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DEVELOPMENT OF COOPERATIVE EDUCATION AT
THE UNIVERSITY OF NORTH TEXAS
1976 - 1988

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
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The main purpose of the study is to describe the developmental story of one of the larger university cooperative education programs in the United States to provide the evidence of outcomes and to utilize selected elements of the program in other colleges and universities.

The study utilizes historical methodology with a descriptive approach to investigate and analyze the program's establishment, its development of staffing, organization, students, employers, funding, and its evaluation by using primary and secondary sources, annual reports, federal grant request proposals, evaluation reports, and the on-campus newspaper. The information for this study was also gathered through personal interviews with previous and present staff members of the program.

The study shows that the program was established in the dean of students' office, but in order to get more support from the faculty, the program was moved to the academic affairs office. As a result of the academic support by the faculty, the program expanded. The findings show that the federal grant, Title VIII, contributed significantly to the

initiation and growth of the program. The investigator observes that the director's leadership and the staff members' commitment to the program were two of the most important factors in the continued growth of the program.

Strong commitment by the chief executive officer of the institution has also been a strong factor in the continuous growth of the program. The study indicates that close affiliation with professional organizations has benefited the program by influencing the development of quality and effective, diverse employers. The results show that the cooperative program significantly aided the students, institutions, and employers annually by placing approximately 1,200 students in their major-related working places.

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CHAPTER 1

INTRODUCTION

Cooperative education in the United States of America has a unique philosophy of higher education as its basis. Through cooperative education, students build a bridge between theory and practice by employment in a position that is directly related to their major fields. As a result, they gain valuable professional experience as well as academic credit. Another benefit is the monetary gain which helps to defray the cost of education. Dewey's (1938) pragmatic philosophy is seen in cooperative education. His great influence upon educational thought and practice, is the belief that people learn by doing.

The movement toward cooperative education began in the school of engineering at the University of Cincinnati, Ohio in 1906. Herman Schneider made a significant contribution to the field of education when he originated the idea of combining classroom learning with work experience. One problem he observed was that students did not acquire most elements of professional skills with classroom teaching alone; they also needed practical experience. Another problem was that many students had part-time jobs, but the

jobs were not directly related to their major area of study (Knowles et al., 1971).

Since 1906, Schneider's idea of cooperative education has spread from one university in Cincinnati, Ohio to institutions of higher education all over America. Ryder et al., (1987) state that "current estimates indicate that more than 1,000 colleges and universities offer programs of cooperative education, more than 200,000 students participate, and between 75,000 and 85,000 businesses, industries, and service and governmental agencies employ these students" (p. xvii).

The University of North Texas, Denton, approximately 35 miles north of the Dallas/Ft. Worth metroplex (see Appendix J), opened in the fall of 1890 as a private post-secondary institution under the name of Texas Normal College, becoming a state institution after acceptance by the Texas legislature in 1899. After its beginning in 1890 as Texas Normal College, the name was changed six times: North Texas Normal College in 1893, North Texas State Normal College in 1899, North Texas State Teacher's College in 1923, North Texas State College in 1949, North Texas State University in 1961 (Rogers, 1965), and University of North Texas in 1988.

Through its long history, UNT has developed into the fourth largest university in the state of Texas with an enrollment of approximately 26,500 in the fall of 1989 and "a multipurpose institution offering a wide variety of

undergraduate, master's and doctoral degree programs. It has awarded more than 108,000 degrees at the undergraduate and graduate level . . . more than 1,100 master's degrees and 190 doctoral degrees are awarded annually" (University of North Texas Graduate Catalog, p. 10). UNT was classified as a doctoral-granting university by the Carnegie Council on Policy Studies in Higher Education in 1973 (The Carnegie Commission on Higher Education) and as a Class I Doctoral Granting Institution by the same council in 1976 and 1987 (UNT Graduate Catalog, p. 10). In 1986, UNT was recommended for designation as one of Texas' major research universities and an emerging national research university by the Governor's Select Committee on Higher Education (UNT Undergraduate Catalog, p. 3; UNT Graduate Catalog, p. 10).

North Texas is a coeducational and state-assisted institution of higher learning which has world class laser facilities, the second-largest music program in the nation, one of the leading producers of educators in the state of Texas, and the most well-respected business program in the region (A Guide to Higher Education in North Texas, 1988). The university has one of the largest instructional computing centers in the nation, one of the best and largest performing art programs in the Southwest, widely recognized research in critical human health problems in the division of biochemistry, and the industrial technology program which was instrumental in site selection for the new regional

Boeing Electronics and Texas Instruments plant (UNT Graduate Catalog, p. 10). UNT has the first and only Texas Academy of Mathematics and Science (TAMS) which is a combined upper-level high school and lower-level college curriculum open to highly qualified high school students. The UNT library has "more than 1.7 million printed books, periodicals, maps, documents, microforms, audiovisual materials, music scores and software" (UNT Graduate Catalog, p. 11).

The history of cooperative education at the University of North Texas began late in the 1970s, the decade of expansion of cooperative education in America. "In 1970 there were some two hundred colleges and junior colleges using the cooperative methodology, and by 1980, this number had grown to over a thousand" (Barbeau, 1985, p. 45).

The cooperative education program at UNT began September 1, 1976. Forty-one students participated during the first year and were placed in business and industrial areas. In 1978, over 100 students were placed by two cooperative education staff members directed by Ron Lutz who was responsible for the success of the program in its early years. As a result of 12 years of continuous development, UNT placed in the top 20% of universities involved in the cooperative education program in America with approximately 1,200 students, 6 staff members, and approximately 400 participating employers (D. Altenloh, personal communication, June 15, 1989).

Even though the program of cooperative education at the University of North Texas has rapidly developed and expanded for about 12 years, a developmental study on the program has never been done. Therefore, the primary reason for this study is to systematically document the development of cooperative education at UNT by providing such information as to why, how, when, and by whom it was developed in terms of staffing and organization, student numbers, employer involvement, funding, and evaluation of the program in order to provide available information to the people who work for cooperative education. This information should benefit the users by helping them to provide quality services for their students and employers.

The second reason for this study is to offer basic information for future researchers who want to study in the program of cooperation education at UNT. Because of the unique philosophy of cooperative education, which is helpful in solving educational problems in the United States, and because of the geographical importance of the University of North Texas, which is located in one of the most rapidly growing industrial and technical regions in the United States of America, further research on the program of cooperative education at UNT could be beneficial.

The third reason is that this study can serve as a model for future programs of cooperative education in and outside of the United States. A developmental study on a

large university-based cooperative education program is lacking as revealed by the professional literature. There are about 2,000 small and large colleges and universities in the United States and many other higher education institutions in the world that do not provide work experience related to the major fields of education. The information provided in this study should be an example for future development of cooperative education at other institutions of higher learning.

Statement of the Problem

This study documents the development of cooperative education at the University of North Texas.

Purposes of the Study

The purposes of the study are as follows:

1. To describe the development of cooperative education at University of North Texas.
2. To provide evidence of program outcomes for the cooperative education program at UNT, for example, the number of graduates, the number of agreements with business and industry, and the employment history of as many students as possible.
3. To examine the possibility of utilizing selected elements of cooperative education at other colleges and universities.

Research Questions

1. Why, how, and when did the program start at the University of North Texas?
2. What is the development of the organization of the program?
3. What is the development of the staffing of the program?
4. What is the historical development of students in cooperative education at UNT?
5. What is the pattern of development of business and industrial involvement in the cooperative education program at UNT?
6. What is the history of funding for the program?
7. What is the criterion for the evaluation of the program at UNT?

Significance of the Study

Higher education institutions in the United States provide many benefits and opportunities for their students. Among the many advantages students enjoy are low tuition and fees in public institutions, scholarships at both private and public schools, student loans, and the work-study related programs. However, the education system in America is not free from problems. The ever-increasing tuition and fees for a post-secondary education prevent many potential students from attending college. The greater than 20%

student loan default rate costs the federal government an estimated \$1.6 billion in the fiscal year 1988 (Merisotis, 1988). Some of these problems are not only those of today's educational system, but they were also the problems of the past which prompted Herman Schneider to create the cooperative education program; if nothing is done to solve them, they will be the problems of the future.

It is true that Schneider's idea of combining theory and practice has rapidly expanded from decade to decade and has helped many students, both financially and practically, to acquire a quality education. However, it is also true that only about one-third of higher-education institutions and only 2% of enrolled students participate in this unique program (Ryder et al., 1987). In addition to these statistics, some university community members do not understand the value, benefits, or even existence of the program in their institution (Benson, 1977). One significance of this study is to describe the importance of cooperative education through the developmental study of one of the rapidly growing cooperative education programs in the United States of America.

The future of cooperative education at UNT is encouraging because of the importance of the geographical location of the university. Several significant facts which contribute to the success of the program include:

1. Dallas/Ft. Worth is one of the largest population areas in Texas and has one of the largest possible job areas in the nation (Dallas Morning News, Jan. 27, 1989, p. 5D).

2. A national business trend has developed for companies to move their headquarters to the Dallas/Ft. Worth area because of tax incentives, and economic growth potential. A partial list of these industries includes the \$5.4 billion supercollider in Waxahachie, J.C. Penney in Plano, Fujitsu in Richardson, General Telephone Electronics in Irving, and most recently, Exxon in Irving.

3. There is an increasing development of technological industries in the region such as defense, computer, and aviation (Block, 1988).

4. The Dallas-Fort Worth International Airport and 23 others in the 16-county North Central Texas region provide direct and indirect economic benefits for the region (Takahashi, 1989, pp. C1, 7).

5. An increasing number of foreign investors believe this area will be very profitable for future expansion. As a result of this discovery, many Canadian and other foreign investors are purchasing land, businesses and industries, and materials in the region (Brown, 1989, Section D, p. 1; Haar, 1988, pp. 1, 19).

6. In spite of the problem of the surplus of Middle East and other oil resources, Texas continues to be one of the nation's leading energy producers (Stuart, 1988, p. 8).

Therefore, the state is in a highly favorable position for providing energy sources, especially in the event of a foreign boycott or cutoff.

Cooperative education at UNT gains importance each year as the nation becomes dependent on this area to produce highly educated, experienced, and skilled college graduates; therefore, UNT is the largest higher education institution (Dallas Business Journal, May 22, 1989) in the region with the wide range of opportunities for the greatest range of business in America. Because of these promising factors, Fortune magazine placed the Dallas/Fort Worth Metroplex as the best area for business and the most diverse and dynamic economic base in the United States (Labich, 1989).

Definition of Terms

Cooperative education is an educational program by which a student is employed in a job directly related to the student's major or minor field of study. This is achieved through an agreement between the university and the employer to combine work experience and classroom learning. Major objectives of the program are: (a) to enrich classroom learning through practical experience; (b) to assist students with financial difficulty to meet the cost of higher education; (c) to help students decide on their future career; (d) to create a positive relationship between academic institutions and business corporations; and (e) to

prepare an experienced and skilled work force for the technical development of the nation.

Alternative cooperative education is a plan that allows a student to alternate a semester, or term, and to work and study. Through this program, a student can study for a semester or term at school and then be assigned employment which is related to the student's major field of study under the guidance of an academic supervisor and an on-the-job supervisor (Rogers State College: Catalog, 1988-1989, p. 20).

Parallel cooperative education is a plan by which a student can study and work during the same semester or term. This allows a part-time student to work one-half of a day and attend classes one-half of a day. A student who works full time and attends evening classes is also eligible to receive credit. This type of cooperative education is often practiced by junior community college students or non-traditional students (Rogers State College: Catalog 1988-1989, p. 20).

The summer cooperative education program allows students to receive academic credit while working in their major areas of study under the supervision of an academic and on-the-job supervisor during the summer vacation. Many traditional students take advantage of this plan.

The director of cooperative education is the head of the cooperative education program in an institution of

higher learning. The director's major responsibilities are administration and supervision, policy and decision making, budgeting, hiring and firing, maintaining liaison, handling student and coordinator appeals, and evaluating the cooperative education program (Knowles et al., 1971, pp. 114-115).

Cooperative coordinators are "staff personnel directly responsible for the placement, counseling, and guidance of cooperative students" (Knowles et al., 1971, p. 114).

CECONET, Cooperative Education Communications Network, "is a computer-based communication system designed to provide instant access to information and the exchange of ideas among and between individuals and organizations involved in cooperative education" (Cooperative Education Association Inc., 1988).

Methodology and Procedure

This study included a development of the cooperative education program at the University of North Texas. The historical research is of a descriptive type that "examines evidence from the past in an attempt to describe past events or to draw principles from the past that may have continuing relevance" (Slavin, 1984, p. 16). Koul (1986) discusses the value of historical research in education. He states, "historical research has great value in the field of educational research because it is necessary to know and

understand educational achievement and trends of the past in order to gain perspective on present and future directions" (p. 380).

The process of historical research, according to Best (1970), involves "investigating, recording, analyzing, and interpreting the events of the past for the purpose of discovering generalizations that are useful in understanding and in predicting the future" (Best, 1970, p. 14).

Therefore, the methodology of this study is a descriptive approach to investigate and analyze the development of cooperative education at the University of North Texas using primary and secondary sources.

Borg (1987) gives the following definition of primary and secondary sources:

Primary sources are documents in which the individual observing the event being described was present when it occurred; secondary sources are those in which the person describing the event was not present but has obtained his description from someone else who may or may not have directly observed the event (p. 807).

To accomplish this study, the following primary and secondary sources were used:

1. Annual reports of cooperative education at the university.

2. Correspondence between the cooperative education offices, employers, and students which will provide an indication of the scope and depth of the operation.

3. Brochures, folders, pamphlets, and handouts developed at the university.

4. Reports from the president, board of trustees, and other officials of the university which emphasize the significance of the cooperative education program.

5. Various documents and reports regarding grant requests, financial aid, funding, and donations. These reports identify sources and amounts, and define how the funds will be used in support of the cooperative education program at the university.

6. Literature on cooperative education in general and the significance and contributions of the program.

7. Student newspapers and articles that give the students' view of cooperative education.

8. Other sources such as student files, employer files, and job evaluation reports.

In addition to these documents, information for this study was also gained through tape recorded personal interviews with the past and present directors of the program; other previous and present staff members of the program such as coordinators and secretaries; a faculty coordinator; and administrators of the institution who contributed to the development of cooperative education at

the University of North Texas including the Chancellor/President, Vice President for Development, Associate Vice President for Academic Affairs, Dean of Students, and Associate Dean of Students.

Interview questions were formulated by the author (see Appendix C) and reviewed by the chairman of the dissertation committee and the director of the cooperative education program at UNT. The questions, with a cover letter, were mailed, interview schedules were made and performed on a one-to-one basis from April to October 1989. All 19 people who contributed to the development of the program agreed to and willingly participated in the interview. Among them, 18 people provided available information through oral interviews, and one who lives out of state provided written answers through the mail.

In order to provide reliability and validity of the study, only formal documents which were published or authorized by the directors of the program were adopted but excluded informal documents such as brief memo and individual descriptions. Also, to avoid the communication problem between interviewer and interviewees, a tape recorder was utilized during the oral communications. In addition, to eliminate possible misinformation as a result of the interviewees' memory problems, only reliable information which met general agreements with written documents or other people's opinions, was selected for the

study. Furthermore, to secure content validity of the study, each part was sent to the director of that period of time who was asked to review its content, and all five former and present directors responded (see Appendix M).

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CHAPTER 2

REVIEW OF LITERATURE

Introduction

Published studies and literature dealing with the numerous areas of cooperative education during its 90-year history are abundant. Approximately 200 research projects on postsecondary cooperative education in the United States have been conducted since the National Commission for Cooperative Education (NCCE) was established in 1962 (Wilson, 1988). The purpose of the NCCE is to integrate cooperative education into the field of higher education. According to Wilson (1988), 113 such articles have appeared in The Journal of Cooperative Education since its creation in 1964.

Through the literature, researchers have provided the theoretical background and a practical viewpoint of cooperative education by using applied and evaluative research. The primary focus of the literature has been on practical issues and problems; perceptions and attitudes of students, administrators, and faculty members concerning cooperative education; values, the roles, and responsibilities of cooperative workers and academic coordinators. This chapter focuses on the values of

cooperative education for students, employers, institutions and on the administration, federal funding, and evaluation of cooperative education.

Values of Cooperative Education

The most important aspect of cooperative education is its value to students, employers, educational and other social institutions, and the federal and state government. The acknowledgment of which is vital to any study of this type of program. From its beginning, when Herman Schneider tried to help students who needed practical experience to enrich their academic achievement and needed money for their educations, the cooperative education program has been regarded as value-oriented. Therefore, many studies have been conducted on the values of cooperative education, using interchangeable terms such as benefits, outcomes, and others. Literature assessing the value of cooperative education is reviewed in this section. In addition, the section provides basic information regarding the development of cooperative education at the University of North Texas and reasons for the students' and the employers' participation in this program.

