the types of training programs required by businesses in the area according to Castellucis (1976).

Friano (1975) stated that the community college not being tied to traditional ways, being young and flexible and with a dedication to be of service to the community, to its industries and to its citizens can

take measures to bring services out of the institution and into the community. This study can provide valuable information to the schools for purposes of institutional and program planning. Also the study ascertained the extent to which the business community was willing to commit funds, time and equipment to the training institution for a particular program.

The Scope of the Study

The respondent organizations of this study were limited to business and industry firms in the Ponca City area employing more than 30 employees, and the community college and vocational-technical school serving the Ponca City area. The survey was sent to the official in the organization who had the responsibility for making decisions concerning training and the expenditure of funds for training or training costs.

Assumptions

This study was undertaken with the following assumptions clearly in mind.

1. The individual contacted would be able to identify the training requirements of their organization.
2. The individuals know or have access to the plans for meeting training needs.
3. The officials in the schools can speak with authority about facilities and plans to cooperate with industry.
4. The officials in both sectors can speak with authority about the expenditures of funds.

It is further understood that the results of this study are in no

way construed as an obligation of any organization or individual participating in the study.

Definitions

Before examining the steps used in conducting the study a description of a limited number of terms in the study are provided.

Training - The formal or informal process by which the learning of skills and knowledge take place (Castellucis, 1976).

Cooperative Training - Training programs set up jointly between business and a school for the purpose of making training more cost-efficient to both sectors (Castellucis, 1976).

Retrain - To anew the process of learning skills and knowledge through instruction (Random House Dictionary, 1980).

Upgrade - An increase or improvement in the process of learning skills and knowledge (Random House Dictionary, 1980).

Area Vocational School - An institution for teaching and learning occupations regularly followed for those living within a certain district (Random House Dictionary, 1980).

Community College - A school offering courses only through the first two years of college but also serving the needs of a local area (Random House Dictionary, 1980).

Training Facility - Something designed, built, or installed to serve the process of learning skills and knowledge (Random House Dictionary, 1980).

Training Equipment - Anything kept, furnished, or provided to carry out the process of learning skills and knowledge (Random House Dictionary, 1980).

CHAPTER II

REVIEW OF LITERATURE

Introduction

A great deal of literature to-date points out the need for developing a plan to create adequately trained manpower. There is major recognition that we must have labor force trained to enter and advance on the occupations created by new technologies. The review of literature describes training in cooperative training programs in business and education.

Development of Cooperative Programs

From its beginning the history of adult education has been involved in the competition between labor and management in the work force. The history of worker education according to Clarey (1980) is, worker education under worker control and labor-management adult education under company control.

Traditionally viewed as education for action, worker's education has long been a practical method of building and maintaining a strong and effective labor movement. But there has been a marked lack of blue collar participation in both worker education and adult community education.

Smith (1980) stated that employer-sponsored recurrent (or

lifelong) learning has grown from its World War II beginning to become a large and important, but little studied aspect of American education, one with major implication for the U.S. economy and society. The educational programs range from informal on-the-job training or formal apprenticeships to formal academic instruction through tuition assistance or paid release time. The availability of programs vary a great deal. They are sponsored chiefly by large companies and are used mostly by nonmanual employees. Many barriers, especially lack of time off and lack of program information hamper worker participation. Some successful assistance programs provide guidance that barriers can be overcome if programs include liberal eligibility, flexible work scheduling and non-restrictive curriculum requirements. Smith (1980) also pointed out, the decline of American industry and its loss of competitive strength in the world economy has led to a need for stimulation of the economy through reindustrialization.

Leach (1982) said the concept of reindustrialization has had an impact on vocational education. Vocational education can have an impact on the process through delivery of education and training that provides general work skill development and occupational skill development. A well-planned cooperative and coordinated effort must be conducted by industry and vocational education. Vocational educators need to conduct assessments to identify training they can provide and then develop and deliver multifaceted flexible education and training programs.

Industry's Need for Training

Corporations are dissatisfied with the fact that college graduates

cannot communicate effectively, a situation employees find as hard to understand as most colleges and university leaders do. According to Lynton (1982), company officials feel that college graduates are not prepared to deal with work organizations or with other employees. As a result entry-level programs place great emphasis on human interaction skills and organizational effectiveness training.

The three broad categories in which corporate industry and educational institutions could work together are: (1) employee growth and turnover, (2) education and training needs created by technology changes, and (3) needs for skills in performance of employees in their present jobs (Lynton, 1982).

Entry-level training includes employees who are: (1) promoted to supervisory positions, (2) diagonally moved from professional level to supervision, and (3) initially entered after pre-employment preparation. Few colleges and universities have moved to provide preparation for transition into the work place. A number of colleges and universities provide short courses and workshops for newly appointed foreman and supervisors. There are fewer college offerings for engineers and other professional personnel assuming supervisory and managerial duties. Lynton (1982) said the most disconcerting fact is the corporate executives beliefs that college graduates are improperly and inadequately prepared and that companies are forced to provide what might be called remedial instruction.

New skills and knowledge, a second substantial portion of corporate training, is designed in response to changes in technology, products, organizational and external relations. This category also includes the preparation of persons for overseas assignment. This

preparation primarily consists of intensive language training and in some cases including families of the employee being involved in cross-cultural learning. There is little involvement by college and university specialists in this type of training which may reflect the difficulty institutions have in adapting to the instruction formats and time interests for training needed by employers.

Lynton (1980) said that as far as continuing education is concerned, many companies support substantial continuing education and training for professionals and managers. The more advanced the level, the more use is made of existing advanced management and executive training programs conducted by business schools and other academic units throughout the country.

The "obsolete worker," those workers who have lost their jobs due to technology change, is according to Frey (1983), a subsector of the training process. Less than one percent of the total government money spent on retraining is applied to this particular training area. Frey feels that much more information is needed about the capability of these workers, if more training was conducted. Industry, education, and government must work closely to develop carefully conceived pilot programs.

According to Frey (1983) many companies have used appropriate programs in colleges and universities as well as workshops and seminars organized by consulting firms and professional associations. Larger companies frequently conduct their own in-house programs. Limited use was made of tuition remission plans. In some cases, company-supported leaves for full-time graduate study is granted. A small but growing number of corporations provide education allowances for a

special kind of "bridge point" from work to retirement. Financial assistance in some cases is provided for preretirement training.

Teaching Partnerships - Studies of Corporative Programs in Operation

In this section of the study a review of several successful cooperative programs in operation was conducted so that the reader might better understand what has been accomplished in this area. Many of these programs are beginning to meet industry training needs as stated in the preceding section of this paper.

Lancaster (1980) reported on a program in Tucson, Arizona where business and education coordinated their efforts to show participants the relationships of what they are learning in school and what they hope to do with the information on the job. Officials recognized that dollars were in short supply and that both business and education needed to share in the cost.

At Pima Community College, a consortium of Tucson educators, business people, and industrialists was formed and career centers, career days, and job placement weeks took place. "Cooperative Education" efforts, where students worked and trained on-the-job in banks, factories, et cetera, were also tried. The college assisted banks and industry in their education programs and 500 professional and business people advised and monitored occupational programs of the college to make sure they were meeting the community needs. The cooperation was sparked by a career education workshop hosted by Pima Community College in 1978. The consortium sponsored retreats where strategies were developed for building links between business and

education (Lancaster, 1980).

Another teaching partnership, as reported by Brown (1974), was a model for vocational-technical teacher recruitment and cooperative education between the major industrial plant, Union Carbide, and the University of Tennessee. The plant's skilled technicians and industrial technicians through the model, updated and broadened their skills beyond present employment requirements. Management pledged support and requested that more courses be offered at the industrial mini-campus.

Through this model, classes were held at 4:45 p.m. to avoid rush traffic and to provide students with flexibility in scheduling their personal time. More than 50 graduates of the teaching partnerships are currently serving various mid-management positions and as community college teachers, technical directors, and industrial supervisors (Brown, 1974).

According to Brown (1974) the partnership was valuable because:

1. an industry-university partnership could be operated with mutual benefits to both organizations, for example laboratories and equipment not ordinarily available to the university are made available by the industry and specialized technical instructors are provided by the university not usually available to industry.
2. technical and professional preparation of courses could be developed that were viable and acceptable to both academic and industry personnel.
3. industrial employees could receive credit toward a degree.
4. university courses were considered of immediate benefit to the industrial jobs of those enrolled.
5. industrial workers could be recruited as a resource pool of

trained prospective vocational-technical teachers through enrollment in the partnership.

In a report by Clary (1980) the state of North Carolina committed a positive climate for business and industry. The committee consisted of providing skills training through 58 institutions in the state community college system. During the past 20 years, substantial resources have been committed to extensive vocational-technical curriculum programs, extension courses and customized training for industry. The industries in North Carolina reported using the colleges for upgrade training 83.0 percent of the time; new training 66.6 percent, and in training for expansion, 36.7 percent for occupational education programs, extension, and customized industry training programs had a high priority (Lynton, 1980).

Clary (1980) stated the benefits of the joint training programs to colleges, industry, and the community were viewed somewhat differently by college and industry respondents.

1. Eighty percent of the college officials said the joint training provided better employees, while 30.0 percent of industry said it improved skills level.

2. Sixty percent of college personnel viewed joint training as economically efficient, 26.7 percent of industry personnel identified reduced need for in-house staff and increased productivity as factors. Twenty-three point three percent mentioned other financial elements. 26.7 percent of college personnel mentioned public relations as a benefit.

3. Of college officials, 53.3 percent said joint training programs improved the local economy (standard of living and income) while

only 46.6 percent of industry officials agreed.

4. Attracting and holding desirable new industry was a benefit cited by 36.6 percent of industry leaders. Providing jobs for local citizens was stated as a benefit by 46.7 percent of college personnel.

In a recently published directory of cooperative efforts between two-year institutions and business and industry, Bulpitt (1983) cited many very successful teaching partnerships. One such effort involved Cooperative Training Agreements with South Oklahoma City Junior College and three major industries in the Oklahoma City area.

In the programs reported by Bulpitt (1983), first-line sheet metal workers for Star Manufacturing Company took metal cutters training and upgrading at the local junior college. These courses were designed to meet the needs of a population of workers who were deficient in basic mathematical skills. Instructors from the college, as well as from another business, were used to teach the course. Boecking Machine Company's forklift repair technicians participated in repair technician training and upgrading. The courses were two hours in length, two nights per week for six weeks and the courses were taught by college personnel in Boecking Machine facilities. Western Electric Company of Oklahoma City also participated in cooperative programs with South Oklahoma City Junior College (Bulpitt, 1983). Courses were designed to upgrade current employees who were maintenance technicians. These courses included Industrial Math, Blueprint Reading, and Welding Theory.

The cooperative efforts described in this section of the study are but just a few of the teaching partnerships being tried in this country, with proper training and commitment these efforts will likely

continue with success.

Research in the Field

In an interview series ("Talking With Malcolm Knowles, 1977) it was stressed that in his research and work in the field of adult education the "learning contract" is the magical answer to the problems that educators have in helping adults organize and structure their self-directed learning. Knowles uses learning contracts in all course work on campus and in all in-service training work with professional associations and in the management development work in industry. One of the things he found was, that adults decided that they want to learn, start organizing in terms of a project, and are not concerned with behaviors to be acquired. The form of the learning contract, then, is really the identification of a set of projects for accomplishing a set of learning objectives. Knowles sees the required function of the industrial trainer as a facilitator and resource person to self-directed learners. The trainer's role includes such functions as helping the learner diagnose his needs of learning. There are many strategies, tools, and methods for helping the learner get objective data about the competence he needs to learn.

Knowles states that there has been more innovation in the training field in the last five years than there has been in the preceding 35 years. Some of these innovations include competency-based education for professional and management education, and lifelong education for lifelong learners.