The Student

Heerman (1973) lists the overall values of cooperative education for students as follows:

helps the student decide on a career; increases potential placement, advancement, and remuneration; accentuates students to academic performance and staying in college; instills cognitive and attitudinal skills critical to a successful job performance; provides a matching of job to personal needs; sensitizes students to interpersonal relationships; supplements financial resources; decreases the sense of isolation of the culturally and economically deprived student; provides direct contact with practitioners; demonstrates the importance of formal education to work performance; fosters understanding of the subtleties of the managerial activity in problem solving; facilitates a study-work intermingling for life by learning; bridges the generation gap; allows for the development of critical skills in a work setting; aids the adjustment to work and the achievement of higher level needs. (pp. 36-37)

One of the most important values of cooperative education for students is classroom learning enrichment through on-the-job experience. According to Tyler (1981), traditional methods of instruction using only lectures and textbooks often minimize the problem-solving behavior and over emphasize memorization. Thus, students receive instruction without thinking, feeling, or acting. Tyler maintains that cooperative education prevents such negative

factors by furnishing real problem-solving experience, by providing opportunities for understanding natural and human phenomena, and by experiencing new attitudes and interests of relevant emotional responses.

Kendall (1987) formulated the Complete Cycle of Learning which includes concrete experience and observation, reflection, synthesis and conceptualization, and testing of concepts in new situations. He explains his formulation by saying that, through cooperative education, students have concrete experience and observation; however, this experience is not learning which actually occurs at the next step involving the reflection and synthesis of the experience with other experiences and with concepts provided in the classroom. When students have the ability to apply what they learn in new and different situations, then they have truly acquired knowledge and skills.

By helping students look more closely at their future careers, cooperative education can serve as a motivation for academic learning. Tyler (1981) explains this motivational value by pointing out that many students do not have a clear understanding of the behaviors that they must acquire in order to better function as professionals in their future careers. Cooperative education provides the opportunity for students to discover why mathematics and physics are necessary and how these courses facilitate better working ability in later job performances. Also, through

cooperative education, students can receive feedback, a necessary aspect in the enrichment of their classroom learning. College and university teachers usually do not provide different opportunities for feedback to their students. Cooperative education can provide this for students as work supervisors and academic coordinators review their working experience and academic learning activities and can provide information regarding successes and difficulties.

Another value of cooperative education is that students have an opportunity to develop professional skills, including decision making. McKendrick (1987) emphasizes the enhancement of students' decision-making processes for their future careers through cooperative education. According to McKendrick, one of the most important functions of college life is for students to decide upon their future careers. Many students make, or change, their career decisions during the years of campus life. Cooperative education offers students the opportunity to do this more effectively by helping them find positions which are appropriate to their future lives.

Through cooperative education, students can also develop professional skills. Willis (1981) supports this idea with his survey which was conducted in the nursing school at Northeastern University. In his study, participating senior students indicated an improvement in

technical skills (93%), in the development of new skills (91%), and in realistic work orientation (88%). Martello and Shelton (1981) also conducted an experimental study in order to check career maturity, career choice, and certainty of major by comparing cooperative and non-cooperative students from a group of undergraduate studying the liberal arts. The results indicate that cooperative education students have significantly greater maturity in attitudes concerning career development and knowledge than do students who are not in a cooperative education program. Cohen (1989) provides statistical evidence that "40 percent of cooperative education students get jobs with the same employer after graduation; 40 percent get jobs in fields related to their co-op work assignments and 15 percent go on to graduate or professional schools" (p. 18).

The monetary gain of cooperative education students is an important value and is the most important one for some students. According to Wilson (1987), about 87% of cooperative education students are paid annual incomes of between \$4,600 and \$7,500. Evans (1987) suggests that even though cooperative education students earn from 60% to 65% of the salary paid to other college graduate employees in the early period of their placement, cooperative education students receive approximately 85% to 90% during the final work period. He also mentions that cooperative education graduates normally receive a salary which is about 10%

higher than college graduates without cooperative education experience. In addition to the financial support from this experience, Wilson (1987) mentions that the psychological aspects of cooperative education on students cannot be overlooked since paid study-related employment possibly enables them to realize their potential contributions to society and helps them to experience the pride of being self-supporting rather than depending on financial aid from family or through the university.

Cooperative education also provides work related experience for reducing the apprehension that students often undergo when moving from adolescent to adult life. Porter (1982) points out that through cooperative education young people can accept the responsibility of real work and can prepare for further adjustment to the highly competitive adult society. Without this assistance in reducing the social and cultural gap between the young and the adults, some young people experience frustration or failure in their totally new environments.

In addition to this problem-solving value for native students, the program also is beneficial to many international students who have difficulty adjusting to new situations. Smith (1981) studied the value of cooperative education for foreign students from Polynesia and concluded that cooperative education experience helped participating them gain academic enrichment through practical

applications, cultural enhancement, and value reinforcement, as well as improving their English usage after experiencing cooperative education at the Polynesian cultural center of Brigham Young University-Hawaii campus.

The cooperative education experience also helps students reduce the gap between campus life and the work place. Gould (1987) points out that because of the rapid development of technical and industrial areas, the gap between higher education and the work place has widened. In order to reduce this and to prepare students for a high-technology society, classroom learning needs to be coordinated with on-the-job experience through cooperative education programs.

Brant (1987) emphasizes the value of cooperative education for non-traditional students through an alternating program approach. According to Brant, a recent and rapid change in higher education is brought about by greater numbers of non-traditional or older students who are attending colleges and universities for the purpose of changing their present careers. Cooperative education can provide these students with an opportunity to experience other careers without giving up their present jobs which are usually necessary for their financial security.

Finally, cooperative education can be of great value for disabled students by providing them with opportunities to develop their abilities. McCain (1986), who is himself a

disabled quadriplegic, stresses the value of cooperative education by confessing that it raised his consciousness regarding his vocational future and life goals and has helped him to develop a sense of self-reliance and self esteem. He also believes that cooperative education is the magic key that has opened the door to his future.

The Employer

The second most important beneficiaries of cooperative education are employers who provide the practical experience for cooperative education students. As mentioned earlier, approximately 75,000 to 85,000 employers are participating in cooperative education programs in the United States (Ryder & Wilson, 1987). They play an important role in cooperative education by training and funding student employees; however, employers also benefit as a result of participating in cooperative education programs. Diaforli (1981) demonstrates such overall values of cooperative education for employers.

Recruitment costs are lowered by the colleges providing an excellent supply of highly motivated interns for entry level positions.

The employer has an opportunity to observe the student in action before investing a large sum of money in training.

The employer can utilize the program to fill temporary on-call assignments which do not require the valuable time of highly paid personnel.

The employer became a contributor to the educational process, which will provide better qualified personnel for the future.

The employer's professional staff is motivated toward continuous learning in order to identify with student questions, ideas, and viewpoints.

Students serve as "goodwill ambassadors" for employers upon returning to the college campus.

Employers develop a "family relationship" with the colleges through communication and mutual understanding. (pp. 76-77)

The main value of cooperative education for the employer is the opportunity to recruit employees through cooperative education by training, identifying, and evaluating the participants. Kunde (1989), a staff writer of The Dallas Morning News, predicts a shortage of qualified workers for the business and public sector based on a study of the American Society of Personnel Administration (ASPA). This study reveals that two-thirds of employers are having moderate to very great problems in hiring technical and skill-craftsmen, and 54% are having problems filling professional jobs. She suggested that the business world

needs to create a close relationship with schools in order to solve this problem.

Roberts (1987) asserts that cooperative education programs are the perfect way for employers to invest money in the recruiting process because they can observe young people in the work place, observe them at their worst and at their best. Brown (1987) supports Roberts' idea by stating that "one of the major reasons for employers to participate in cooperative education is to identify and recruit potential full-time employees" (p. 293).

According to Snell (1981), Arthur D. Little Inc. conducted a case study examining employers' policy level commitments and the benefits of its postsecondary cooperation program. The results of the study indicated that most employers benefited as a result of cooperative education by better recruiting opportunities for quality and minority employees.

Porter (1982) also examined employer benefits through cooperative education by studying a number of research findings which included "Employer Experience with Cooperative Education: Analysis of Costs and Benefits" by the Detroit Institute of Technology. This study shows that cooperative education students' recruitment costs averaged 16 times less than the cost of regular student recruitment; however, the rate of recruitment yield was 13 times higher for cooperative education students (40%) than for other

recent college graduates (3%), and minority group members were recruited twice as high among cooperative education students (33%) than among other recent college graduates (6%).

Lovvorn (1987), through his practical experience at Dow Chemical USA, views cooperative education as a suitable means of recruiting more qualified minorities and females . He indicates that it provides minorities and females a wide variety of uses for their degree disciplines when they finish school.

Employers' viewpoints on cooperative education programs is reported by Nielsen and Porter (1983) who collected the following information from the Detroit Institute of Technology study. According to the study, 98% of employers reported their experience with cooperative education students as satisfactory or better, and 76% of them indicated excellent or good. Only 2% of the employers designated a negative response with a poor rating.

Another significant reason for employers to participate in cooperative education programs is that recruiting costs, wages, training costs, supervisory costs, and evaluation costs can be used more effectively and efficiently. According to Porter (1982), cooperative education students' performance ratings are only slightly lower than those of regular college graduates who are full-time employees, even

though total labor costs average 40% less for cooperative education students.

Nielsen and Porter (1983) support the above study with one by Applied Management Sciences, Inc. (AMS) which sampled 250 cooperative education employers and 150 regular employers to measure the costs and benefits of cooperative education for participating employers. The investigator found that cooperative education students' wage and salary costs were as much as 47.2% lower than those of other employers, cooperative education students' vacation time, holidays, and sick leave costs were as much as 51.6% lower than those of other employees; and fringe benefit costs for cooperative education students were 52.6% lower than other employees.

Trupiano (1987) of C.E.O Enterprises describes the value of cooperative education based on his experience with lowered costs, increased productivity, and improved quality in human resource management and development. He adds that although regular cost-per-hire for on-campus recruiting programs can easily exceed \$1,000, cost-per-hire can be lowered to less than \$100 through the use of cooperative education because of better screening, a reduced number of interviewees, and a decrease in driving and lodging expenses.

Trupiano (1987) also pointed out that cooperative education students can bring about improved productivity and

quality production for employers because these students bring the latest in high technology skills to their work places, and they are highly motivated. He also suggests that quality material production in American business, especially automobile industries which are challenged by foreign automobile companies, can benefit from the training of better workers through the use of cooperative education.

A study by Wiseman and Page (1983) explains Trupiano's viewpoint by providing research findings from a study which used questionnaires on a Likert scale of 5, with a response rate of 89.9%, "to discover (1) the underlying factors of both cooperative education activities and outcomes, and (2) the relationship between these two sets of factors, i.e., relationship between activities and outcomes" (p. 49). The findings indicate that cooperative education was regarded as the most useful approach to the participating employers because of the following outcomes: "contributed to our productivity (mean: 3.38), provided a chance to help students (mean: 3.26), and provided an opportunity to help the community (mean: 3.04)" (p. 50).

Another study which provides evidence of improving productivity and quality through cooperative education is a study of AMS which was introduced by Nielsen and Porter (1983). According to their study, 44.7% of the employers surveyed thought that cooperative education students had better communication skills and only 14.6% of the employers

considered them to have inferior communication skills. Of the surveyed employers, 51.6% felt that cooperative education students had superior ability for working with other people, and only 2.7% felt that non-cooperative education employees had superior abilities in this area. Other ratios were that cooperative education student were more dependable (44%:5.4%), had more ability to follow instruction (49.8%:5.9%), were more motivated (67.3%:4.1%), and learned more rapidly, resulting in greater speed of productivity improvement (57.3%:9.5%) than non-cooperative education employees. The overall value of cooperative education for employers is well represented by employers' responses that 96.5% planned to continue their cooperative education programs compared to only 3.5% who planned to discontinue their relationship with these programs.

The Institution

Even though institutions of higher education are not the main beneficiary of cooperative education, there are values and benefits which are gained as a result of offering this. The National Commission for Cooperative Education lists the following advantages of co-op for institutions:

Co-op builds a strong and positive relationship between the institution and the surrounding business community. Co-op, because of its advantages to students, helps to increase enrollments.

Institutions can make more efficient use of their facilities and faculties. By alternating students between the classroom and the workplace, essentially two students can be enrolled for every one classroom seat.

By using the workplace as an extended classroom/ laboratory, colleges have access to the latest and most sophisticated equipment.

Constant input from the employment sector keeps college curricular up-to-date with changes in industry.

An important value of cooperative education for colleges and universities is that the program provides balanced educational opportunity in both general and specialized areas. Dawson (1981) supports this concept in a study entitled, "The Breadth of Learning in Cooperative Education" which points out that cooperative education can be a compromise in solving the dichotomy between liberal and technical education by combining both ingredients in the school curriculum. He further cites the following statement by A. N. Whitehead: "The antithesis between a technical (specialized) and a liberal (general) education is fallacious. There can be no adequate technical education that is not liberal and no liberal education that is not technical" (p. 63). It is not easy for an institution of higher education to maintain one extreme area of liberal or

technical education without offering a balanced education in a rapidly changing, industrial and technological society.

In fact, many students, especially the non-traditional students, attend colleges and universities in order to prepare for an occupation. In turn, the training of many professional jobs requires basic skill proficiency in writing, communication, mathematics, and science. Well-organized cooperative education programs allow students to maintain a balanced educational philosophy.

Johnson (1981) explains the concepts of "Experiential Learning" and "Facilitative Teaching" with his Behavior, Learning, Adjustment Cycle. He defines experiential learning as "the internalized learning associated with life experiences, on-the-job experiences and classroom experiences" (p. 86). He describes the concept of facilitative teaching as that "kind of teaching which promotes experiential learning; it emphasizes the teacher as one who structures the educational process and helps to orchestrate the learning resources around the student, rather than the teacher who is mostly an expert in content" (p. 88). By connecting classroom learning activities to on-the-job experience, cooperative education might be a perfect approach to actualizing the concepts of experiential learning and facilitative teaching.

Cooperative education can also be used for professional enrichment of the faculty by assisting them in the

understanding of the external environment of their teaching fields. Williams and Ducat (1985) describe an internship program and a corporate-visits program of faculty members at LaGuardia Community College, in 1979, which were created by the Division of College Cooperative Education for the purpose of enhancing professional development. These unique internship programs for the faculty are unlike traditional approaches, which usually emphasize research, writing, and seminars. Two programs provide the faculty with opportunities for contact with the non-academic learning environment. These authors report that the results of these programs helped participating faculty members through the contacting of new work environments, increase of knowledge in career development, utilization of research skills, and observation of new equipment and procedures in operation.

One of the problems in the field of college teaching is that some faculty members use ineffective instructional methodologies for years with different groups of students. This repeating of teaching methodologies, without creating new ones might be one of the reasons that students drop out of school. Faculty members need to seek new methods of instruction which facilitate a better life outside of the college campus. Cooperative education makes it possible to communicate with the business world and offers opportunities to look at other aspects of learning, as actualized in the LaGuardia Community College study.

Stull and deAyora (1984) conducted a survey which utilized mailed questionnaires "to identify and analyze the benefits to faculty resulting from their involvement in cooperative education" (p. 18). The respondents of the study were made up of all faculty members and all cooperative education directors of 2- and 4-year institutions of higher learning. A final sample size of 296 faculty members and directors resulted in 252 responses (return rate: 85.1%). Respondents were asked to rate 20 individual statements on a Likert scale of 5. The major finding of the study was that the four primary benefits for 4-year college faculty were (a) enrichment of the classroom learning environment (mean = 4.48), (b) more meaningful relationships with students (mean = 4.14), (c) opportunities for bringing relevant outside speakers into class (mean = 4.10), and (d) access to available information for dissemination to students (mean = 4.08).

Another value of cooperative education for institutions is an increased application and retention rate which is very important to many colleges and universities in the United States. Korngold and Dube' (1982), of Pace University, conducted an admission survey in order to check the value of cooperative education in student recruitment during the 1981-82 academic year. According to the study, one-half of the 462 students who were aware of the Cooperative Education Program at the university responded that "the Cooperative

Education Program was a significant influence in their decision to attend Pace University" (p. 77). The study also included a survey for determining the difference in retention rates between cooperative education students and non-cooperative education students. The results indicate that all the retention rates of 35 cooperative education students was 100%; whereas, the retention rates of non-cooperative education students were considerably lower. If a college maintains more students through a cooperative program, as these authors suggest, an institution can select better students by raising its standards.

Dube' and Korngold (1987) also studied the economic value of cooperative education for institutions as it relates to increases in applicants and retention rates, extending financial aid, and employer contributions. These authors point out that the tuition income from the 36 students who indicated that they would not have enrolled except for the cooperative education program at the university amounts to almost \$240,000 for a year and \$650,000 for 4 years. They speculate that the monetary gains, as a result of improving the retention rate through cooperative education, provide a hypothetical increase of \$360,000. This is the result of maintaining an 80% retention rate among 100 cooperative education sophomore students, compared to a 60% retention rate among non-cooperative education students for three years.

Administration of Cooperative Education

This section reviews literature related to the organization of cooperative education in the areas of centralized versus decentralized structure and academic versus student affair placement. The organizational structure of cooperative education—centralized versus decentralized—is one of the most commonly argued issues concerning this type of program. According to Way, "Delaying a solid management structure may result in jurisdictional battles, development of cooperative education at the mercy of staff, poor quality programs, or employer dissatisfaction" (Way, 1978, p. 60). While supporting a centralized management structure, Way (1978) mentions that "to avoid these problems, it is important that the organizational period of a cooperative education program include a design for a centralized management system that will prevent fragmentation of the program" (p. 60).