In a research study conducted by Castellucis (1976) findings indicated that business would be spending about the same amount of dollars

per employee for in-house training as they would for off-site training. In light of these findings it is recommended that the educational community reappraise its position and its responsibilities to assist in the continuing educational plans of Oklahoma Businesses. The educational institutions must do a better job of: (1) selling businesses on the advantage of professional educators, and (2) accepting the task of providing assistance to retrain and upgrade the present work force.

Castellucis (1976) indicated that although most business leaders indicated they intended to do the majority of their training, it was recommended by this study that the business community weigh the cost of maintaining individual training programs versus the pooling of their resources through a single established school to operate a single common training program. Also the study recommended that employee training needs should be known to the educational community and business and industry should seek out the public education system for a larger percentage of overall training needs. These recommendations, if followed by both business and industry and education will improve cooperative training programs.

Shared Responsibilities for Establishing Programs

There are many reasons why some cooperative training programs have not succeeded, ranging from difficulties over finances, to a rigid insistence on the part of both the employee and the technical college of maintaining their traditional concept of what further education is about. A broadening of objectives of corporate human resource development programs includes various long-range and less specific needs.

There are many opportunities for cooperation with colleges in designing and providing appropriate instruction. Education institutions could work together to identify instructional activities and make arrangements for them to be offered at desirable times and locations.

Singer (1974) has addressed several issues that both business and education sectors are concerned with.

1. Day release facilities should meet the needs of local industry.
2. Employees and trade unions, rather than colleges, should have a major say in the development of syllabi.
3. The teaching methods used should be in line with the best modern practice in industry.
4. There is a great need for the provision of shorter courses which lead only to the test of proficiency.
5. The facilities in the technical college need to be improved in line with the needs of industry (p. 104).

According to Frey (1982) another financial concern of business and education is that when they must bring educational resources into play in the national economic rejuvenation, they find many of the school systems beset with serious budget problems. Government aid and enrollment fees, the chief resources of revenue, have not stabilized. Professors' salaries are falling behind those of equivalent responsibility and stature in industry. Laboratory facilities and equipment in many universities are outdated, up to 30 years.

Friano (1975) offered some concepts from In-Plant Education.

1. Programs must be cooperatively planned by personnel from the educational institution and the participating company or business.
2. It is a non-traditional approach to education, non-traditional thinking must be implemented in scheduling workshops and seminars, scheduling courses at a time and a day of the week which is convenient to participating business or industry.
3. Do not place an instructor in an in-plant situation until the school, as well as the business or industry, feel confident in his ability to get the job done.

4. Programs should offer incentives, time-sharing, job upgrading or promotions (p. 50).

Before any responsibilities are shared by businesses and schools, corporations must ask two questions: (1) do education and training pay off in efficiency, productivity, and profitability? and (2) is it cheaper to buy this service or do it themselves (Levine, 1982). Levine further listed several factors to determine what corporations do in education and training.

1. Need--they will do what they think they need.
2. Demographic trends--indicate fewer entry-level workers and an aging work force.
3. Technological change--indicates new, different and continuing retraining needs.
4. Continued decline in the rate of productivity.
5. What skills and abilities the employees bring with them (p. 5).

According to Leach (1982) the shared responsibilities of reindustrialization training between education and industry can cover several areas.

1. Education must have an immediate impact to youth entering the paid work force by providing the most up-to-date skills training possible and the most current equipment and methods.

2. Education in order to provide for upgrading and retraining needed for adults entering the work force, needs to seek alternative approaches for delivering vocational education.

3. For education to have more impact on reindustrialization, there needs to be an increase in the number of short-term specific skills training provided by industry.

4. Education needs to provide or continue with employee-specific training. Coordinated planning and delivery of this training can provide "custom-made" employees and are successful because students are

trained in specific areas for specific jobs.

5. Education can be more involved in "in-house" training. Duplication of up-to-date equipment necessary to conduct upgrading and training is avoided when the instruction occurs at the work place.

Leach (1982) went on to explain that in order to participate in reindustrialization personnel need to address several things.

1. Program directors must become more knowledgeable about training that is provided by industry and other agencies.

2. Educators must develop organizational skills necessary to promote cooperative approaches to meeting the needs of industry.

3. Creative and flexible methods must be designed to permit classroom instruction to include instructional strategies used in business and industry.

4. Preservice and in-service development for administrators must be forced on management and organizational skills needed to develop and deliver short-term up-to-date training.

5. Educators must update their own skills on the latest equipment using appropriate teaching methods.

According to Tracy (1971) two significant factors in training and development programs is its cost and efficiency. If it is designed in such a way that it maximizes returns on the investments of personnel, time, space, facilities, equipment, and materials, then it is an important advantage to all enterprises in maintaining competitive posture.

Summary

This chapter has attempted to guide the reader through writings in the field of cooperative training programs to the conclusion that

there is a need for this study. A need for cooperative training as well as a need for commitment by business and education to provide responsibility for these programs is shown in Chapter I. Levine (1982) reflected on the subject of collaboration between business and industry and education in these words:

The convergence of increased corporate involvement in education and training and changing students' needs will have implications for planners of postsecondary education in drastically changing patterns and locations of schooling (p. 5).

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to determine the types of cooperative training programs that exist between local business and industry, the community college and the vocational-technical school in the Ponca City area. It also determined the level of commitments made to the continuation of these programs from both educators and business and industry.

This study used descriptive research to analyze, (1) the training needs, plans, and commitments of selected Ponca City businesses, and (2) the facilities, plans, and commitments of the area community college and vocational-technical school. Chapter One and Two developed the problem and described the information needed to solve the problem. The remaining steps were categorized into four major areas: (1) selection of respondents, (2) development of the instrument, (3) collection of the data, and (4) analysis of the results. Each of these steps are described in detail in this chapter.

Selection of Respondents

This study was concentrated in the Ponca City area (Kay County, Oklahoma) and was limited to businesses and industries employing 30 or more people. These businesses and industries were selected from a

list obtained at the Chamber of Commerce in Kay County. All of the selected businesses and industries are involved in some kind of formal or informal training process for their employees. The study also included Northern Oklahoma Community College at Tonkawa, Oklahoma, and Pioneer Area Vocational-Technical School at Ponca City. These particular schools offer full time adult education programs for Kay County residents in a wide range of subject areas.

In the 31 business organizations there was an effort made to identify an individual who had the responsibility to know the plans, commitments and expenditures of funds for training in their respective companies. Also within the two school there was an effort made to identify an individual who has the responsibility to know the facilities, plans, and commitments for adult education of the institution. It was felt that these individuals could most properly respond to questions which attempted to ascertain the educational postures of their organizations.

Development of the Instruments

The study used two very similar instruments, one with business and industry and other with the schools. Questions were developed to determine similar information but were worded differently to meet the needs of each sector.

Some of the questions on the instruments were refinements from a training needs survey developed by Castellucis (1976). The instruments were pilot tested in another community with similar businesses and schools, to assure clarity and ease of understanding. The instruments were further reviewed by advanced students and faculty in the area of

Occupational and Adult Education of Oklahoma State University to further assure clarification. The instruments are presented in Appendix A.

Collection of Data

Upon full refinement of the instrument, personal telephone contacts were made to individuals in the business and schools explaining the study and requesting an appointment to personally visit the organization. Those who agreed to participate in the study were visited by the researcher during January and February, 1985. During the site visit, the researcher described the purpose of the study, and using the instrument as an interview outline, collected information needed for the study. Because of the nature of the data needed, and because the geographic area was well defined, it was determined that the interview process was the most appropriate technique for the collection of data.

The responding businesses and schools are listed in Appendix B of the study. A follow-up letter of appreciation and a report of the study was given to each of the respondents.

Analysis of Data

Upon completion of the interview process, the data were recorded and analyzed. Because the data were descriptive in nature, analysis was limited to observations of central tendency. Data were arranged in groupings of nominal scale.

Data were summarized and presented by the following methods. Bar graphs were prepared to display the kinds of training each type of organization used. Frequency tables of specific responses were

prepared for illustration of areas of training needs. Comparison tables were prepared to present the training needs recognized by business and industry matched to the resources which the schools could provide to fulfill those needs. Finally, by analyzing specific responses, a comparison table was prepared to show the amount of commitment businesses and schools are willing to make to provide cooperative training programs.

CHAPTER IV

PRESENTATION OF DATA

Introduction

The purpose of this study was to determine the types of cooperative training programs that exist between local business and industry, the community college and the vocational-technical school in the Ponca City Oklahoma area. It also determined the level of commitments made to the continuation of these programs from both educators and business and industry leaders.

Officials of the schools, who were in charge of business and industry training, were directly interviewed using a standard interview format. Training directors from business and industry were also directly interviewed, using a similar interview format. Responses were compared and summarized in this chapter.

Time Spent on Employee Training by Business, Industry, and Schools

A bar graph is presented in Figure 1 displaying the percentage of time that business and industry spend in specific areas of employee training. The graphs compare each of the five types of business and industry interviewed, by the five areas of training which included: in-house formal training, in-house informal training, off-site company

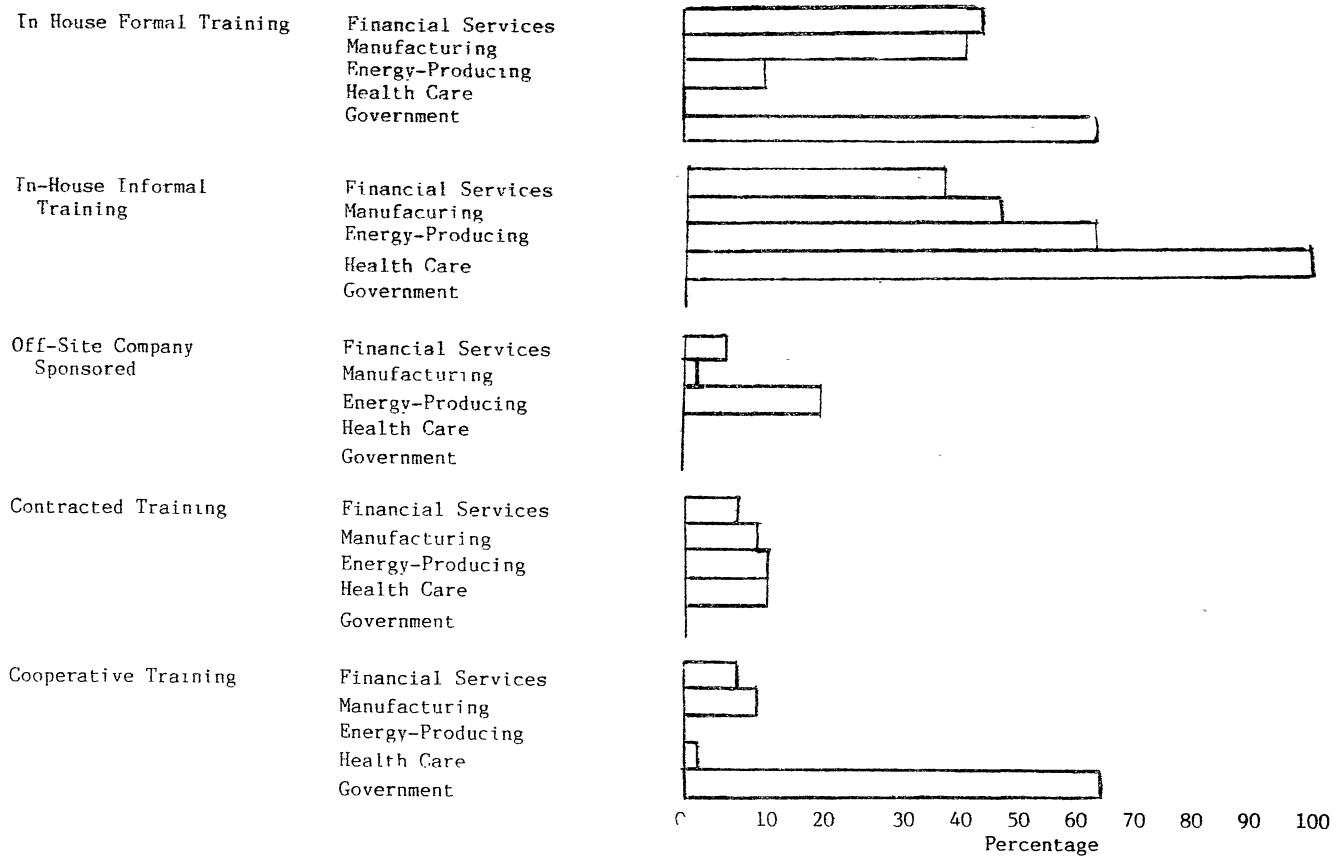


Figure 1. Distribution of Percentage of Time Spent in Training by Different Types of Training and Different Types of Organizations

sponsored training, contracted training, and cooperative training programs between schools and businesses.