Stromayer (1987) defines the centralized program administration as combining highly related and complementary career development components under one centralized structure which is usually established as a certain type of career center under the name of Career Service Center, Career Development Center, or Career Resources Center. The career planning and placement program, student employment services, and career counseling services are included in

this centralized administrative structure along with the cooperative education program.

Stromayer (1987) also outlines some values of a centralized cooperative education as the following: (a) developing quality and diverse employers more effectively, (b) providing more convenience and quality services for students, (c) saving money by combining similar positions and services, (d) developing a career as a total system rather than focusing on isolated events, and (e) managing more effectively by creating better communication channels with career related staff members.

By positioning decentralized management structure of cooperative education, Quandt (1987) introduces research results which were obtained by the Cooperative Education Research Center at Northeastern University. The findings of the research are that 82 of 448 (18%) 2-year colleges, and 63 of 568 (11%) 4-year colleges and universities have decentralized cooperative education programs.

The definition of "decentralized" cooperative education, according to Quandt, is that "each academic unit has an autonomous cooperative education program with individual directors-coordinators reporting to different administrative head" (p. 46). Quandt also points out the value of a decentralized cooperative education program as the most effective way for the program to keep a close relationship within academic departments--the faculty and

their students--and to enhance the liaison between students of cooperative education and the academic curriculum.

As Stromayer commented in 1987, even though there is no relationship between the size of the institution and the organization of the cooperative education structure, larger institutions favor adoption of a decentralization with smaller and medium-size institutions tending to maintain a centralized structure. Stromayer also listed the factors that influence the type of administrative structure for cooperative education programs such as the nature of the institution, the nature of the student body, the resources of the institution, employer relations, promotional strategy, and service commitment.

Another issue facing cooperative programs regarding administrative structure is their placement in the body of the institution, that is, under academic or student affairs. Since the basic idea of cooperative education is to enrich classroom learning with on-the-job experience, it is most commonly placed under academic affairs. Homer, Stull, and Boal (1982) report the results of a survey indicating that 82% of cooperative education programs are under academic affairs in the administrative structure of the higher learning institution.

Abitia (1987) supports the cooperative education program as a part of academic affairs by urging that the cooperative education program "should be the prime source of

information in the development of curricula" (p. 49). Lawrentz (1987, p. 51) and Lupton (1978, p. 40) "strongly recommend" the position of cooperative education as a component of academic affairs in order to develop a faculty base.

Cook (1987) explains that the cooperative education program at Southwest Missouri State University was moved from academic affairs to student affairs. This was done because under student affairs it could work with career planning and placement and could involve admissions and records, registration, student life and development, housing and counseling by maintaining a good relationship with academic components of the institution.

Federal Grants on Cooperative Education

Federal funding was one of the most significant factors for rapid growth of cooperative education in the 1970s. This section, which contains a review of literature on federal grant-related cooperative education, should provide a better understanding of the development of this type of program at the University of North Texas.

The National Commission for Cooperative Education (NCCE) played a major role in creating federal funds for the development of cooperative programs by working with members of Congress and the Office of Education (Porter & Nielsen, 1986). As a result of the two years of intensive work by

NCCE, Title III of the 1965 Higher Education Act was reauthorized. This made it possible for colleges and universities to use Title III money to develop cooperative education programs.

According to Barbeau (1985), the fund through Title III was not available to all cooperative education programs because it was limited to developing institutions only, thus denying federal grants to many institutions. After hearing of NCCE's recommendation not to limit funding to certain institutions, legislators amended Title III and moved the cooperative education funding to title IV-D, in 1968 (Wooldridge, 1987).

When Title IV-D was established, a large-scale federal funding for cooperative education was authorized (Porter & Nielsen, 1986). This amended title provided federal funding for administration, demonstration, training, and research for programs of cooperative education. In 1973, the funding was separated as a line item under Title IV-D of the Higher Education Act and received about \$10 million from the federal government rather than receiving only a percentage of the work-study monies (Wooldridge, 1987).

Title VIII of the Higher Education Act was enacted in 1976, "not only making all co-op funding a separated line item but also making it more susceptible to the Congressional budget axe" (Ibid, p. 23). Because this new authorization dropped the old regulations which required

that cooperative education programs be full-time in order to get federal funds, community colleges could establish parallel cooperative education programs in which students would participate on the basis of part-time study and part-time work. The Department of Health, Education and Welfare (1980) under Title VIII set the objectives of federal funding for cooperative education as the establishment, expansion, strengthening, training, research, and demonstration/exploration of the program.

The eligibility of grants for the administration of cooperative education programs under Title VIII was limited to a maximum of five annual grants to accredited higher education institutions. Federal grants were proportioned as follows: first year, 100%; second year 90%; third year, 80%; fourth year, 60%; and fifth year, 30% (Department of Health, Education, and Welfare: Office of Education). However, there is no such limitation for training, research, and demonstration-exploration projects.

Federal grants for cooperative education programs in 1979 were endangered because the Carter administration proposed a phase-out of federal funding (Wooldridge, 1987). However, a task force was established to develop a counter proposal and reversed the elimination proposal for Title VIII funding. Finally, in 1980, Title VIII was amended to provide opportunities for large-scale comprehensive cooperative education programs to receive funding from the

federal government. The amendment allowed "institutions which had exhausted their eligibility for Title VIII funding to again be eligible to apply for funding for those 'units' of the campus in which cooperative education had not been funded previously" (Porter & Nielsen, 1986, p. 65).

Under Title III, developing Institutions Funding, Title IV-D of the Higher Education Act, and Title VIII, approximately \$200 million has been awarded for institutions of higher education to start up, strengthen, and improve cooperative education programs (p. 65). Thanks to federal support, the number of cooperative education programs expanded from 190 in 1970 to over 1,000 in 1975 (Wooldridge, 1987, p. 22).

According to Heineman, Wilson, Heller, and Craft (1982), national assessment of cooperative education by congress in 1975 concluded that the federal grant Title IV-D of the Higher Education Act had made a significant contribution to the expansion of cooperative education all over the United States. The establishment of granting systems for the cooperative education system was a sound legislative decision because the federal investment in cooperative education was a more cost effective approach than was the federal student loan system. Heineman et al., felt that the future expansion of cooperative education was bright.

Kaas (1985) evaluated the Title VIII Federal Fund for cooperative education through a comparative study between pre-funding cooperative education graduates and post-funding cooperative education graduates at the University of Minnesota Technical College in Waseca (UMW). He found a significant influence of the federal funding on the development of cooperative education because it enhanced students' academic development, their work experiences, and the communication between faculty and industry.

McMullen (1981) investigated the impact of federal funding on cooperative education in an attempt "to examine the effects of 1979 Administrative Title VIII funding on co-op program operating characteristics" (p. 71). According to his study, federally funded cooperative education programs have a centralized administration, more full-time personnel, a high level of program publicity, proportionally more selective programs, more cooperative work experience in all curriculum areas, and more graduate programs. The major conclusion of McMullen's study is that federal funding of cooperative education significantly affects the operation of programs in the United States.

In a study of the significance of federal funding in the growth of cooperative education in the United States during the 1970's, Heineman et al. (1982) found that "as a result of governmental intervention strategies, programs in more than 800 institutions were started, and 90 percent of

these institutions report that without federal monies they could not have initiated their cooperative education program" (p. 4).

Evaluation of Cooperative Education

Evaluation of cooperative education programs is a core activity because it provides information on what the program really is, how valuable it is to involved people and organizations, and which areas need to be emphasized in the future. Wilson (1989) states that the purpose of the evaluation of cooperative education programs is "to assess the outcome of instructional intervention" through clearly written missions and objectives of the program by studying how much "those objectives are realized and the role played by the instructional or learning experiences in that achievement" (p. 38).

Little and Landies (1984) offer three major program elements for evaluation: (a) the objectives of the program, (b) process or program functions, and (c) the cost of the program in relation to the acquired benefits.

Heinemann (1987) provides the following investigation areas for the evaluation of cooperative areas: (a) the level of students' preparation and their performance on the job, (b) the level of employers' satisfaction, (c) the degree of matching the level of technological change and curricular change, (d) the effectiveness of policies and procedures,

and (e) the level of achievement of the institution's goals for the program (p. 35).

In a study of the Cooperative Education Program at Pace University, Korngold and Dube' (1982) set these objectives for the use of (a) program planning, (b) making more precise management decisions, (c) marketing the program, (d) providing federal grant proposals, and (e) documenting the impact of the cooperative education on the institution. The survey areas of the assessment of cooperative education at Pace University are (a) employer survey, (b) student survey, (c) faculty survey, (d) admissions survey, (e) permanent placements survey, (f) retention study, and (g) salary study.

In a recent study, Wilson (1989) reviewed the development of the measurement and methodology for an evaluation of cooperative education. According to Wilson, evaluators in the early years studied the growth and development of students by assessing their analytical proficiency, practical judgment, self-reliance, responsibility, and knowledge of men and affairs. This observation is based on the researcher's years of experience in working with students and does not provide any empirical data.

After 1960, however, evaluators began to investigate outcomes of cooperative education programs by comparing their students with non-cooperative education students,

using previously-developed instruments (which are more convenient and avoid the complex and time consuming task of instrument construction, are more valid and reliable, and are more comparable with the results of some instruments) or self-developed questionnaires (which are available for measuring precisely and closely what the evaluators seek to measure). The most frequently invested areas of cooperative education were students' academic achievement, social and political attitudes, career decision making, confidence in career choice, and job finding and advancement.

Regarding the methodology for evaluation of cooperative education, Wilson (1989) mentions that sampling and data analysis are the most frequently used techniques for the assessment of values of cooperative education. He further mentions that the most remarkable change in evaluation methodology during the last 25 years involves the use of more complicated statistical analysis for evaluating data because of the development of computing systems. According to Wilson, evaluators, in the early years, used relatively easy computing approaches such as the percentage, mean, median, T score, and chi-square, but since 1980, far more sophisticated approaches, such as factor analysis, canonical correlation, and regression analysis have been adopted and have provided, more powerful, more reliable, and more valid evaluations.

Concerning future evaluation of cooperative system programs, he urges the development of theory-based evaluation and more emphasis on the individual student's outcome rather than on student bodies. In relation to theory-based evaluation, Wilson recommends that researchers formulate hypotheses based on relevant theories, such as psychological, social, educational, behavioral, and economic areas, which link to outcomes of cooperative education.

Korngold and Dube' (1982) point out a problem concerning the evaluation of cooperative education by stating that, "it has been found, . . . that when colleges and universities cease to qualify for federal funding, they no longer have their program evaluated" (p. 81).

Summary

The aim of this chapter was to provide background information on the development of cooperative education at the University of North Texas through a review of literature. The first section, The Value of Cooperative Education, explains why students, employers, and institutions are involved in cooperative education, and it lists specific values of these types of programs.

The cooperative education program is of the greatest value to students because it provides the enrichment of classroom learning through on-the-job practice, allows them to earn money for their educations, and helps them to

prepare for a career. Employers play a very significant role by providing opportunities for practice and finances for students. Employers benefit by recruiting skilled employees, using human resources more effectively and efficiently, and saving money by employing less costly employees. Institutions can provide a balanced general and technical education through cooperative education, can maintain better recruitment and retention rates by accepting cooperative education students, and can develop positive education-business relationships and by giving students experience with up-to-date technological equipment.

In the next section, the organizational structure of cooperative education was reviewed in order to provide basic information on the development, staffing, and organization of cooperative education programs at the University of North Texas. Also considered are reasons why the cooperative education program was moved from student affairs to academic affairs. It was observed that centralized administrative programs in student affairs can operate the program more effectively by combining student career and counseling service centers. However, a decentralized structure of the cooperative education program, usually under academic division, can attract strong faculty involvement in the program.

The cooperative education program at the University of North Texas was created mainly with federal funds.

Consequently, it is necessary to review the development of federal grants in the United States and to study the influence of federal funds on the overall development of cooperative education in America. The first federal grant for cooperative education was authorized by Title III of the 1965 Higher Education Act. In 1968, cooperative education funding was available for more than just developmental institutions under Title IV, part D of Higher Education Amendments. Title IV-D was replaced in 1976 by Title XIII. After the initiation of federal grants for cooperative education, more than 800 new cooperative education programs were established. Federal grants played a critical role in the establishment of 90% of the 800 programs, including the cooperative education program at the University of North Texas in 1976.

In the last section of this chapter, the evaluation of cooperative education is reviewed and provides information as to why cooperative education needs to be evaluated, how to evaluate programs, and what the development of evaluation on cooperative education is. Through evaluation of cooperative education, various outcomes of the program are assessed by evaluators who emphasize clearly written objectives and evaluate the realization of them. With the development of more efficient, faster computing systems, more powerful, meaningful, and persuasive evaluation methods have been developed.

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CHAPTER 3

HISTORICAL BACKGROUND OF COOPERATIVE EDUCATION

The chapter describes, briefly, the life and leadership efforts of Herman Schneider, who developed cooperative education in the United States, and the developmental history of cooperative education in the United States from 1906 to the middle 1960s. This chapter addresses such questions as (a) what were the educational and professional backgrounds of Herman Schneider?; (b) why, how, and when was the cooperative education program initiated in the United States?; and (c) how did the program grow and expand from one university to more than one thousand higher education institutions in America?

Herman Schneider and the Development of Cooperative Education in the United States of America

Schneider was born in Summit Hill, Pennsylvania, on September 12, 1872, as the fourth son of Anton and Sarah Schneider. He spent his childhood and youth in an isolated mining community working in his father's prosperous general store along with his three brothers. His mother always tried to teach her four sons about the industry and their responsibility to it, but she did not neglect their spiritual and educational enrichment as she emphasized that

her sons attend the local Presbyterian church and read the bible and other classics after church every Sunday (Park, 1943, pp. 17-22).

In the early stage of his life he decided on a future career as a civil engineer because of the influence of his brother, Anton, who was planning to do the same. His one-armed boss, a carpenter who advised him to study engineering, to make blueprints, and to teach others how to do this, also influenced his early career decision. Before starting the more advanced engineering courses, he needed to develop basic skills knowledge. In 1890 he attended the Pennsylvania Military Academy at Chester, which was considered equivalent to the United States West Point Military Academy during that time. While there, he acquired mathematics and other basic academic knowledge which he needed for advanced study and his future career. He also learned the skill of mapping out a series of tasks and achieving them in a certain time, a skill enabling him to prepare and follow a strict schedule throughout his life (Park, 1943, p. 24).

In 1892 he entered Lehigh University to study civil engineering where he met Mansfield Merriman who had been educated in Europe and had received his Ph.D. from Yale. Merriman influenced him academically with his impressive teaching methodology and simple, clear, and ordered writing skill. Another person who had an impact on his future life

was William Leh who was an architect and construction engineer. Leh hired Schneider to work in his office on Saturdays and gave him practical experience. He guided Schneider in linking classroom learning with on-the-job experience by asking him frequently to describe what he was learning in school (Park, 1943, pp. 26-30).

He graduated from Lehigh University in 1894, but this was a difficult year for college graduates to find employment throughout the country. However, his long-term dream of opening an architect's office was actualized when he received an invitation from his former classmate at Lehigh who lived in Cumberland, Maryland. After starting his own business, his diligence, hard work, and enjoyment of social functions kept him involved with his new community. Occasionally, he hosted table conversations with young, local businessmen. He also enjoyed musical entertainment, drama, and other social activities with the towns' people. In the summer of 1897 he gave up his architectural business in Cumberland because he contracted malaria, and he returned to Summit Hill, his hometown (Park, 1943, pp. 31-34).

In order to restore his health, his family sent him to Oregon, the home of his brother Anton, who worked for the Oregon Short Line Railway as an engineer. Schneider designed railroad bridges which were small-scale projects but which allowed him to understand the concept of bridge building. He was also impressed with the beautiful

landscape such as the green hills and snow-covered mountains (Park, 1943, pp. 34-37).

After recovering from his illness, he returned to Summit Hill in 1899. In December he was married to Jessie Schober, the daughter of a Cumberland stationer, by a bishop of the Moravian Sect. Schneider started his new life in the teaching field after accepting Merriman's offer of a position as an instructor at Lehigh University. Merriman again provided assistance and encouragement for the new, young college instructor by guiding not only his classroom procedure but also his general educational philosophy, including the need for practical work in scientific fields (Park, 1943, p. 46).

Schneider soon found that Lehigh did not provide shop work for its engineering students, even though most of the other institutions offered this as the result of influence by an exhibition of the Russian technical school during the Philadelphia Centennial in 1876. Schneider believed that his students needed the same industrial experience as other engineering students in other institutions. He also believed that it would be more worthwhile if that experience were gained directly from industry with more updated machines. However, his thoughts were not limited only to the area of engineering as he also questioned the total teaching and learning relationship along with the growth of

his idea to combine theory and practice (Park, 1943, pp. 40-41).

He often pondered how to put together theoretical knowledge and first-hand experience when an idea came to him which seemed to be a possible solution to this problem. Near the campus there were many large experimental industry laboratories available for him to fill with new and advanced equipment. He thought "why not use these tools and machines to give the students practical experience by employing them on a part-time basis while they are in college?" (Park, 1943, p. 44). Immediately, he went back home and began to map out details of his educational philosophy.