Analysis of these graphs indicates that the Financial Services and the Manufacturing Businesses spent 40 to 45 percent of training time on in-house formal training, and 39 to 40 percent on in-house informal training. The Health Care Institution and the Energy Producing facility showed a much higher percentage, 60 to 80 percent on in-house informal training as compared to zero to ten percent for in-house formal training. In the other areas of training a much smaller percentage of time was spent in off-site company-sponsored and contracted training.

The Energy-Producing and Financial services ranged from ten to 20 percent on off-site company-sponsored training in relation to one to ten percent in contracted training. The Manufacturing and Health Care types of businesses represented zero to three percent for off-site company-sponsored training, to three to ten percent for contracted training.

The most important area for purposes of this study was the percentage of time spent on cooperative training programs between businesses and schools in the area the energy producing industry used the school only for consultation purposes instead of organized programs so no training was shown on the graph. The financial services and the manufacturing industries both indicated that eight percent of the time was spent on cooperative programs. The Health Care Institution indicated that although the facility was used for clinicals for the community college nursing program still only about two percent of the time was used in cooperation with the community college in this program.

Another bar graph presented in Figure 2 illustrates the percentage of time the schools spent on cooperative programs in the following areas: on-campus regularly scheduled classes, on-campus short-term classes and workshops, and off-campus industry sites. The vocational school indicated 15 percent of time was spent in on-campus regularly scheduled classes, 75 percent of time was spent on-campus short-term classes and workshops, and 15 percent was spent off-campus in industry sites. The community college indicated 98 percent of the programs were on-campus short-term courses or workshops. The only off-campus industry site was used for the nursing programs in some law enforcement programs which shows as two percent on the bar graph.

The chart in Table I lists the existing school and business cooperative programs reported by respondents. The type of businesses interviewed were listed under each school the classes that have been offered during the last fiscal year. The types of programs with schools are listed opposite the identity of the types of businesses in the community.

Business Training Needs for Employees

Table II displays the distribution of the amount of need for selected types of training by business and industry. The degree of need was given five responses: none, very little, average, great, and very great. The value of each response was (1, 2, 3, 4, 5). An average mean response was 2.5. All responses were above average ranging from 2.8 to 4.6.

The highest ranking need was supervisory training with a mean response of 4.6. Safety or security training was ranked second with a

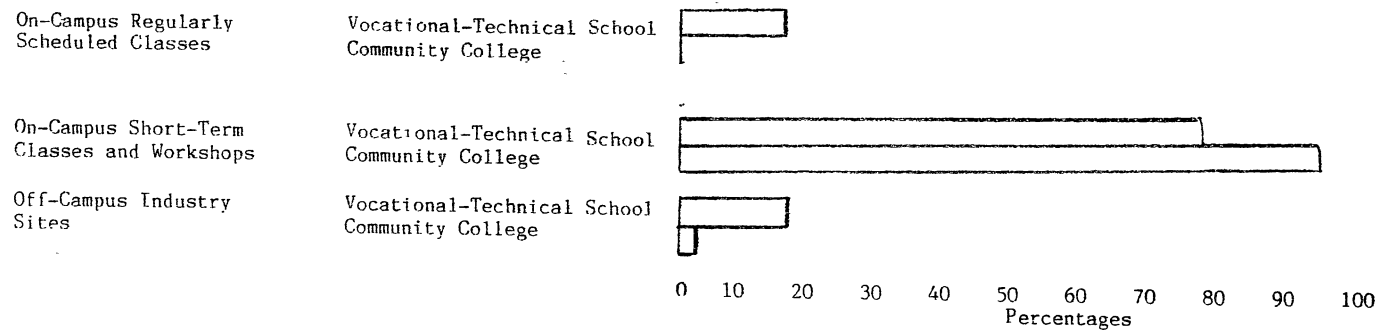


Figure 2. Distribution of Percentages of Time Spent on Cooperative Trainings by Schools

TABLE I
LISTING OF COOPERATIVE TRAINING PROGRAMS IN OPERATION DURING 1985

Types of Business	Vocational-Technical Classes	Community College Classes
Financial Services	IBM-PC American Institute Banking Classes One-Minute Management Principles of Banking The Electronic Spreadsheet Microcomputer Model for Commercial Credit Collectors Training Program	Micro-Computer
Manufacturing	Video Tape Services Management and Personnel Development Personal Computer Word Processing Lotus Spread Sheet Data Base Management Machining Welding Carpentry	Micro-Computer
Energy-Producing	--	--

TABLE I (Continued)

Types of Business	Vocational-Technical Classes	Community College Classes
Government (City)	First Aid CPR EMT	Law Enforcement Seminars Police Reserve School
Health Care	I.V. Therapy	Nursing Program

TABLE II
 DISTRIBUTION OF THE AMOUNT OF NEED FOR SELECTED TYPES OF
 TRAINING BY BUSINESS AND INDUSTRY

Types of Training	None		Very Little		Average		Great		Very Great		Mean Response	Rank
	No.	%	No.	%	No.	%	No.	%	No.	%		
Safety or Security	0	0	0	0	3	21	3	21	8	57	4.4	2
New Technical	3	21	3	21	2	14	2	14	4	29	3.1	5
New Skill	1	7	2	14	4	29	4	29	3	21	3.4	4
Motivational	0	0	0	0	10	71	2	14	1	7	3.1	5
Upgrading	2	14	2	14	3	21	6	43	1	7	3.1	5
Sales	6	43	1	7	0	0	4	29	4	29	3.7	3
Entry-Level	0	0	3	21	3	21	4	29	4	29	3.7	3
Supervisory	3	21	0	0	4	29	6	43	5	36	4.6	1
Computer	4	29	0	0	0	0	5	36	2	14	3.1	5

4.4 response while entry-level training ranked with 3.7. New skill training ranked fourth with 3.4. The next four training needs (new technical training, motivational, upgrading, and computer received a fifth ranking with a mean response of 3.1. The lowest training need was sales training with a mean response of 2.8. There was no significant differences between certain kinds of training needs between the larger and smaller businesses.

Table III provides a presentation of business and industry training needs and those training services the schools can provide. The table presents a scale of mean responses in the nine categories of training needs or training services to be provided. These are: safety or security, new technical training, new skill training, motivational training, upgrading, sales training, entry-level training, supervisory training and computer training. In all the categories except safety or security and supervisory training, both the community college and vocational-technical school could meet all the training needs.

Table IV is an estimate of the total training cost per employee for the fiscal year 1985. The respondents were asked to give the projected cost per employee for the training year. The table illustrates a range of responses as well as the average total cost per employee in each of these types of businesses: financial services, manufacturing, energy-producing, health care, and city government. Over half of the businesses and industries could not or would not give a response to this question, as a result Table IV does not reflect an accurate estimate of training costs. One manufacturer presented the training costs that included salary during the training time, although this is a more accurate depiction of total costs, it is out of line with

TABLE III

TABULATION OF THE RESPONSES FOR TYPES OF TRAINING THAT
CAN BE PROVIDED BY SCHOOLS AND
NEEDED BY INDUSTRY

Type of Training	Provided by Community	Provided by Vocational	Provided by Industry
Safety and Security	1	5	4.4
New Technical	5	3	3.1
New Skill	5	4	3.4
Motivational	4	4	3.1
Upgrading	5	4	3.1
Sales Training	5	4	2.8
Entry-Level	5	4	3.1
Supervisory	5	4	4.6
Computer	5	5	3.1

TABLE IV
ESTIMATE OF TOTAL TRAINING COST PER EMPLOYEE FOR 1985

Type of Business	Range of Employees	Cost Range Per Employee	Mean Cost Per Employee
Financial Services	50 - 100	150 - 1050	569
Manufacturing	90 - 780	100 - 5000	779
Energy Producing	2500	1000	1000
Health Care	120	no estimate	--
Government	30 - 420	3390	30

what was indicated by the other firms. The difference between costs of in-house and off-site training was not demonstrated on the table in that costs were not separated at the time of data collection. Tuition assistance or educational refund plans were in effect in all businesses and industries interviewed. The range of these employees taking advantage of the program was ten to 20 percent.

The schools interviewed in this study would not give an estimate of total costs of providing cooperative training. The vocational school did say that they had use of new and existing industry funds through the State Department of Vocational-Technical Education to help business and industry with training for new and expanding changes or additions in skills and products.

Business Commitment for Training

Table V presents an indication of the degree of interest business had to establish or maintain training programs for employees. In this table the possible responses were: (1) some interest, and (2) great interest. Seventy-five percent of the businesses and industries showed some interest in establishing and maintaining training programs for employees. The highest response was 2.5 from the city governments to maintain their programs.

Table VI presented the degree of specific types of assistance to schools that business and industry would provide in each of the nine specific areas. The rank order of the types of assistance were: (1) none, (2) not able to determine, (3) some, (4) half, (5) most, and (6) all. The average response was 3.0. Responses less than 3.0 indicated a negative response and any degree above 3.0 indicated a

TABLE V
 DEGREE OF INTEREST TO WORK WITH SCHOOLS TO ESTABLISH
 OR MAINTAIN TRAINING PROGRAMS FOR EMPLOYEES

Group	No Interest		Some Interest		Great Interest		Average Response
	No.	%	No.	%	No.	%	
Financial Services	0	0	0	21	1	5.9	2.2
Manufacturing	0	0	5	36	1	5.9	2.2
Energy-Producing	0	0	1	5.9	0	0	1
Health Care	0	0	1	5.9	0	0	1
Government	0	0	1	5.9	1	5.9	2.5

TABLE VI
THE DEGREE OF SPECIFIED TYPE OF ASSISTANCE TO SCHOOLS
BY BUSINESS AND INDUSTRY

Type of Assistance	None		No Detr.		Some		Half		Most.		All		Mean Response	Rank
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Pay instructor's salary	6	46	1	8	1	8	1	8	2	15	2	15	2.9	6
Buy special equipment	4	31	2	15	3	23	0	0	1	8	3	23	3.1	5
Buy supplies needed	2	15	0	0	2	15	0	0	4	31	5	38	4.5	1
Pay for course development	2	15	1	8	4	31	1	8	3	23	3	23	4.1	2
Pay for secretarial help	5	38	3	23	0	0	1	8	1	8	3	23	2.9	6
Pay for course administration	4	31	1	8	2	15	2	15	0	0	4	31	3.4	3
Pay or provide class-room space	5	38	0	0	3	23	0	0	0	0	3	23	3.4	3
Pay for course advertising	4	31	1	8	3	23	1	8	1	8	3	23	3.2	4

willingness to offer half or more of the assistance.

Two of the respondents thought in terms of total package costs and indicated that they would pay all costs of assistance if their needs could not be met with in-house training. One respondent showed more interest in paying for short-term consultant help from the schools rather than developing short courses or workshops. The highest degree of assistance offered was the buying of supplies with a response average of 4.5. The two categories indicating negative responses (2.9) were: paying for instructors salaries and paying for secretarial help.

Table VII presents a comparison of the degree of specific support businesses or the schools can provide in cooperative programs. These are presented by each of the nine specific assistance areas: pay instructors' salaries, buy special equipment, buy supplies needed, pay for course development, pay for secretarial help, pay for course administration, provide classroom space, and pay for course advertisement. The mean responses of business and industry compared to the responses that the community college and vocational-technical school gave to this question are presented in the table. Analysis suggests that the schools were fully committed to cooperative training programs whereas that was not always true for industry.