His unique idea was not accepted readily by the community, and he was classified as a rather visionary young man by the institution and society. Even his family regarded him as immature, even though he visited them many times to discuss his idea. Tragically, on June 22, 1901, after only two years of marriage, his wife died. Even with such hardship, Schneider did not give up his idea, but he did change his approach by detailing the idea of a co-op-based college supported by large corporations (Park, 1943, pp. 45-50).

In 1902 he visited one of his friends and explained his idea of establishing a technical school in Pittsburgh which had such industrial plants as Carnegie Steel Co., Westinghouse, and General Electric. He also planned to

build the same type of school in Philadelphia which had the American Bridge Company, Baldwin Locomotive Works, and Cramps Shipbuilding Co. He visited executive officers of these companies and explained his theoretical and practical training program which would make it possible for firms to supply themselves with trained workers. He used the pattern and the administrative organization of the United States Military Academy at West Point as a model for his program. He also mapped out curriculum, a mission statement, and even the faculty's research, and the practical-based job descriptions of the special institution. However, his plan again ended as only a dream with one of the main reasons being that this type of institution had never existed before (Park, 1943, pp. 52-56).

His second attempt at a co-op-based education was not achieved, and his human energy was almost exhausted, but he did not abandon his original plan. After a short period of rest, he started again. This time he decided to develop his idea in another section of the country. He was offered a teaching position in the Department of Civil Engineering at the University of Wisconsin, but Schneider gave the job to a friend who had taught with him in the University of Cincinnati, taking his friend's position instead (Park, 1943, pp. 57-59).

In 1903 Schneider became an associate professor of civil engineering at the University of Cincinnati. The

institution at that time was not technologically based but was predominantly liberal arts, with the departments of art, music, law, and medicine. In the 1903-04 academic year the number of engineering students was 97 as compared to 431 liberal arts students. In the bottom sector of the city, there were 30 large and small industries, including machine tool, chemical, and electrical factories. At this time, Schneider married Louise Bosworth, who came from Michigan, and spent the winter with her aunt in Cincinnati (Park, 1943, pp. 60-61).

After beginning his teaching job at the University of Cincinnati, he discussed his idea of cooperative education with the students, fellow faculty members, and administrators of the institution through classroom instruction, article writing, speeches, and individual communication. In September 1904, Charles William Dabney succeeded Howard Ayers as president of the institution, and the new president's educational philosophy was not far from that of Schneider's. When he read Schneider's paper entitled "A Communication on Technical Education," he was impressed with it and its author (Park, 1943, pp. 62-64).

As a result of his various articles and speeches on cooperative education, Schneider became quite well known among business leaders of the city. One of his short articles, which was published in a newspaper, attracted the attention of John M. Manley who was Secretary of the

Cincinnati Metal Trade Association. The idea of part-time school work and part-time practical work impressed Manley who became a very important supporter in the beginnings of cooperative education in America. He introduced Schneider to a group of industrial leaders and provided opportunities for him to speak at the Cincinnati Metal Trade Association meetings. Schneider gained attention and received positive responses because many of them already realized the lack of practical knowledge in their employees who had finished engineering studies at the college level. Schneider often accompanied Manley to present his ideas to more firms, such as the American Tool Works, Bradford Machine Tool, and Cincinnati Milling Machine (Park, 1943, pp. 66-72).

When the university's board of trustees approved the new course in January 1906, the members considered the issue of satisfactory support by the industry which would be required to train students; but because Schneider had already gained strong support from the leaders of the firms, it was not a problem to create the first course in cooperative education at the institution. In September 1906, 27 various academically- and socially-oriented freshman co-op students were recruited by the university and placed in local companies. Among them, 12 students were studying mechanical engineering, 12 students were studying electronics, and 3 were studying chemistry. These students were divided into groups with each of the group members

attending school and working every other alternate week (Park, 1943, pp. 75-81).

In 1907 Schneider became the Dean of the College of Engineering, and he worked continuously as a coordinator by visiting students' working places, meeting their employers, and calling on them to discuss what they had learned through their job experiences. He also visited many places outside of Cincinnati to communicate his educational philosophy to other educational institutions by functioning as a consultant. He was praised by many prominent people, some of which were William Howard Taft, President of the United States; Henry S. Pritchett, president of the Carnegie Foundation; John Brashear, the lens maker; and Frederick Winslow Taylor, the founder of scientific management (Park, 1943, pp. 81-83).

Schneider's plan was not limited to one institution in Cincinnati but expanded year by year throughout the country, increasing its total number as a result of his continuous consultant work and many speeches and scientific and educational articles. In 1908 the cooperative education idea was adopted in the public school system in Fitchburg, Massachusetts. In 1909 the Polytechnic School of the Boston YMCA Evening Institute (formerly Northeastern University) expanded its program to day school at Polytechnic Institute by adopting the Cincinnati plan (Barbeau, 1985).

Thereafter, the University of Pittsburgh (1910), the University of Detroit (1911), the Georgia Institute of Technology in Atlanta (1912), the Rochester Institute of Technology (1912), the University of Akron in Ohio (1914), the Massachusetts Institute of Technology (1917), the Drexel University (1919), the University of Evansville (1921), Cleveland State University (1923), and the General Motors Institute (1924) established cooperative education programs (Barbeau, 1985; Hartley, 1987).

Among them, the Massachusetts Institute of Technology included the first graduate cooperative education program in the United States (Tillman, 1986), and the University of Cincinnati placed its first female co-op student in 1920. The development of the cooperative education program at Antioch College in 1921 was a very special turning point because it provided a good opportunity for cooperative education to move beyond the engineering discipline (Hartley, 1987).

In 1924, a policy concerning mandatory cooperative education for all students was adopted in the College of Business of Northeastern University (Barbeau, 1985). The University of Evansville opened the territory of cooperative education to future teachers in 1920. The Lane Theological Seminary in Cincinnati was the first seminary which offered cooperative education for its students, and the College of Medical Evangelists in California brought the idea of

cooperative education to its medical students. Riverside Junior College in California in 1922 was the first junior college which adopted cooperative education (Porter, 1975).

In 1926, 16 cooperative education schools and 6 industrial leaders held meetings in Cincinnati under the leadership of Schneider and organized the Association of Cooperative Colleges. The Association lasted three years and included meetings in Cincinnati, Philadelphia, Chapel Hill, and Columbus until in 1930 when it changed into the Cooperative Education Division of the American Society for Engineering Education. By 1930 there were 33 postsecondary institutions offering cooperative education, and Northeastern University had already placed 1,146 students in the 1929-30 academic year (Park, 1943).

Before maturing, one severe obstacle confronted the early process of development in cooperative education, the great depression of the 1930s. Now jobs for cooperative education students were hard to develop, and many employed co-op students were released by the firms. In addition to this placement problem, conflict existed between cooperative education and unions because of the employment of unmarried college students instead of union members who were, for the most part, married full-time workers with families. Also, the government, at all levels, refused to hire cooperative students because they did not take the civil service

examination which had not been required of cooperative education students in the past.

As a result of this hardship, some institutions discontinued their cooperative education programs, but some did survive during this difficult period. At the same time, Northeastern University passed a policy to help the continuous development of its cooperative education program by allowing unemployed students to take courses at no or little cost without charging extra tuition to upper level, noncooperative education students (Barbeau, 1985).

Before fully recovering from the damage of the Great Depression, the Second World War began and employed students were taken from every aspect of cooperative education all over the country. Courses were eliminated or reduced in colleges; some campuses were occupied by military forces to train soldiers; and curriculum was altered to supply the needs of the war (Barbeau, 1987).

In such a changing system of higher education, many cooperative education programs again stopped functioning or were suspended temporarily, the result being that 13 out of 32 programs were discontinued during the war, but 19 survived by overcoming various internal and external hardships. Again, Northeastern University focused on recruiting and placing female students instead of male students, many of whom had left school to join the military (Barbeau, 1987).

As a result of these two unpredicted historical events, cooperative education was altered in many ways, and its development process was delayed. Schneider died suddenly in March 1939. His successors worked hard to rebuild the unique educational approach by communicating its values and contributions to the students, institutions, employers, and society. Some of these leaders were Dean Clement J. Freund, who chaired the American Society for Engineering Education which examined the values of cooperative education, H. P. Hammond who reported the role of cooperative education after the war, and Dean Ovid Eschbach of Cincinnati who addressed the advantages of cooperative education to college groups (Barbeau, 1985).

In 1956, the year of the 50th anniversary of cooperative education, some leaders such as Roy L. Woodridge and Charles F. Kettering, former director of research for General Motors and president of the Thomas Alva Edison Foundation, discussed future directions of cooperative education. The result of this was a conference on cooperative education with 80 institutions and 100 corporations in Dayton, Ohio, on May 23 and 24, 1957. Clarence H. Faust, President of the Fund for the Advancement of Education; Ralph Tyler, Director of the Center for Advanced Study in Behavioral Science; and Henry H. Amsby, Chief for Engineering Education of the U.S. Office of Education participated in the conference, the most important

outcome of this being the endorsement of a \$95,250 grant for a 2-year study and evaluation of cooperative education by the Fund for the Advancement of Education. The study group recommended the expansion of cooperative education to other fields of endeavor, to postgraduate education, and to women and minorities (Barbeau, 1985).

In 1962 the National Commission for Cooperative Education (NCCE) was established because of the influence of the 2-year study and the continuous support of the Edison Foundation and the Fund for the Advancement of Education. The main goals of the association were to double the number of cooperative education colleges and increase the co-op students' number to 75,000, as well as to strengthen existing college cooperative education programs (Barbeau, 1985).

On September 18, 1963, the Cooperative Education Association (CEA) was founded in Detroit as a result of years of debating proposals mainly issued by non-engineering members in the Cooperative Education Division of the American Society for Engineering Education. The foundation was an historical landmark in the process of development of cooperative education. Roy L. Wooldridge of Northeastern University was elected in April 1964 as the first president of the association. In this meeting, the Journal of Cooperative Education was initiated, and the journal published its first issue in November 1964 (Barbeau, 1985).

President Lyndon Johnson's education message to Congress in February 1967 contained the importance of cooperative education as a means of educational innovation and discussed its effectiveness and suggestions for adopting this unique educational approach more widely. This was the first formal statement on the value of cooperative education by the President of the United States (Barbeau, 1985).

Conclusion

Schneider was born and grew up in the typical American family environment during the end of the 19th century. He was the son of Christian parents who had four sons and ran a general store. He had to help his parents while attending school and was influenced by his older brothers and his employer when he made a decision to study engineering in college. He also worked in his study area while attending college and learned the value of practical experience as a means of enriching classroom learning.

When Schneider received a teaching position at Lehigh University, he realized the value of practical experience for his civil-engineering students and formulated the idea of connecting classroom theory and on-the-job practice. However, his idea was not easily accepted by the higher education environment at that time; therefore, he tried to establish cooperative-education-based technical institutions.

Even though his goal was not accomplished, he did not quit but published his ideas and spread his plan by meeting many educational and business leaders. The reception of his idea by many leaders eventually led to its adoption by the University of Cincinnati and then branched out to other institutions in study areas ranging from civil engineering to the liberal arts, and from a city in Ohio to cities around the world. During its 90-year developmental history, events such as the Great Depression and world wars interfered; however, it overcame such hardships and continued its mission for the students, the employers, the institutions, and for society. Today, Schneider's concept of cooperative education remains a vital part of higher education institutions due to its practical approach for students across the United States and in many parts of the world.

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CHAPTER 4

A DEVELOPMENT OF COOPERATIVE EDUCATION AT THE UNIVERSITY OF NORTH TEXAS: 1976-1979

Introduction

This chapter describes the first part of the study on the development of cooperative education at the University of North Texas based on the dean of students office and the first three directors of the program: Joe Birmingham, Margot Hirsch, and Ron Lutz.

The chapter will provide answers to the following questions: (a) how, why, when, and by whom was the program of cooperative education at the University of North Texas established?; (b) how was the program organized in the university administrative system?; (c) who worked for the program?; (d) what were their educational and professional qualifications for the program?; (e) what were their contributions to the program?; (f) how did they develop student and employer (business and industry) participation in the program?; and (g) how was the program funded and evaluated?

The chapter also discloses such information as the importance of funding, leadership, and the cooperative working relationship with other departments of the

university through an historical descriptive research approach.

The Development of Cooperative Education
at University of North Texas in 1976

The inauguration of Cooperative Education at the University of North Texas (UNT) was the first day of September 1976, and the birthplace of the program was the office of dean of students. From the beginning of the fall semester in 1975, the preparation period took about 1 year for program establishment.

Joe Stewart, Dean of Students; Barbara Jungjohan, Assistant Dean of Students; and Barbara Houston, Director of Student Employment, began to discuss the possibility of a new program that would better serve students by a different approach. These administrators thought that they could help many students on the campus who had to find places to work right after graduation from the university, and they could find a way to prevent high drop-out rates from the institution due to the students' financial problems (J. G. Stewart, personal communication, June 5, 1989).

In the academic year of 1976-77, approximately 17,300 students enrolled in the university. Among them, there were a large number of minorities (15%) and low-income family background students (20%). In addition, more than half (55%) of the student body had already worked during some portion of the school year to supplement their insufficient

educational money supply (UNT: Center for Cooperative Education, 1979).

Even though Joe Stewart had limited cooperative education experience, he was familiar with the concept of the program because he had been exposed to it at New Mexico State University which began its cooperative education program in the 1960's to serve students of engineering, math, and other discipline areas. He thought that the cooperative education program could possibly solve some problems at the university at that time by helping students who needed places to work as well as to increase academic funds (J. G. Stewart, personal communications, June 5, 1989).

Barbara Jungjohan received her Master of Arts degree in English Literature from Baylor University. She was awarded the Governor's Award for outstanding contributions to the handicapped, which is the highest honor of that kind and given to only one person each year in the State of Texas (Stem, 1981). When she was exposed to the idea of cooperative education, she thought the program might be almost ideal for working students (B. M. Jungjohan, personal communication, April 20, 1989).

Barbara Houston served for several years as Director of Student Employment Services and worked for various professional student-work related associations as chairperson, vice president, and secretary. She had

attended the National Convention on Work and the College Student in June 1975 at Southern Illinois University in Carbondale, and she was impressed by the speech of Ralph Porter who made a presentation on the history of cooperative education. She kept abreast of the availability of federal grants through Title VIII which was designed to assist a start-up cooperative education program for institutions of higher learning in the United States (B. Houston, personal communication, July 6, 1989).

In addition to these two factors, one being the need of the program for students and the institution and the other being the agreement of educational philosophy of three key persons about cooperative education, there were some other internal and external reasons for the university to lead the decision making in the creation of the program.

First of all, the university-wide commitment to the program was found in the University's Purposes and Goals Statement, which was revised in August of 1975 and which was described as follows:

A. Instructional programs whose goals are to produce citizens who are more skillful, adaptable, innovative, appreciative, and dedicated to their personal enrichment and to the betterment of society D. Assistance to local, state and national governments, business and industry, labor and the professions and the public at large by offering consultation,

information and special service programs. (University of North Texas: Planning Office, 1975, pp. 2-3)

Another internal factor within the university was that some departments, mostly in the College of Business, had provided some type of internship experiences while giving credits to their students. However, there was no payment policy for those students who had worked outside of their classrooms to get practical training in their major areas. The other internal factor which contributed to the creation of the program was the strong student employment services within the office of the dean of students. Student Employment Services had placed thousands of students on a part-time, paid basis, but they could not receive any academic credits. Therefore, Stewart, Jungjohan, and Houston decided to combine these two existing programs so that students could get credits as well as remuneration for their educations.

The most important external factor in the establishment of the program was the possibility of granting federal funding through the Department of Health, Education, and Welfare. As mentioned earlier in this chapter and in chapter II, federal funds were available to higher education institutions for establishment, expansion, and strengthening of cooperative education. Jungjohan recalls the importance of the federal funding at that time by saying that "there is no way we could have begun the program without the federal

funding" (B. M. Jungjohan, personal communication, April 20, 1989).

The other significant factor in the program's establishment was the promising geographical location of the university in Denton which is often called "the top of the golden triangle." As it is described in Chapter I, Dallas/Fort Worth Metroplex is one of the largest population areas in Texas and has numerous employment resources, such as computer, defense, and aviation industries.

The decision to create cooperative education at UNT was made based on the above promising internal and external factors. After deciding, the three administrators began to work. Jungjohan contacted the appropriate administrators, including the deans of each college, to explain the co-op idea and its value to students and the university. Most of the contacted people expressed their positive opinion toward the future program by saying, "It's a good idea" or "Sounds good!" But when they were asked about the possibility of funding to establish the program, almost all of their reactions seemed unfavorable as they replied, "It's hard" or "It's not easy to do so" (B. M. Jungjohan, personal communication, April 20, 1989).

All that she could do to accomplish this dream of establishing cooperative education in the institution was to solicit funds from the federal government. Houston wrote a letter to the Department of Health, Education, and Welfare

asking how to start cooperative education funding. Several days later, federal grant guide-line documents and grant request forms were sent to the office of the dean of students from the department of HEW. Jungjohan and Houston reviewed the requirements of the federal grant proposal, collected information from books, journals, and other sources, as well as asking for help by writing for a grant to the administrators and the faculty. After gathering all of the required information. Jungjohan and Houston wrote the first federal grant request proposal for the program.

The proposal was sent to the Department of Health, Education, and Welfare in January 1976 after gathering support from all related administrators and the faculty of the university (B. Houston, personal communication, July 6, 1989). They did not really expect to be funded, but in June 1976 they were informed that the amount of \$35,000 would be available for the establishment of the program (B. M. Jungjohan, personal communication, April 20, 1989). Upon approval of the federal grant, they began working toward the new program, and after three months it was formally established on the first day of September 1976.

Cooperative Education at UNT under
Joseph Birmingham: 1976-1977

Staffing and Organization

The cooperative education program at the University of North Texas started with a full-time director and a part-

time secretary in a small room. The office site was Suite 319A in the University Union Building of UNT. The purpose of the program was "to broaden that experience by setting specific quality standards which would ensure that cooperative education was synonymous with a quality credit-worthy para-professional experience of at least 1,000 hour duration in the student's major field" (UNT: Center for Cooperative Education, 1977).

From its first year in 1976, the administrative structure of the program started as a centralized system. The placement of the program in the university organization was in the division of Student Affairs and supervised by Joe Stewart, Dean of Students, and Barbara Jungjohan, Assistant Dean of Students. Under the Dean of Students, there were Student Employment Services and Special Student Services. which worked for those students who needed part-time employment on or off of the campus. Special Student Services provided assistance for some students, such as the disabled, the aged, women, minorities, and commuters, as well as those having academic problems.

Joe Stewart reported to Jane Smith, Vice President for Student Affairs, and she reported to Calvin Nolen, President of the University. Under the Vice President for Student Affairs, the offices included were the Counseling and Testing Center, Health Services, Career Counseling and Placement, Housing, Financial Aid, and other student affair

related services. The reporting system in 1976 was from the Director of Cooperative Education to the Dean of Students to the Vice-president for Student Affairs and then to President of the university.

As mentioned earlier in chapter 2, within this type of organizational administrative system, the program could work together and utilize the other student affairs related programs. However, the program had difficulty when trying to contact the academic departments and their faculty members. This kind of remoteness between the program and the academic component of the institution resulted in providing a good recommendation source to the evaluators of the program and limited its functions to a certain area of academic discipline. It also brought about negative reactions from some faculty members and caused the lack of academic policy for those who were involved in the program.

The program in September of 1976 started with a full-time director, Joe Birmingham, and a part-time secretary. Birmingham earned his Bachelor of Science (B.S.) degree in biology, and his Master of Education (M.Ed.) degree in Secondary Education at the University of North Texas. He was working on his doctoral program in the department of higher education at the time of his appointment. He had teaching experiences in secondary educational institutions in Texas and also at the college level. He had worked in the office of the dean of students as a doctoral intern

during the spring semester of 1976 and assisted Jungjohan with the federal grant request proposal.

Because of his educational background and his internship experience with the dean of students, he was promoted to a full-time working position and became the director when the position was developed. According to Jungjohan, Birmingham was hired in July 1976 without any formal recruiting, and the Dean of Students asked him to begin immediately on the remaining mission for the establishment of the program (B. M. Jungjohan, personal communication, April 20, 1989).

Therefore, he actually began to work for the program nearly two months earlier than its formal opening day. Birmingham's philosophy on cooperative education was that he was confident of the program, and the idea as a learning methodology was superior to the simple classroom experience (J. C. Birmingham, personal communication, April 5, 1989).

In the beginning stage of the program, he hired a part-time secretary and later attended a training program. He brought back such information as how to formulate, guide, and report the program; what he could expect from the program; how to write federal grant request proposals; and other administrative matters and job descriptions of the director, coordinator, and secretary (J. C. Birmingham, personal communication, April 5, 1989).

After returning from the training program, he began to make contact with all academic deans and department chairs to explain the idea of cooperative education and the new program. He imparted to them that the new program was not intended to threaten the existing internship program but would assist it and work for the benefit of students and the institution (J. C. Birmingham, personal communication, April 15, 1989).

He notified and visited with employers of the new program and provided them with information on cooperative education and some federal guidelines. Then, he advertised in the North Texas Daily, the campus newspaper, visited classes, and met students individually to explain and bring them into the new program. Birmingham contributed in many ways to selling the newly developed cooperative education program at UNT; however, one year later he completed his Ed. D. degree and moved on to another position elsewhere (B. M. Jungjohan, personal communication, April 20, 1989).

Development of the Student

The program had difficulty bringing enough students in to fill jobs even with broad advertising. According to the on-campus newspaper, "The lack of student response was attributed to a lack of understanding on the part of the students as to what the program is about. Although the

program had been the subject of previous "Daily" articles, few students integrated its merits" (Grace, 1976).

Along with this problem another was that few students could qualify because they were required to complete 30 hours of academic credit while maintaining a 2.0 grade point average (GPA) and also had to take interests tests to check their qualifications for a prospective job (Grace, 1976, September 30). Therefore, freshman students were basically eliminated from the program because of the 30 credit hour requirement. Also, senior students were not welcomed by employers who wanted student workers to work for more than a year.

As a result of these problems, only four students were placed in jobs in the fall semester of 1976, leaving many unfilled positions (Grace, 1976). During the spring semester of 1977, Birmingham began to see more and more students inquiring about the program. He also sought out those who were working in jobs directly related to their majors without getting academic credits, and he arranged for them to receive credit through the cooperative education program. By the end of the academic year of 1976-77, over 200 students completed applications requesting work assignments, and 41 students were placed. Among them, 18 students participated in alternating (full-time) assignments, and 23 were parallel (part-time) co-op students (UNT: Center for Cooperative Education, 1977).

Many of the placed students came from the College of Business and were majoring in accounting, general business administration, marketing, and finance, but some students came from the College of Arts and Sciences and were majoring in arts, chemistry, biology, psychology, and sociology. All of the placed students were very receptive, followed the rules and regulations of the program, and completed their academic and professional responsibilities without any problems. Some upper level students expressed their intention of delaying their graduation to get more professional experiences (UNT: Center for Cooperative Education, 1977).

Development of the Employer

Without having a job developer or coordinator, Birmingham developed employers by himself with the help of a part-time student secretary. He spent many hours on the phone doing "sales" calls by notifying the employers in the Dallas-Fort Worth Metroplex of the new program. He visited with them to open relationships by distributing information on the program and some of its federal guidelines. Most of the employers contacted were receptive, supportive, and interested; however, he had to conduct several follow-ups to create rapport with an employer and to verify the job position for the student (J. C. Birmingham, personal communication, April 5, 1989).

It was not so difficult to find employers because the metroplex had plenty of resources, such as regional headquarters for the government and industrial, merchandising, and insurance industries (UNT: Center for Cooperative Education, 1977). The major participant corporations in the first year were as follows: IBM Corp., Glitch Inc., the Environmental Protection Agency (EPA), International Paper Corp., Jones-Blair Paint Corp., Department of Housing and Urban Development (HUD), Department of Health Education and Welfare (HEW), Internal Revenue Service (IRS), and the General Services Administration. The Civil Service Commission in Dallas recommended the program to several governmental agencies for implementation (UNT: Center for Cooperative Education, 1977).

Funding

The cooperative education program was operated by using only federal funds from the Department of Health, Education, and Welfare in the amount of \$35,000 for the establishment of a central office. The contributors for the first federal funding were Barbara Houston and Barbara Jungjohan. Houston, Director of Student Employment Services, brought the information concerning federal funding sources and other information from the national level conference at Southern Illinois University, and Jungjohan, Associate Dean of

Students, compiled and completed the federal grant request forms. In addition to this federal grant, the dean of students office provided necessary equipment for the opening of the office and paid all utility bills (UNT: Center for Cooperative Education, 1977).

Evaluation

No formal evaluation of the cooperative education program was conducted during its first year of operation from September 1976 to August 1977 under Birmingham.

Cooperative Education at the University of
North Texas under Margot Hirsch:
1977-1978

Staffing and Organization

Margot Hirsch took over the position as second director of the program in September 1977. She had earned a bachelor's degree in chemistry from the University of Texas at Austin and a master's degree in student services from the University of North Texas. She was a doctoral student in the Department of Higher Education lacking only dissertation requirements. Like Birmingham, she had internship experience in the dean of students' office and had worked for the woman service program. Hirsch had work experience in various businesses for several years in the Dallas/Fort Worth metroplex. She had also worked for the vice president for student affairs as an assistant before her positioning in the directorship of the program. She served also as the

president of the graduate student council. Because of her educational and professional background, as well as her internship experience in the dean of students' office, she was placed as the second director of the program (M. Hirsch, personal communication, June 7, 1989).

In the early part of October 1978, the dean of students' office held an informal coffee time to introduce the new cooperative education staff members to administrators, faculty members, and students in the Golden Eagle Suite of the University Union Building (North Texas Daily, October 12, 1977). No changes occurred in the upper level administrative organizational structure of the university, so that the same people worked as dean of students, vice president for student affairs, and president of UNT.

This program started in 1977-78, though, with a new director, new secretary, and one additional person serving as coordinator/job specialist. Hirsch and Birmingham, the first and second directors, were similar to each other in many ways: (a) both had almost the same educational experiences, (b) both were doctoral students with only dissertations remaining, (c) both had internship experiences in the office of dean of students, and (d) both majored in the sciences, Hirsch in chemistry and Birmingham in biology. Hirsch, therefore, took a similar approach to that of Birmingham by visiting classes to spread the idea of

cooperative education and its values to the students (B. M. Jungjohan, personal communication, April 20, 1989). She also worked to gain the support of administrators and faculty members of the university and published job openings through the on-campus newspaper.

As this was a new program, the two directors could only work to expand it and inform the university community of its objectives and potential, this being the program's first objective. Hirsch emphasized its usefulness to the students of the College of Business and concentrated on the development of employers for the program. One of her contributions was to hire a full-time job developer/coordinator to contact more businesses and industries in the metroplex.

Debbie Sheridan, its first job coordinator, was very interested in working for the program, having had previous co-op experience at the University of Florida where she received a degree in sociology. She understood what was needed to sell the cooperative education concept and the program at UNT to the area employers, convincing over 70 employers to participate as a result of her work. Darlene Walker, the first full-time secretary/receptionist, kept all records and did much of the paper work (M. Hirsch, personal communication, June 7, 1989).

During the 1977-78 year, the program conducted two large national-level conferences and brought in two well-

known cooperative education scholars. The first of the conferences was the Third National Convention on Work and the College Student held in the University Union Building of UNT during November 1977. Asa Knowles, Chancellor of Northeastern University, which had the world's largest cooperative education program, addressed the concept, values, definition, and issues and problems of cooperative education (Conley & Carol, 1977).

The second convention was the Cooperative Education Conference held on March 22, 1978, at the Airport Marina Hotel and was sponsored by the Federation of North Texas Area Universities and the National Commission of Cooperative Education (NCCE). Roy Wooldridge, President of NCCE, Charles Pogue, President of Daytona Beach Community College in Florida, and Calvin Nolen, President of the University of North Texas, spoke to about 50 presidents of 2- and 4-year institutions from all over Texas, encouraging them to foster the cooperative education programs at all levels of higher education institutions in Texas. Hirsch served as coordinator for this conference (Schwaim, 1978). The main outcome of these conferences was that through these many university community members, including administrators, the faculty, and students, significantly raised the awareness of cooperative education at UNT.

Within the constraints of the insufficient budget, the three staff members worked hard for the development of the

program with increasing support from the divisions of both academic and student affairs. They revised a record-keeping system, created university-level participation, and visited students' places of work (UNT: Center for Cooperative Education, 1980). However, again, their working term was not long. By the end of the academic year, all of the staff members had resigned. As the program was operating mainly with unsubstantial limited federal funds, this kind of discontinuity might bring confusion and endanger the existence of the program. Continuity was maintained, though, through the caretaking roles of Stewart, Jungjohan, and Houston within the dean of students' office.

Development of the Student

Hirsch tried to educate the university community by defining what cooperative education really was and by emphasizing that the program was not simply designed to provide employment for students but also to provide a means of learning enrichment. She focused heavily on the College of Business because many more job possibilities for co-op students existed in its departments than in any of the other disciplines at that time. As the program gained credibility within the university community, faculty and department chairpersons assisted the program in many ways by referring many students and assisting in developing employer contacts and jobs (M. Hirsch, personal communication, June 7, 1989).

Hirsch initiated the quarterly newsletter, "Co-opportunity Knocks," delivered brochures and pamphlets to all campus organizations, and mailed promotional literature to all freshman, sophomore, and junior students to attract them to the program (UNT: Center for Cooperative Education, 1980). Under her leadership, the program revised the GPA requirement for student participation in the program from 2.0 to 2.5 and the academic credit course hour requirement from 30 to 12 hours (UNT: Center for Cooperative Education, 1978).

The student placement did not increase sharply, but 34 students were placed in alternating positions and 16 in parallel positions for a total of 50 placements, a 22% increase over the previous year. In addition to the students placed, over 200 were applying and being accepted into the program. The students were anxious to work co-op into their academic commitments. For the first time the program established the Outstanding Cooperative Education Student Award, with David Sullivan being its first recipient (UNT: Center for Cooperative Education, 1978).

Development of the Employer

During the academic year 1977-78, the program more actively contacted area businesses and industries than in the previous year because of the director's former professional experience in business fields and because of

the work of the new job developer. They established an on-campus employer's institute (seminar) for North Central Texas co-op employers and prospective employers, made more than 20 presentations on cooperative education to employer and student groups, and contacted more than 300 employers to create work places for co-op students (M. Hirsch, personal communication, June 7 1989).

Sheridan was hired, trained, and made responsible for employer contact. She had a special talent for establishing a paper trail by listing all of the names of the employers with whom she met and by describing what had happened at these meetings so that future administrators would know who had been contacted. She distributed all of the co-op related information to the employer and tried to create job positions in the Denton area, as well as in the metroplex (M. Hirsch, personal communication, June 7, 1989).

As a result of such contributions by the director and the job developer, many new government agencies and large corporations participated in the program. The new major employers in the 1977-78 academic year were Mobil Corp., Dr. Pepper Corp., Xerox Corp., Shell Oil Company, Vought Engineering, Rockwell Corp., The Gap Stores, Inc., H. L. Hunt Sales., the Federal General Accounting Office, the U. S. Department of Labor, the National Weather Bureau, and First State Bank of Denton (UNT: Center for Cooperative Education, 1978).

Funding

The program was again granted federal funds amounting to \$45,000 from the Department of Health, Education, and Welfare. The university also provided \$17,619 through the dean of students' office (UNT: Center for Cooperative Education, 1978). The total budget for the 1977-78 year was \$62,619 which was spent on staff members' salaries and wages (\$34,000); employee benefits (\$4,500); general office management costs (\$14,331); and communications, equipment, advertizing, office supplies, printing brochures and newsletters, space utilities, and indirect costs (\$3,300) (UNT: Center for Cooperative Education, 1978).

Evaluation

The first evaluation of the program was performed by Bruce C. Stoughton, a professor and the Director of Cooperative Education at the University of Houston on February 1, 1978. The purpose of this was "to evaluate the present program of cooperative education and to advise and recommend procedures and techniques for the future growth and expansion of the program thus enabling an increasing number of students to participate in the benefits of the program" (Stoughton, 1978). The criteria of the evaluation were a summary of activities, a description of the schedule, faculty and academic staff comments, an overview, specific recommendations, and a summary.

The evaluation took most of a day from 10:00 a.m. to after 4:30 p.m. During the first meeting, Stoughton referred to the administrative structure of the program and the staff members' respective roles in the administrative system of the university--Jane Smith, Vice President for Student Affairs; Joe Stewart, Dean of Students; Barbara Jungjohan, Asistant Dean of Students; Margot Hirsch, Director of Cooperative Education; and Debbie Sheridan, Student Job Development Specialist (Stoughton, 1978).

The evaluator also met Marvin Berkeley, Dean of the College of Business, through the guidance of Hirsch, and developed his strong commitment to the program from this encounter. At noon a luncheon was provided for him and President Nolen along with vice presidents, deans, and assistant deans of the univeristy. While there, Stoughton answered many questions, mainly concerning the operation of the program and the cooperative education activities of other institutions (Stoughton, 1978).

After lunch Stoughton discussed the issues and problems of the program for liberal art students with Jim Pearson, Dean of the College of Arts and Sciences. Stoughton also exchanged ideas about the possibility of creating the cooperative education program for future teachers with James Muro, Dean of the College of Education (Stoughton, 1978).

In the conference with Jungjohan, Hirsch, and Sheridan, topics discussed included the granting of academic credits,

the program's organizational structure, the evaluation of student performance, employers' seminars on the campus, the coordination of graduate placements, and other practical issues within the program (Stoughton, 1978).

With only a day's evaluation, Stoughton pinpointed a very critical problem--the reluctant support of the program by faculty members, which was regarded as the most important factor for the sound development of any cooperative education. Stoughton also provided some significant recommendations which guided the program to its rapid growth afterward. These major recommendations included the expansion of the program to the college of education as a means of teacher-aid co-op, the administrative structural change of the program from the division of student affairs to academic affairs, a development of funding sources other than federal grants from academic and student affairs (Stoughton, 1978).

These three major recommendations were all accomplished by the program during the next five years and played a very important role in the program placing more than 1,000 students in major-related businesses and industries.