Additional Information Gained in the Study

In several of the direct interviews conducted during this study, serendipitous information was gained. The information helped to formulate the conclusions and summary evolving from this study. Some of the side comments with identified sources were:

TABLE VII
 TABULATION OF THE RESPONSES FOR SPECIFIC ASSISTANCE
 BUSINESS AND SCHOOL CAN PROVIDE
 FOR COOPERATIVE TRAINING

Type of Assistance	By Community College	By Vocational School	By Industry
Pay Instructor's Salaries	6	6	2.9
Special Equipment	6	6	3.1
Supplies	6	6	4.5
Course Development	6	6	4.1
Secretarial Help	6	6	2.9
Course Administration	6	6	3.4
Pay or Provide Classroom Space	5	5	3.4
Course Advertisement	6	6	3.2

1. Financial services industry reports stated: (a) the American Institute of Banking (AIB) classes needed a fulltime staff coordinator to deal with scheduling and promoting and (b) that employees need more education on the types of training opportunities available to them.

2. Manufacturing industry reports stated: (a) that there was too little communication between schools and industry on all levels, (b) there was a very low interest in employees to take part in training, and (c) the instructors in some areas at the schools are not competent teachers.

3. The schools' respondents also stated they could not get FTE credit for classes conducted off-campus, an important factor when budget resources are determined in part by credit enrollments.

4. The industries in the area are slowing down their training needs at the present time.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine the types of cooperative training programs that exist between local business and industry, the community college, and the vocational-technical school in the Ponca City, Oklahoma area. It also determined the level of commitments made to the continuation of these programs from both educators and business leaders. It was assumed that with the completion of this study, the educational community could better serve the training needs of the industrial community. To assure that the businesses interviewed would adequately respond to the interview format, the population was limited to training directors from business and industry with 30 or more employees. Officials of the schools, in charge of business and industry training, were also interviewed, using a similar interview format.

The specific objectives of this study were:

1. identify programs that exist as cooperative programs in the schools,
2. identify the types of training required by business and industry in the area,
3. identify the types of programs in the schools that address the needs of business and industry, and
4. determine the level of commitment of schools and industry to cooperate with programs.

Two survey instruments were developed with the assistance of professional adult educators. A pilot test was conducted in a nearby community with similar educational and industrial settings.

After the instruments were refined they were used in interviews with business, industry, and schools in the research population. The responses to the interviews, using the survey instruments, were tabulated and presented in Chapter IV. Through the responses of those who took part in the study, the objectives of this study were met.

Summary

A summary of the data tabulated and presented in Chapter IV is given here. The first objective of the study was to identify programs that exist as cooperative programs in the schools. The schools and business and industry responded that most of the training was done through in-house formal and informal programs. However, there were several specific training programs now in operation at both the schools that included: computer training, machinery and welding classes, emergency medical classes, and law enforcement seminars. Many more classes were in the process of being organized at the time of the interviews.

The second objective of the study was to identify the types of training required by business and industry in the area. The responses to these questions indicated that supervisory, safety or security training, were the real needs of businesses interviewed. Sales training was of very low importance to the respondents. An estimate of total training costs per employee was revealed by the respondents and irregularity of the responses did not reflect an accurate estimate

of training costs.

The third objective of this study was to identify the types of programs in the schools that addressed the needs of business and industry. In the survey, the schools were asked in what training areas could programs be provided and they indicated that they could meet all the business and industry training needs necessary.

The last major objective of this study was to determine the level of commitment of schools and industry to cooperate with training programs. All of the respondents indicated some interest in establishing or maintaining program with the schools. They were then asked to specify which type of assistance they would give to cooperative training. Responses from business and industry was low in comparison to the full commitment from the schools.

For the most part, there was a general agreement between most respondents, that there was a definite need for employee training programs. The respondents, were as much as possible, meeting the training need through in-house training programs. When needed, employees utilized the schools for classes on an individual basis, using education refund plans. Schools and buisnesses do cooperate in establishing programs that meet a specified need. These are not regularly scheduled throughout the year except for the American Institute of Banking classes that were scheduled each semester.

Conclusions

The following conclusions may be drawn from the data compiled through this study. The schools in the research population need to communicate, that even though their training programs are local, they

are credible and can provide cost-savings to the businesses. Also, it could be an advantage to the schools to benefit from the resources of industries. Businesses would then have a vested interest in maintaining programs with schools on a regular basis.

The schools have stated, that the slowing down of industry training programs and the problem of not being able to offer classes off-campus, has hindered the growth of cooperative training programs in this area.

Recommendations

The recommendations offered in this section are based on the findings of this study, both from the review of literature and from the data collected. The recommendations are based on a very select population and this information should not be generalized beyond that population.

Educational Responsibilities

As shown in this study a major portion of employee training in the Ponca City area is conducted through in-house formal and informal programs. Even though the businesses surveyed had training budgets, very little money is allocated to be used for cooperative training. The educational institutions can do a better job of selling businesses concerning the advantages of using local training programs through schools. The institutions should reach out to more of those industries that provide limited training for their employees. Schools could continue to seek new ways to bring training to industry sites rather than having only on-campus programs. Educational institutions wishing

to take part in continuing education must develop instructional materials and programs reflecting the present state of technology. They must also find instructors who have both the knowledge of subject and proper teaching techniques to effectively reach adult students.

Business Responsibilities

This study was a survey of businesses and industry in the Ponca City area employing 30 or more people. Business and industry respondents indicated that they do have training programs for their employees. They are meeting these needs through in-house training, for the most part. However, in some cases they do send their employees to workshops or to short-term courses to other areas, rather than using facilities of the local schools. They further indicated they will use cooperative programs when need exists but cannot be met with in-house training programs. There are no plans for regular on-going classes except for the American Institute of Banking classes and Law Enforcement seminars.