Cooperative Education at the University of
North Texas under Ron Lutz:
1978-1979

Staffing and Organization

After Hirsch left the program in July, 1978, Jungjohan worked for two months as an interim director of the program. On the one hand, she continued the progress by advertising the co-op positions several times in the campus newspaper, and on the other hand, she searched for a promising future director by publicizing the position in nationally distributed higher education and student work-study related publications (B. M. Jungjohan, personal communication, April 20, 1989).

Ron Lutz, the next director of the program, received a B.B.A. degree majoring in general business and minoring in political science at Western Michigan University. He completed his M. A. degree in the Department of Counseling and Personnel at Western Michigan University. He also possessed professional experiences, including coordinating and counseling in the offices of the Student Employment Referral Service and Financial Aid at Western Michigan University (R P. Lutz, personal communication, July 24, 1989).

Unlike the two former directors, he was neither a doctoral student nor an intern in the office of the dean of students. He was simply looking for employment and had a good sense of the responsibilities of a full-time program

director because of his working experiences in the division of student services. He discovered the vacancy through one of the nationally distributed magazines.

At the time of his appointment by Jungjohan and Stewart as the third director of the program, Lutz was the youngest director and the first one from outside of Texas. His term was successful, and he contributed significantly to the program in its developmental stage. According to Dianne Altenloh, who worked as a full-time secretary under him,

Ron was an inspiring leader and he could help people do better things than he/she has ever done before. He was a person who made things happen and a dynamic person with never-stopping energy. He was a kind of man who could make a whole picture together with pieces of paper. I learned as much from him as I have ever learned from anybody in my life. The most valuable thing for him was that he was a wonderful delegator for the program. (E. D. Altenloh, personal communication, June 15, 1989)

Because of his rich professional experience in higher education institutions, he knew many ways to shape up the program and renovate forms and procedures.

Lutz described himself, UNT's third program director, as one striving to achieve three objectives: (a) securing funding, (b) increasing credibility within the university, and (c) bringing many students into the program. To secure

funding, he tried to gain support for the university by visiting Austin and working with the Texas State Government and the Higher Education Coordinating Board to get credit hour support and funding for students' internship experience. To increase its credibility in UNT, he worked to bring support from administrators and deans of the university, such as Howard Smith, Acting Vice President for Academic Affairs; Marvin Berkeley, Dean of the College of Business; Jim Pearson, Dean of the College of Arts and Sciences; and James Muro, Dean of the College of Education. To bring students to the program, Lutz talked with them in the classroom, in group meetings, and individually to emphasize the program as a means of classroom enrichment and as a working experience (R. Lutz, personal communication, July 24, 1989).

Lutz's staff included Barbara Houston as full-time coordinator and Dianne Altenloh as full-time secretary. Houston had much professional experience in the field of student work-study programs and affiliated herself with many professional organizations by serving as president, vice president, executive committee member, secretary, and treasurer on national and regional levels. She was a recipient of the 1977 Award of Merit at the National Association of Work and the College Student. She also received a 1978 Service Award at the Southern Associate of

Student Employment Administration (UNT: Center for Cooperative Education, 1979).

During the 1975-76 academic year, she participated in the preparation work for the establishment of the program along with Jungjohan and Stewart. She had worked for student employment services as a director until she moved to the cooperative education program, and after becoming its coordinator, she developed employer contacts and external support. She formalized a list of employers, made audio-visual presentations, and sent updated co-op-related information to develop new employers (B. Houston, personal communication, July 6, 1989).

Altenloh was hired by Lutz in February 1979 as a full-time secretary. She had earned a Bachelor of Arts degree in English at the University of Houston and had worked for several businesses and educational institutions in Texas before obtaining this position. One such position was as technical writer and editor at TRES Computer System, a software computer company in Dallas. She had also worked for the Aldine Independent School District as a substitute teacher (E. D. Altenloh, personal communication, 1978).

Although she had no experience with co-op, Altenloh was familiar at least with what cooperative education is because her husband was a participant in the program while in the Department of Chemistry at the University of Houston. Through cooperative education experience, he had changed his

field of study after discovering what he truly wanted to pursue (E. D. Altenloh, personal communication, June 15, 1989).

As a result of the contribution of these three outstanding full-time staff members; the program was at a turning point; it began to find its own way, not merely depending on the office of the dean of students and student employment services but growing a sense of self-supporting confidence by achieving this. The program created three audio-visual presentations: one for the student, one for the employer, and one for the faculty. It also developed a new employee orientation manual, a student learning objectives manual, a multi-session presentation on "How to Help Yourself Find a Job," and a mailing list of students who were eligible to participate in co-op. The program also initiated the graduate cooperative education, and established the Cooperative Advisory Committee which was composed of students, administrators, faculty members, and employers (UNT, Center for Cooperative Education, 1980).

As a result of these various new approaches, along with good leadership and a capable coordinator and secretary, the cooperative education program began to spread rapidly into the internal and external groups of the university. The number of applicants increased, more students were placed in jobs, and professors began to talk about cooperative education to their students saying, "Why don't you check

into the co-op program"? or "That's what you need" (B. M. Jungjohan, personal communication, April 20, 1989).

After Houston left the program to go to the University of Texas at Arlington in July 1979, Lutz took responsibility for the Texas Cooperative Education Association's Annual Conference which was held on the campus during October 10-13, 1979. The conference brought approximately 40 employers to the campus in addition to many faculty members, deans, and administrators of higher education institutions in Texas. They participated in a series of workshops and meetings and shared ideas, problems, and issues (E. D. Altenloh, personal communication, June 15, 1989).

Altenloh referred to one of these conversations: She and Lutz were so happy because they had placed 34 students during that semester, passing their goal of 28; therefore, she answered proudly when other co-op staff members from different institutions asked how many students had been placed through the program. However, her pride became disappointment when a co-op staff member at Texas A & M University stated they had placed 300 students in jobs with only two full-time and one part-time staff member. She was surprised, but she decided to bring the program up to the level of that of Texas A & M University. She also realized how large the co-op program could be, but until that point she had made no comparison with other programs (E. D. Altenloh, personal communication, June 15, 1989).

That conference event led Altenloh to launch a regional and national level of professional cooperative education involvement. However, once the conference was over, Lutz left the program for a new position in Fort Worth. Only Altenloh continued, becoming the first full-time staff member in the UNT cooperative education history who worked for more than one academic year. She had also played an important role in the program since 1979 by helping to initiate new staff members.

Development of the Student

The outcome of excellent leadership and hard working staff members during the 1978-79 academic year was the result of strong commitment from all academic discipline areas and the significantly increasing number of co-op students. Marvin Berkeley, Dean of the College of Business, expressed strong support for the program in a letter to Lutz by stating the following:

We are able to provide four quarters (4/4) release time on the part of four faculty members from the business faculty to assist with the following: (a) academic advising for students concerning cooperative education in relation to their degree plans; (b) on site visits by faculty members to employers; (c) evaluations of co-op students regarding their work/learning experiences; and, (d) attendance at training sessions about

cooperative education. (M. H. Berkeley, personal communication, January 5, 1978)

Jim Pearson, Dean of the College of Arts, also supported this by saying:

The College of Arts and Sciences has not traditionally met true cooperative education models, but our college is committed to the needs of our students, and I have ample support in our college to assure you that co-op does have merit for students pursuing their career objectives within our college. (J. B. Pearson, personal communication, December 20, 1978)

Even though the college of education did not participate in the program at that time, James Muro sent his support: ". . . one of my major objectives in the college is to provide cooperative education experiences for as many of our majors as described in such a program" (J. J. Muro, personal communication, December 6, 1978). He also emphasized the values of co-op as a means of enrichment of the classroom learning by writing, "I have long been convinced that prospective teachers need an experimental base to make their university coursework meaningful" (J. J. Muro, personal communication, December 5, 1978).

In addition to each of these college deans' strong commitment to the program, faculty members were also very supportive by keeping close personal relationships with its staff members in the morning or lunch time while having a

cup of coffee, many faculty members and faculty coordinators often stopped by the office and talked about the co-op program, matters concerning placed students, and other concerns of the program . This kind of closeness with faculty members provided encouragement to all of the program's staff members (E. D. Altenloh, personal communication, June 15, 1989).

As a result of such wide support from the academic division, the percentages of completed student applications increased, and the total number of placements skyrocketed in the third year of the program. The total number of students who completed their application forms increased more than 50% from 200 to 343. New placements during the academic year 1978-79 increased more than 300% (from 30 to 106), and total student placements increased 252% from 50 in 1977-78 to 126 in the 1978-79 academic year. Among the 126 placements, 69 were in the alternative (full-time) program, and 57 were in the parallel (part-time) program (Lutz, 1979).

The total amount of earnings from these placements was approximately \$195,000. After working 1,000 clock hours in a supervised work/learning position, 26 students received student earning certificates. Stephen Crozier, whose major was Computer Science Information and who worked for Sun Oil Company, was selected as the Outstanding Cooperative Education Award recipient of the year and was commended

during the University Honor's Day in April 1979 (Lutz, 1979).

Development of the Employer

In addition to strong commitment from the academic side of the University, the program also brought significant support from many departments of the student services division. Much of that support came from John Brooks, Director of the Career Planning and Placement office at UNT. Whenever employers came to the campus through his office, Brooks did not forget to ask the co-op staff members to make contact with the invited employers who might have positions for the students. He also discussed his experiences, techniques, and approaches to employer development with the co-op staff members (E. D. Altenloh, personal communication, June 15, 1989).

Altenloh said that Brooks' contribution to her and to the program was how he taught her to make better presentations and to make the employers friends and also by providing the program with his vast store of experiences. He invited the staff members to one of the placement association meetings which was one of the largest organizations of its kind in the region, having hundreds of employers. He introduced her to employers and taught her how to use professional organizations to the benefit of the

cooperative education program (E. D. Altenloh, personal communication, June 15, 1989).

One of the main reasons for Brooks' strong support of the program was that he had realized the importance of the co-op type educational approach of career-related practical experience for bachelor's candidates when they applied for jobs in their future careers. His thought was represented in his supportive letter to Lutz:

Week before last I was attending an MBA Recruiting Conference in New Orleans, and it became loud and clear to me that more and more of the employers are seeking MBA candidates who have had career-related work experience . . . so far as bachelor's candidates are concerned there is little doubt in my mind that any bachelor's candidate who had career-related experience is much more acceptable to the employer. (J. M. Brooks, personal communication, December 12, 1978)

From her former working experience in the program as a coordinator, Houston explained how to build a bridge between students and employers. Basically, two approaches were necessary to connect them. The first was bringing students into the program and trying to match listed working positions. In order to do that, she visited classrooms to transfer the idea of cooperative education to the students using presentation aid materials such as brochures, fliers, and balloons and then by inviting

students to the office of the program to counsel them on their career objectives. After putting together all of the requirements such as resumes, transcripts, and other files, she showed them job opening listings. After matching one or two positions, she scheduled interviews for students with representatives of the businesses. However, this process did not always work as planned (B. Huston, personnel communication, July 6, 1989).

If it did not, she then tried to use other approaches by developing the employer first and then by visiting each one to match listed prospective students. To develop positions she identified targeted employers; then she sent letters and brochures to the businesses or visited some employers' conferences to contact potential student employers. By appointment, she then visited them to explain by using audio and video tapes the possible benefits to the participating businesses. Whenever possible, she asked the employer to allow her to accompany other people in the company, such as department heads, high-ranking administrators, and other key decision makers (B. Houston, personal communication, July 6, 1989).

As a result of such support from other departments and staff members, the number of employers who had actively participated in the program increased from 42 to 171, even though the program terminated contact with 106 inactive employers (Lutz, 1979).

Funding

Compared to the rapid development of the program during its third year in 1978-79, the funding from the federal government was not granted. At the end of the previous year, the program was informed, " . . . your application seeking support under the Cooperative Education Program C, Title VIII of the Higher Education Act was not selected for funding this year" (Department of Health, Education, and Welfare: Office of Education, 1978).

Because this was not predicted, all of the staff members were surprised and disappointed. The program was in turmoil, and its existence was in danger; however, thanks to the help of administrators of the institution, the program received \$28,000 for director and secretary salaries. The university also provided for the expenses of facilities and operational money to maintain the program at its 1977-78 level. As mentioned earlier, faculty support of each discipline area was significant by releasing time equivalent to 1 1/4 position with a dollar cost of approximately \$33,000 (Lutz, 1979).

Like the clear sky after rain, this kind of hardship made the program stronger and encouraged its being self-supportive by assuring continuation without federal money. In addition, the long-range strong commitment from the divisions of Academic Affairs and Student Affairs was

created. Both divisions promised an increase in funding over the next several years.

Evaluation

Because of financial limitations, the program could not invite external evaluators to the program. But the evaluation of the program in 1978-79 was performed by the Advisory Committee for Co-op at UNT which was formed in 1979. The main objectives of the committee were to help determine and achieve the objectives of the program, to give advice on courses of study, to act as a diplomatic corps for program expansion, to create goodwill in the community, and to help evaluate the program and establish standards (UNT: Center for Cooperative Education, 1979).

The director of the program became the chairman of the advisory committee, and the members were four of the faculty, four administrators, three employers, and two students. Each member was asked to indicate one of the following five categories: 1 - Poor, 2 - Fair, 3 - Satisfactory, 4 - Very good, and 5 - Outstanding.

Question areas and mean scores of the evaluation were as follows:

1. strengthening a university commitment to career-oriented and work related curricula through the Cooperative Education Program (2.75);

2. contributing in a positive manner to the development of the student (3.47);

3. developing a strong university-wide cooperative education program having an effective, efficient internal operation as a foundation (3.08);

4. developing faculty-filled, off-campus learning experiences by broadening student placement (3.93);

5. raising the level of awareness of all persons, both on and off campus, concerning the mechanics and benefits of cooperative education employment (3.23); and,

6. developing a sense of direction for cooperative education at UNT in order to create an efficient responsive program for students now and in the future (3.36) (UNT: Center for Cooperative Education, 1979).

This evaluation was done by a limited number of advisory committee members of the program using very simple statistical instruments, as well as only a limited area of the program. So, the result of the evaluation was very questionable in terms of its validity and reliability. However, its value was as the first and the only evaluation performed by the Advisory Committee of the program involving various administrators, faculty members, and students of the institution at the same time, saving money that would have been spent for the outside evaluators.

Conclusion

The chapter studied the establishment, organization and staffing, student and employer development, funding, and evaluation of cooperative education at the University of North Texas from 1976 to August 1979.

The program was established on the first day of September 1976 in the office of the dean of students to help some of the student body by combining the existing internships in the academic departments with student employment services by major staff members of the dean of students office.

Even though there was a problem with a shortage of students to fill the positions in the very first semester of the program, it had no critical problem in recruiting the students and placing them in the business and industrial working places because of the rich resources of the employer's pool in the Dallas/Fort Worth Metroplex, having various government agencies, regional and national headquarters of many companies, and other high technological industries.

The biggest problem was insufficient funding for the program. In the third year, it experienced severe hardship because the federal government did not provide any money. The program overcame this with the help of administrators of the university and faculty members of the academic

departments as well as hard work by staff members and leadership by directors which gave much support.

Such limited funds resulted in a high turn-over rate of staff members during the first three years of the program. In addition to the staff members being paid poorly, they did not even know whether the program would continue into the next academic year. Because of such uncertainty, the program had to start each year with totally new staff members. For three years from 1976 to 1979, only one full-time staff member continued her work into the next semester.

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CHAPTER 5

A DEVELOPMENT OF COOPERATIVE EDUCATION AT THE UNIVERSITY OF NORTH TEXAS UNDER GEORGE SCOGGIN: 1979-1983

Introduction

This chapter describes the development of cooperative education at the University of North Texas under the directorship of George Scoggin during the academic years 1979-80 - 1982-83 based on organization and staffing, development of the student and the employer, funding, and evaluation of the program.

Through the historical-descriptive approach, the chapter tries to provide answers to the following questions: (a) how did the program change its location in the university administrative system?; (b) what was the impact as a result of reporting system change?; (c) who worked the program and what were their contributions to it?; (d) how many students were placed in jobs and how were they placed?; (e) how were employers developed and how was the program evaluated?; and (f) how much and how was the program funded?

Staffing and Organization

Since its establishment in 1976, the cooperative education program at UNT underwent no main administrative changes in the university system. However, during the four years of Scoggin's directorship from September 1979 to August 1983, many significant changes in the program took place influenced by the inconsistent leadership problem of the institution.

In August 1979, the position of the vice president for student affairs was eliminated from the university administrative organization, and as a result, the dean of students directly reported to the president of the university (UNT: Planning Office, 1979). Whether the dean of students reported directly to the president of the university or reported to the vice president for student affairs, the program of cooperative education at UNT belonged to the student division.

In May 1980, however, the organization of the university administration system was restructured. As a result of the change, the dean of students reported to the vice president for academic affairs (UNT: Planning Office, 1980). It was an unusual system in a large comprehensive university with almost 20,000 students at that time. However, in such a university system, the cooperative education program had some advantages and operated more effectively by attracting commitment from the academic side,

as well as keeping a good relationship with the dean of students who supervised the program. Under this system, the program also worked with other departments in the student division and created its operating funds from the student service fee.

After the passing of more than a year, another change occurred in the program. In October 1981, the dean of students announced the movement of the cooperative education office from the University Union building to the second floor of the Health Center (Garner, 1981) (see Appendix K). The move was not welcomed by the staff members of the program. Altenloh remembered that time saying, "It was horrible, dirty and dark, as well as not being in the center of the university. Staff members thought it was the end of the program. That year was also a final year of the federal grant" (E. D. Altenloh, personal communication, June 15, 1989). But the staff members accepted the reason for the move and tried to manage the building and the program well.

The main reason for the move, according to the on-campus newspaper, was that there were not enough rooms for cooperative education on the floor of the University Union because the program was continuously expanding the number of staff members along with student traffic (Garner, 1981). The relocation of the program provided more space with six rooms, but it was less accessible to students. The move also resulted in the loss of some advantages, such as being

close to Student Employment Services and the Career Planning and Placement Office which had helped the program to find quality employers. On the other hand, the program could get out of being a sub-function or extended program of these organizations; the program was provided with the grounds for a self-supporting atmosphere.

In November 1982, approximately a year later, the program faced the largest change in its six-year history. Under the leadership of Alfred Hurley, the new Chancellor/President of the university, the administrative organization of the institution promoted reform. As a result, the program began a new era as a decentralized administrative system. The program was supervised by the associate vice president for academic affairs along with admissions, the registrar's office, the Dallas Center, the libraries, and the Center for Instructional Services (UNT: Planning Office, 1982) (see Appendix L).

This administrative change in the program was not done by chance but as an accomplishment after long consideration by many co-op-related administrators and staff members in the program from its earliest stages of development in the office of the dean of students. According to the plan of action of the dean of students office, which was established in 1978, the need for the program's placement under the division of academic affairs with a decentralized administrative system was discussed in order to get more

support from the academic department and its faculty members. The plan of action stated:

The need for decentralization is a natural progression in any effective organization. With the growth of our program, we now feel our unit can provide the necessary springboard for effective, extensive use of additional personnel (faculty) in the program. Through active interaction with numerous North Texas professional staff, the following reasons have been determined as viable for decentralization:

1. Heart of the program is its academic thrust and academic (learning) potential,
2. Departments have ready-made contact through alumni, advisory counsels (both on and off campus), consulting work, and other on-going programs.
3. Expertise for evaluating successful experiences is in the departments.
4. Training of new staff will require a much narrower scope in that responsibility will be over a smaller area with established academic expertise.
5. The faculty is kept abreast of innovations as students return to the classroom from their cooperative experiences.
6. As co-op programs are developed, the teaching faculty can maintain a closer relationship with

business, industry, and professions. (UNT: Center for Cooperative Education, 1978, D-1)

This separation of the program from the dean of students' office can compare with the nature of human beings. When they are young, they need some kind of assistance from their parents, siblings, and other caretakers who nurture and educate to help the young adjust to society. Without such assistance for some period of time, they might lose themselves in a competitive society. Likewise, the program was born and has grown in the environment of the dean of students' office by getting help from student employment, career planning and placement, and staff members in the dean of students' office. In 1982, however, the program had grown to be self-supporting with five full-time staff members, two part-time student secretaries, and 150 active employers.

In addition to this natural progression of the program's movement from student affairs to academic affairs in the university system, the leadership of Alfred Hurley played a significant role in the change. According to Larry Bowman, Director of Cooperative Education, Chancellor Hurley came to the university at the right time for the program's rapid development. When the new chancellor came to the university, he attended the faculty senate meeting, and faculty members asked him questions, among which was the new leader's attitude about the future of cooperative education.

At that point, he had no answer (L. G. Bowman, personal communication, August 6, 1989). After the meeting, Hurley asked the chair of the Advisory Committee to look at cooperative education in terms of where it was and what must be done in order to improve the program (A. F. Hurley, personal communications, October 17, 1989).

As a result, James Muro, one of the committee members, studied this and reported to the chancellor. In his "Short-term Cooperative Education Recommendation" which was reported in April 1982, Muro recommended as follows:

The director of the program must report to the office of the Vice President for Academic Affairs rather than Student Affairs if this program is to be viewed as important by our faculty. Moreover, the new Vice President must actively support this program if it is to grow. A potential problem may develop here if student service fees continue to be the source of support for the academic program. The program must have academic "clout." (Muro, 1982, p. 2)

Muro explained that the main reason for his suggestion to the chancellor for an administrative organization change in the program was to make it more visible in academic affairs rather than in student affairs which had so many branches (J. J. Muro, personal communication, September 12, 1989). Hurley thought that getting support from the faculty was the most important issue for the program, so placing it

in academic affairs made the most sense to him (A. Hurley, personal communication, October 17, 1989). He became a strong supporter of the program by adding a sense of credibility to it, and he recognized the value of the program to the institution by describing how it directly supports the important objectives of the university which makes it possible to interact with the business community in the region, help students promote their classroom learning with very necessary hands-on experiences, and provide a sense of what the world of work looks like (A. F. Hurley, personal communication, October 17, 1989). Therefore, Hurley's leadership and Muro's study influenced the relocation of the program to academic affairs.

The result of this movement influenced the rapid development of the program later, such as making the program more visible to the university members and upgrading its position in the university system. One quick response came to the program one year later in May 1983 when members of the Task Force on Mission and Goals developed a list of goals for the institution, "Expand and Improve the Program in Cooperative Education," was placed in the institutional policy manual as the seventh item with the explanation of "the University should pay special attention to the academic integrity of cooperative education courses. The use of cooperative education should be encouraged in areas where it is appropriate" (UNT: Planning Office, 1983, p. 22).

In the 1979-80 academic year, the program maintained one director, two full-time coordinators and a full-time secretary.

In September 1979 Scoggin succeeded Ron Lutz as the fourth director of Cooperative Education at the University of North Texas. Scoggin received a high school diploma and joined the Navy from 1961 to 1964. Later he earned each of his degrees, bachelor and master of arts in communication and MBA in general management from the University of North Texas. Before becoming the director of the cooperative education program, Scoggin taught courses in Business Speaking (1975), Business Communications (1976), Business Management (1977), and Business Reports and Letter Writing (1979) at the University of North Texas as a graduate teaching fellow. He also worked as a management consultant, apartment manager, electronic parts and components salesman, and production control coordinator for various corporations, including I.B.M. Corp., General Dynamics Corp., Summers Electric Inc., and Texas Instruments, Inc. (G. R. Scoggin, personal communication, May 9, 1989).

When the director's job opened, Scoggin felt that the position fit his education and experience background well. He had learned about electronics through means of practical experience while in the Navy, and he realized that on-the-job experience was important to the enrichment of classroom learning. Though the competition among the applicants was

strong, Scoggin was chosen on his nearly perfect academic record and strong professional background and partly because of the strong support from his former teachers in the College of Liberal Arts and the College of Business Administration. In October 1979, Scoggin became the fourth director of the cooperative education program (G. R. Scoggin, personal communication, May 9, 1989).

Because Scoggin spent many years on this campus as a student and instructor, he knew many faculty members and administrators. Every semester he visited and contacted almost all of the department chairs, deans of colleges and schools of the university, and co-op-related administrators (G. R. Scoggin, personal communication, May 9, 1989).

Through his good interpersonal communication skills, Scoggin had little problem meeting people on and off campus. One problem he did have, though, was in his authoritarian style of leadership in his very early period of directorship which he was exposed to while employed at General Dynamics Corporation. He was accustomed to the all male, ex-military environment of the defense industry, and without realizing it, he used very strong leadership to get the job done. That kind of leadership was not appropriate for the new environment of an academic institution. After accepting the advice from Stewart and Jungjohan to be a little less hard on the staff members, he reviewed, adapted, and changed his communication theories and management style. He also

studied psychology and sociology, specifically, interpersonal relationships and value theories. His concentration on these factors actually helped him to better perform his job as director (G. R. Scoggin, personal communication, May 9, 1989).

Jacklyn Kelly worked for the program as a coordinator from August 1979 to February 1980 after being hired by Lutz. As a coordinator, she helped the program by interviewing applicants working with employers to develop positions for students, conducting workshops on resume writing and interviewing techniques, and evaluating students' job performances (J. Kelly, personal communication, August 15, 1989).

Altenloh was promoted to coordinator of the program in October 1979 after working for eight months as secretary. Because of her liberal arts academic background in English, she helped to recruit students majoring in the liberal arts and to develop work positions for them. She also contributed to the program by creating workshops on resume writing and interviewing techniques for students. Her strengths were "in-depth knowledge of the practices and procedures of the registrar's office, an understanding of the business world, and her excellent communication skills" (UNT: Center for Cooperative Education, 1982, p. 12).

Altenloh attended various workshops, professional conferences, and training programs during this period of

time, such as the Rocky Mountain Center for Cooperative Education--Southwest Placement, the Washington Center for Learning Objectives Seminar, the Southern Center for Cooperative Education Seminar, the Upper Midwest Institute for Cooperative Education Association Annual Conference, and The Texas Cooperative Education Association (TCEA) Annual Conference. She served for TCEA as a secretary in 1981-82 and became president of that association for the 1982-83 fiscal year (D. Altenloh, personal communication, July 13, 1989).

Kim Maurer worked as secretary from October 1979 to April 1980. She was a part-time student majoring in secretarial science and a full-time secretary for the program, a job that she was known to do well because of good typing and shorthand skills. She resigned in a short time, though, when her husband graduated and they moved to Oklahoma City.

Janie Lewis became the next coordinator from August 1980 to July 1981. Her main contributions to the program were that she visited and communicated with many residence hall students the idea of cooperative education. Also, she attended freshman orientation meetings to inform them of the program. Her concentration in the areas of accounting, personnel administration, and industrial technology aided her in placing many students in local accounting firms and Big Eight Accounting firms in Dallas. She left the program

in about a year to accept a position as director of West Hall on the UNT campus (J. Lewis, personal communication, September 7, 1989).

Loveta Enis succeeded Maurer as secretary in April 1980 and was promoted to coordinator in September 1981. She was an excellent telephone communicator and had very natural and positive social skills (UNT: Center for Cooperative Education, 1982, p. 15). She knew personally or shared a common friend with many of the employers in the Dallas/Fort Worth Metroplex, and with her good social skills, she brought them to the program. She worked well on-campus and off-campus with co-op students by matching their applications to job specifications and evaluating the students on their job performances. (L. Enis, personal communication, September 7, 1982).

In September 1981 the program expanded its organization by adding one more coordinator; therefore, in the 1981-82 academic year, the program had a director, three coordinators, and a full-time secretary.

Karen Goetschius was hired in October 1981 as a coordinator. Goetschius was known as an excellent and very productive coordinator of the program. She was highly self-disciplined and knew how to organize her duties and responsibilities each day (E. D. Altenloh, personal communication, July 13, 1989). Altenloh praises her by saying that she was dynamic, energetic, and a team worker.

She did exactly what the program needed by going out to meet employers, developing jobs, and then helping students (E. D. Altenloh, personal communication, July 13, 1989).

Development of the Student

Business placement grew more rapidly than any other area during the four years of Scoggins' directorship of the program. Since he had worked in business, studied business and also taught some business courses, it was not difficult for him to understand how the business world worked and what would be important for business people to know.

According to Scoggin, businesses are always looking for good people. However, they also have to hire them without really knowing whether they will be good employees or not; and then, after a certain period of time, some of them have to be dismissed. In order to avoid such a problem, businesses look for opportunities to get to know their prospective employees before they make a final decision. Through cooperative education, they can do this by seeing how the students actually perform in the workplace, how quickly they learn, and how they fit in with the rest of the organization (G. R. Scoggin, personal communication, May 9, 1989).

It was difficult, however, for Scoggin to sell the cooperative education idea outside of the College of Business and the Department of Computer Science. It was the

most difficult in the College of Arts and Sciences.

Scoggins mentioned that Altenloh did more for the liberal arts students than he did because she had a background in English (G. R. Scoggin, personal communication, May 9, 1989). According to Altenloh, she studied basic arguments on learning to make decisions, learning how to live in society, and how to communicate. Then she went back to the employers and explained the concept of a good broad liberal arts education for the benefit of the corporation (E. D. Altenloh, personal communication, July 13, 1989).

Many various activities were used to develop co-op students under the leadership of Scoggin. Cooperative education was available for elective credit in all departments which were participating in the program. Scoggin made a presentation to the Faculty Senate to gain support for formula funding, as well as to broaden the acceptance of co-op assignments for more academic credits. Staff members provided group experiences in job finding techniques, resume writing, and interview preparation for many students in classrooms, dormitories, and professional clubs. They also made numerous presentations to student organizations, classes, and prospective student groups, and advertized in the campus newspaper (G. R. Scoggin, personal communication, May 9, 1989).

As a result of such contributions by the staff members, the program expanded continuously into new academic

disciplines, such as computer science, elementary education, secondary education, English, physics, political science, history, public administration, real estate, insurance, and production, and operation management. With this, the number of students placed increased year by year: in 1979-80, the total number of placements was 215 with 71% more than in previous years of which 125 student placements made \$425,000; in 1980-81, 291 students were placed and earned \$640,000; in 1981-82, the program placed 395 students and earned approximately \$860,000 (Scoggin, 1980, 1981, 1982). In 1982-83 the placement number passed the 500 mark with 591 students placed in various working positions (UNT: Center for cooperative education, 1983).

Development of the Employer

Staff members of the program attended various professional organizations to expand their work knowledge and to develop a good relationship with the participating academic and business members. The program maintained its membership in the American Society for Training and Development, the American Society of Personnel Administrators, the American Society for Engineering Education, and the American Production and Inventory Control Society (Scoggin, 1982).

The program also worked with the metroplex chapters of the Society for Administrative Management, the Data

Processing Managers Association, the Society for Technical Communications, the Southwest Placement Association, the International Television Association, the Association for Computing Machinery, the Public Relations Society of America, Sales and Marketing Executives, and others (Scoggin, 1982).

In order to develop more employers, the program made presentations to employers and professional organizations, including the Denton Personnel Association and the American Production and Inventory Control Society and more than 80 individual employers in the 1979-80 academic year alone (Scoggin, 1980). Annually, the program co-sponsored Career Day with the Department of Career Planning and Placement (Scoggin, 1980). Through this event hundreds of students had the opportunity to meet representatives from local and national companies and were given up-to-date information about current employment needs.

As the result of these different approaches to developing employers, more and more participated in the program. In 1979-80, co-op agreements were established with 54 new employers, including Austin Industries, Enserch Exploration, General Dynamics, Otis Engineering, Sun Production, The Western Company, and the U. S. Department of the Treasury. During that academic year, the program was launched by the Mostek Corporation, with programs competing on a nationwide basis for two accounting internships and

winning both positions. Mostek expressed its pleasure with the performance of students from the program. The total number of employers was 156 for that year (Scoggin, 1980).

In 1980-81 the number of participating employers decreased by 13% from 156 to 135 as a result of the termination of some inactive employers. Among the 135 participating were the U. S. Department of Army Corp of Engineering, Mid America Corp, Fort Worth Correctional Institute, News and Information Service, Texas Woman's University, Southwestern Bell, Dow Chemical, and Dillard's (Scoggin, 1981).

In 1981-82 the total number of employers was 150, gaining 11% more than in previous years. Some of them were NCTT Corp., Texas Oil and Gas, National Supply Corp., NCH Corp., L and N Land Corp., Southern Union Corp., and Metroplex Marketing Agency (Scoggin, 1982).

Because of the large number of available places to work in the Dallas/Fort Worth metroplex area, it was possible for the program to select only those employers who demonstrated a sincere interest in the educational assistance of the participating students and who openly supported the idea of cooperative education as a means of enriching classroom learning through on-the-job practical experience (UNT: Center for Cooperative Education, 1982).

In May 1982 the program surveyed the attitudes of the employers on cooperative education and the co-op program at

UNT. Active employers (135) agreed on the value of the program by expressing their desires to continue participation in it during the upcoming year. Most of the employers showed their intention to expand current involvement by inviting more students pursuing the same major areas of study, as well as providing positions for students in other areas. The participating employers also applauded co-op as a very efficient and inexpensive recruiting tool (UNT: Center for Cooperative Education, 1982).

Funding

Because of the well-prepared federal grant proposal documents by previous staff members under Lutz's leadership, the program utilized \$84,996 in federal funds granted for 1979-80 (Scoggin, 1980). This made it possible to hire and to train two coordinators for the program. In 1979-80 the staff members provided a lengthy and detailed federal grant proposal and received \$80,000 from the Federal Government through the Department of Health, Education and Welfare to strengthen and expand the program in the 1980-81 academic year. (Scoggin, 1980). Scoggin tried to seek other funding sources for the program from the state government and private sectors, including participating metroplex employers; however, none were found.

In 1980-81 staff members made another lengthy and detailed federal grant proposal with additional information. As a result of their hard work and the continuous growth of the program, it was awarded \$76,000 to strengthen and expand for the academic year of 1981-82 (Scoggin, 1981). This award enabled the program to add another full-time coordinator. The award was also utilized as travel money for staff members to attend workshops and professional association meetings in Los Angeles, Tampa, Denver, and Austin and for faculty coordinators to visit student workers at their jobs.

In 1981-82, the staff members prepared and sent a grant proposal to the newly established U. S. Department of Education in the amount of \$1.15 million to speed the development of a comprehensive cooperation education program which would be made available to nearly all academic disciplines. The proposal was not successful, but only by a narrow margin, and they submitted another one with explanations and documentation (Scoggin, 1982).