It is recommended that the business community weigh the cost of maintaining some of their in-house programs against the cost of pooling their resources with other businesses to operate more cooperative programs. It is also recommended that the business training needs be made known to all levels of the educational community so that schools may better provide appropriate services.

Cooperative

Businesses with training needs should make the first contacts with schools in most cases, except in the cases of new industries where

schools can make known to these companies the advantages of using training through the schools. Schools and businesses must share the costs of training programs.

The schools need to become more aware of the needs of adults that take part in training programs and businesses need to become more aware of the capacity of the schools that assist with training.

In order for businesses and educational communities to work together more effectively sharing needs to take place. Schools should use business personnel as instructors. Schools' faculty should be invited to learn about the latest equipment and techniques in industry and business.

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APPENDIXES

APPENDIX A

SURVEY INSTRUMENTS

Company Name: _____

Address: _____

Circle the type of business or industry:

Service Manufacturing Utility Government
 Energy-Producing Other _____

Number of Employees in the Kay County Area _____

In Total Company _____

PLEASE ANSWER QUESTIONS BASED ON TWELVE MONTH FISCAL YEAR.

1. What percentage of your employee training was done through:

- a. In-house formal training programs _____
- b. In-house informal training programs _____
- c. Off-site, but company-sponsored training _____
- d. Off-site, contracted training _____
- e. Cooperative training programs sponsored by the company and a school _____

2. Do you have cooperative training programs sponsored by the company and a school now in operation.

3. What is the extent of your company's training needs in the following areas?

	None	Very Little	Average	Great	Very Great
a. Safety training	_____	_____	_____	_____	_____
b. New technical training	_____	_____	_____	_____	_____
c. New skill training	_____	_____	_____	_____	_____
d. Motivational training	_____	_____	_____	_____	_____
e. Upgrading	_____	_____	_____	_____	_____
f. Sales training	_____	_____	_____	_____	_____
g. Entry-level training	_____	_____	_____	_____	_____
h. Other	_____	_____	_____	_____	_____

4. Estimate the average cost per employee for training for the past fiscal year.

- a. For in-house training _____
- b. For contracted training _____

5. To what extent is your company interested in involving Northern Oklahoma College and Pioneer Area Vocational/Technical School in establishing or maintaining a training program for your employees?

No Interest _____ Some Interest _____ Great Interest _____

School Name: _____

Address: _____

What number of faculty would or could teach in cooperative training programs _____

PLEASE ANSWER QUESTIONS BASED ON TWELVE MONTH FISCAL YEAR.

1. What percentage of your cooperative education programs were done through:

- a. On-campus regularly scheduled classes _____
- b. On-campus short-term courses, workshops, etc. _____
- c. Off-campus community sites _____
- d. Either on-campus or off-site cooperative training programs sponsored by both a company and the school _____

2. Please name the cooperative training programs sponsored by the school and a company now in operation.

3. To what extent could your school provide the following training programs for business or industry.

	None	Very Little	Average	Great	Very Great
a. Safety training	_____	_____	_____	_____	_____
b. New technical training	_____	_____	_____	_____	_____
c. New skill training	_____	_____	_____	_____	_____
d. Motivational training	_____	_____	_____	_____	_____
e. Supervisory training	_____	_____	_____	_____	_____
f. Upgrading	_____	_____	_____	_____	_____
g. Sales training	_____	_____	_____	_____	_____
h. Entry-level training	_____	_____	_____	_____	_____
i. Other	_____	_____	_____	_____	_____

4. Estimate the average cost per hour of instruction to the school for cooperative education for the past fiscal year.

- a. For on-campus training _____
- b. For off-campus training _____

5. To what extent is your school interested in involving businesses and industries in establishing or maintaining cooperative training programs.

No Interest _____ Some Interest _____ Great Interest _____

APPENDIX B

BUSINESSES AND SCHOOLS CONTACTED

Ponca City, Oklahoma (Dictionary of Manufacturing and Processes, 1984)

- | | |
|----------------------------------|-----------------------------|
| 1. Carbon Black Company | 12. Security Bank |
| 2. Central Manufacturing Company | 13. Southwestern Stationary |
| 3. Conoco, Inc. | 14. Smith--Gruner |
| 4. Conoco Refinery | 15. St. Joseph Hospital |
| 5. Continental Can Company | 16. Sooner Life Insurance |
| 6. First National Bank | 17. Titus |
| 7. Frontier Federal | 18. City of Ponca City |
| 8. Mertz, Inc. | 19. Oklahoma Natural Gas |
| 9. Nickles Machine Corporation | 20. Farm Fresh, Inc. |
| 10. Pelton Company | 21. General Can Company |
| 11. Pioneer Bank | |

Blackwell, Oklahoma

- | | |
|---|--------------------------|
| 22. St. Joseph Medical Center
Blackwell Campus | 25. Electron Corporation |
| 23. CFM | 26. Acme Foundry |
| 24. Southwest Cupid | |

Newkirk, Oklahoma

27. Albright Title and Trust

Tonkawa, Oklahoma

- | | |
|-------------------------|---------------------|
| 28. First National Bank | 30. City of Tonkawa |
| 29. United Farm Tools | 31. Tonkawa Foundry |

Schools Contacted

1. Northern Oklahoma College, Tonkawa, Oklahoma
2. Pioneer Area Vocational-Technical School, Ponca City, Oklahoma

VITA 2

Mary Eleanor Scott

Candidate for the Degree of

Master of Science

Thesis: COOPERATIVE TRAINING PROGRAMS THAT EXIST BETWEEN BUSINESS/
INDUSTRY AND SCHOOLS IN THE PONCA CITY, OKLAHOMA AREA

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Personal Experience: Field Executive for Meadowlark Girl Scout Council, Independence, Kansas, 1969-1970; Field Executive for Cherokee Strip Girl Scout Council, Enid, Oklahoma, 1972-1976; Field Executive for Ponca City Camp Fire, Inc., Ponca City, Oklahoma, 1977-1982; Teachers Aide, Substitute Teacher, Ponca City, Oklahoma, 1982-1984; Teacher at St. Mary's School, Ponca City, Oklahoma, 1984 to present.