Since the federal funding was not given to the program in the 1982-83 fiscal year, it once again faced a financial problem. However, Hurley submitted an assistance request to the program through the student service fee. In April 1982 the Student Service Fee Committee in a closed emergency session approved Hurley's request by providing \$76,000 to the program for the upcoming fiscal year. With this

assistance, the program survived and continued its mission without federal funding in the 1982-83 fiscal year; however, all students at UNT were required to pay 25 cents more per semester hour, raising the amount from \$4.25 to \$4.50 (Cavazos, 1982).

Evaluation

There were three evaluations by outsiders during Scoggin's four-year term. The first one was performed during July 23 and 24, 1980, by Charles A. Hulet, a grant officer from New Jersey, the purpose being "to provide information to aid the university in establishing a sound base for future development of cooperative education, to obtain an objective assessment of the program, and because one of the conditions of a Title VIII grant required an independent evaluation" (Hulet, 1980). Criteria of the evaluation included:

1. Why the college undertook a cooperative education program and how it visualizes cooperative education fitting into the overall mission of the university,
2. The commitment of the administration, faculty, and students of the university to the cooperative education program,
3. Program structure and organization; how the organization relates to the sought for goals of the program and the impact that the structure and

organization have upon other functioning units of the university,

4. Program strengths and both existing and potential problems which may have an impact upon the future development of the program. (Hulet, 1980)

The evaluation approach was the same as Bruce C. Stoughton's previous evaluation of the program in 1978 which was conducted by reviewing informative literature of the program and having conferences with administrators, faculty members, staff members, co-op students, and co-op employers; but, this took one more day, involved more people, and pinpointed more shortcomings of the program.

The evaluator pointed out very important findings and recommendations with clear explanations of the issues and problems of the program. These were as follows:

1. A university-wide policy regarding cooperative education needs to be established.
2. Efforts should be made to assure continuity in the cooperative education program staff.
3. A strong and consistent policy regarding the awarding of academic credit must be created.
4. Cooperative education needs to be an integral part of the UNT offering list.
5. The co-op condition needs to be an integral part of the faculty load.

6. Learning contracts should be developed prior to the co-op work period by faculty to ensure academic integrity.
 7. An additional fee for co-op should be considered.
 8. An active Advisory Committee should be created.
 9. Co-op needs more publicity on campus.
 10. The cooperative education staff should be involved in all aspects of off-campus experience.
 11. The co-op program record-keeping needs refinement.
- (Hulet, 1980)

The final overall judgment of the evaluator concerning the program was positive. He said that it was well on its way to being a full part of the university, and the program offered opportunities to both students and employers that other university and co-op programs did not (Hulet, 1980).

Between the 25th and 26th of June 1981 the program was evaluated by Dorothy E. McNutt, Chairperson of the Division of Business at the College of the Mainland, and Bernard L. Hyink, Director of Cooperative Education at California State University at Fullerton (McNutt & Hyink, 1981). Evaluators reviewed the university catalog, the Application for Federal Grants in 1981-82, the Handbook on Cooperative Education (a draft), and other documents on the program before they began to set up interviews with the university administrators, deans, faculty members, co-op staff members, students, and employers. The evaluators also visited working students at

Texas Instruments (TI) and Professional Geophysics. They also held interviews with cooperative education students and their on-the-job supervisors (McNutt & Hyink, 1981).

After spending two days on the campus and in work places, they reported the results of their evaluation. It contained background information, strengths, and shortcomings of the program. They praised its organization within the university system, its strong faculty participation, and its promising external environment. The evaluators pointed out the lack of clear and consistent university-level policy and the need for more faculty involvement, staff member continuity, and publicity in the campus community (McNutt & Hyink, 1981).

Another evaluation was conducted by John Dromgoole, National Commission for Cooperative Education, and McNutt on March 25 and 26, 1982, to assess the current status of cooperative education at UNT and to assess the progress made toward establishing a viable comprehensive program for the future (Droomgoole & McNutt, 1982). The evaluators examined the following four aspects of the program:

1. What specific program development objectives did the co-op staff seek to achieve for 1981-1982?
2. Is there a consensus within the general UNT community as to the purpose of the co-op program? What evidence is there that these purposes are being achieved?

3. What have been the significant accomplishments of the past year?

4. What objectives have been set for 1982-83 in order to ensure the growth of the program? (p. 2)

Because one of the evaluators had analyzed the program only nine months before, the results of were was not very different from the previous one. However, the evaluators praised Hurley for his strong commitment to the program, the faculty and department chairperson for the educational merit of the program, and the confidence of the staff members in the growth and development of the future program (Dromgoole & McNutt, 1982).

One of the unique factors of the evaluation was the assessment of contributions to the program for the benefits of the academic community and the level of integrity of the comprehensive cooperative education program at UNT. One of the evaluators' recommendations was to utilize the computer-based information system of the institution in the development of the employer. Their final judgment was that because of strong and experienced staff members and a new enthusiastic university president, the potential for the program's future development was unlimited (Dromgoole & McNutt, 1982).

Through these three evaluations, the program was judged constructively by exposing its weaknesses in some areas and by glorifying its strong achievements in others. The

program learned new techniques and different approaches from the external evaluators who showed them ways of managing the program more effectively by attracting university-wide support and by achieving a greater number of its goals and objectives.

Conclusion

The most significant change in the program during the period of Scoggin's leadership was the relocation of its reporting system from the dean of students' office to the office of the associate vice president for academic affairs. The movement to the academic side with a decentralization administrative structure resulted in the rapid growth of the program in terms of student placement numbers.

During that time period, one of the characteristics of the program in terms of staffing was the authoritarian leadership of Scoggin in the very early period of his directorship and his personal efforts to overcome this. His such energetic involvement and strong leadership, however, helped the programs' rapid growth in many ways. The contributions of dedicated staff members, such as Altenloh, Goetschius, Enis, and Maurer were noticeable. With such staff members, hard work brought more and more students to the program every year and placed them with qualified employers.

The funding system was secured each year during that time period because of the staff members' well-equipped federal grant proposal and the decision to select Hurley as the new chancellor/president of the university at an opportune time for the program. Adequate funding made possible more evaluations by outside professional evaluators who pinpointed many very important issues and problems, as well as brought new and unique operational approaches to the program.

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CHAPTER 6

A DEVELOPMENT OF COOPERATIVE EDUCATION AT THE UNIVERSITY OF NORTH TEXAS

UNDER LARRY BOWMAN

1983-1988

Introduction

This chapter describes the development of cooperative education at the University of North Texas under the directorship of Larry Bowman from September 1983 to August 1988 based on staffing and organization, development of the students and employers, funding, and the evaluation of the program.

Based on the historical-descriptive approach, the chapter tries to answer such questions as: (a) how was the program improved in the university administrative system?; (b) who worked for the program and what were their contributions?; (c) what were the advantages as a result of appointing the director of the program from a member of the faculty?; (d) what was the increase in the number of working students, and why did this occur so rapidly?; (e) what kind of employers were developed?; (f) how was the program funded, and what was the impact of this?; and (g) how was the program evaluated?

Staffing and Organization

No basic administrative structural change in the program occurred during Bowman's directorship from September 1983 to August 1988. However, the program did not stop improving its standing in the university system. In the fall of 1985, the program proposed the idea of "A Center for Cooperative Education" to enhance its visibility, status, and credibility in the university community and the society, including businesses and industries. The concept of "A Center for Cooperative Education" was formulated by James Muro in his "Report on Cooperative Education in 1982" and other outside evaluators such as Dorothy McNutt, Bernard Hyink, and John Dromgool in 1982-83 (UNT: Center for Cooperative Education, 1985).

The "Center" was needed to reach the goal of 2,000 student placements by 1990 which was suggested by Chancellor Hurley in 1982 and adopted by the Board of Regents in 1984 as a part of the University's Centennial Agenda for that year (UNT: Center for Cooperative Education, 1985). The proposal was accepted, and the program became a Center for Cooperative Education in the fall semester of 1986.

Since Scoggin left the program in May, 1985, Altenloh served as an interim director from May to August 1983. During that time the office of the vice president for academic affairs formed a search committee and received a number of applications (Fulton, 1983). According to Bowman,

there was a strong opinion among faculty members who were involved in the program that it would be helpful if the new director were a faculty member. However, it was not a necessary qualification for the position, and more than half of the applicants were non-faculty members (L. G. Bowman, personal communication, August 6, 1989).

The search committee narrowed the list of prospective directors and sent it to the academic affairs office for final selection. The officers of academic affairs decided on Bowman of the history faculty, and he accepted the position (Fulton, 1983). As a result, the program had the first director appointed from the faculty of the university, and Bowman started his directorship of the program in the beginning of the fall semester, 1983.

Bowman received his B. A. and M. S. degrees in history at Fort Hays Kansas State College and his Ph. D. in history at the University of New Mexico. He came to the university in 1966 as an assistant professor and received tenure and was promoted to the rank of associate professor in 1968. He had taught American history courses every semester, and he published a book in 1976 entitled Captive American and many articles including "Scarcity of Salt in Virginia during the American Revolution," and "Virginia's Use of Blacks in the French and Indian War" (L. G. Bowman, personal communication, August 6, 1989).

When Jim Pearson, Dean of the College of Arts and Sciences, called him to be a faculty coordinator, Bowman was not familiar with the program nor with cooperative education itself, but he accepted the faculty coordinator job and found much value in the program during his term from 1978 to 1983, during which time he also served as chairman of the Cooperative Education Advisory Board. Because of his close connection with the program, some members of the advisory committee and some faculty coordinators suggested to him to apply for the director's position when it opened (L. G. Bowman, personal communication, August 6, 1989).

Altenloh described the value of Bowman as a faculty-originated director of the program by saying that before he assumed the position, the program was largely regarded as a stepchild on the campus, and no one regarded it as a major force in the university system. However, when Bowman, a full-time tenured professor, was appointed director, the program gained an entirely different status within the university community; it began to be respected as a positive and important part of the university, as well as being taken more seriously (E. D. Altenloh, personal communication, July 13, 1989).

Altenloh also stated that another value of Bowman's appointment to the directorship was that he brought national recognition because he was the first director of cooperative education in the nation who maintained a faculty position

and taught each long semester. Since then, this approach has been adopted by other institutions (E. D. Altenloh, personal communication, July 13, 1989).

Bowman was a respected professor, and he earned respect over the years from his professional colleagues, many of whom were administrators of the university. Even though he had never been directly involved in the management of the program, he brought to it ethical perspectives, and he was able to establish a sense of common ground with all staff members and employers participating in the program (E. D. Altenloh, personal communication, July 13, 1989).

Bowman's management style used a Pragmatic-Functional model which was outlined by Miller in 1987 to build his staff with very competent people who could manage the requirements of the program, reach agreement on what were the responsibilities of each staff member, provide necessary materials and a good working environment, and avoid interfering with the work of their colleagues as much as possible. He did not like to hold staff meetings because the program did not have many members, and so he preferred to talk to them individually. He also believed, for the most part, that his staff could perform independently and expected them to know what they needed to do and then let them do it (L. G. Bowman, personal communication, August 6, 1989).

One of the contributions of Bowman was his creation of positive communication channels with academic administrators and faculty members in the departments. He maintained a good personal relationship with Jack Davis who was the Associate Vice President for Academic Affairs and Bowman's immediate supervisor.

Davis was a supporter of the program and tried to help by asking about its needs and examining its problems. He regarded cooperative education, basically, as a component of academic affairs which allowed academic credits for students as a result of practical experience in their majors. He also recognized the value of cooperative education by saying that "it is very beneficial for us (the university) because it provides a lot of things that we try to do" (D. J. Davis, personal communication, September 14, 1989). He briefly mentioned the value of cooperative education for the university as a means of creating good relationships with businesses and industries, providing good opportunities for the faculty to make contact with people who are in the non-academic world and helping students find information on employment opportunities related to their majors (J. Davis, personal communication, September 14, 1989).

Bowman was able to communicate on a one-to-one basis with deans, department chairpersons, and faculty members by maintaining a level of respectability and acceptability. He contacted faculty coordinators weekly to discuss new job

listings, student placements, and all other day-to-day matters of the program. He also communicated with department chairpersons and faculty members informally, for example, in the University Room during lunch hour, in the library, and at other social events (L. G. Bowman, personal communication, August 6, 1989).

Bowman was able to encourage staff members to participate in national-level professional meetings and become more actively involved in professional organizations. He, himself, served as an editor of the Journal of Cooperative Education from 1985 to 1987 and also as Executive Vice President of the Texas Cooperative Education Association (TCEA) during the 1988-89 fiscal year and then was elected president of the association (D. Altenloh, personal communication, July 13, 1989).

Under Bowman were three very capable coordinators and a secretary for the 1983-84 academic year. Altenloh as interim director for the five months from May to August 1983 was promoted to assistant director of the program while continuing her previous coordinating work for most of the liberal arts and science students. Because Bowman was a faculty member in the department of history and taught long-term courses, he could not stay in the office constantly.

Therefore, Altenloh assumed his position when he was out of the office. Since she had been in the program for many years and had a wide variety of experiences with the

program as a secretary, coordinator, assistant and associate director, and interim director, she assisted in training new staff members, resolving some of the problems of co-op and the students by using her experiential judgment, keeping relations with employers, and coaching all kinds of internal matters. She was regarded as a writer and reporter and someone who knew how to keep the program together with knowledge and resources. She was also regarded as an effective advisor to the students, as well as a instructor and diplomat.

Altenloh had been involved in various professional organizations in Texas and in the nation and brought many new and different approaches to the program as well as spreading out the university's national and international image. As mentioned earlier, she served as secretary (1981-82) and president of Texas Cooperative Education Association (1982-83). For two years, from 1984 to 1986, she served as the regional representative at the national level of the Cooperative Education Association which encompasses five states. In 1986 she was the newsletter editor for the national level of the Cooperative Education Association until 1989. In April 1989 she was elected as vice president of programs for the Cooperative Education Association (D. Altenloh, personal communication, July 13, 1989). She will be responsible for the upcoming Cooperative Education Association conference in San Antonio, Texas, in 1990.

Loveta Enis served as a factor of continuity for the program because of her rich resources and experiences with Cooperative Education for which she had been working almost 10 years. Because of this, she knew numerous alumni who had gone through the program and had been placed by her, and they showed their loyalty to the program and the university by calling to notify her of positions for new students. That kind of cooperation has been extremely helpful in the development of the employer network (L. Enis, personal communication, September 7, 1989).

Another of Enis' strong contributions to the program was her development of different types of working positions for the students in radio/tv/film, fashion merchandising, industrial psychology, journalism/public relations, hotel/restaurant management, and other fields. In order to bring such specialized positions to the program, she had to work very closely with the students. Those positions were not expected to be developed in the past, but as a result of extensive experience with the program, she knew what employers were looking for and she also had an ability to find out how to satisfy the students' and employers' needs. She tried to bring capable students to the program by using various advertizing techniques and then by trying to place them in ideal positions, later relying on the "grapevine" to pass information from student to student. With her outgoing personality, she could talk to anyone about the program and

had full confidence in herself and in her students (L. Enis, personal communication, September 7, 1989).

To come up with more than 1,000 student placements, the program needed one more coordinator and a full-time secretary. Because of a limited budget, however, the program added only one full-time secretary for the 1984-85 academic year, establishing a two-secretary system with two titles and two different functions. The first secretary, an administrative assistant, had the responsibility of administrative functions under the director and assistant director of the program. The second secretary, a coordinator assistant, worked with coordinators of the program by greeting new students, filing their applications, and preparing interviews.

Janet Cole worked for the program as an administrative assistant and as a coordinator from August 1984 to September 1986. Before she came to the office, she studied computer science and worked in the computer industry. She was a warm individual who was received well by employers and students. She was also a good politician because she knew how to show off the program and expose it to the public; she was a good ambassador (E. D. Altenloh, personal communication, July 13, 1989).

Harriet Laney had been working for the program as administrative assistant since September, 1985. She attended many workshops on office management skills, was

very knowledgeable and correct in her paper work, and also supervised the part-time student workers in the office.

After Cole and Bills left the program, Kathy Kreiner and Virginia (Ginger) Aldridge filled the vacant positions. Aldridge took over Bills' position as the coordinator's assistant in December 1987. She was studying computer science at the university to provide necessary services for networking computers and the program which was to be called CECONET (Cooperative Education Communications Network) in the near future. After high school, she entered the business world and had a great deal of clerical and managerial experience.

Aldridge was regarded as a very good staff member who had excellent interaction skills, in addition to bringing some excitement to her job (M. K. Kreiner, personal communication, September 11, 1989). She worked to reduce the tension of students who were newcomers to the program and worked hard to keep qualified students in the program who would later be an asset to it (V. A. Aldridge, personal communication, September 15, 1989).

Kathy Kreiner, the newest full-time staff member of the program, came to the position of coordinator in February 1988. Even though she had no previous co-op experience, she enjoyed working with students and employers. What she tried to achieve as a coordinator of cooperative education was the placement of real estate majors in jobs because she worked

for real estate firms in Dallas for several years before she came to the program (M. K. Kreiner, personal communication, September 11, 1989).

Development of Students

The continuous growth of student placement meant the continuous growth of the program in cooperative education. During Bowman's directorship of the program from September 1983 to August 1988, the last time frame for this study, the number of student placements had increased significantly. The total placements of the 1982-83 academic year was 591; however, the number had increased to 835 in 1983-84, 1,123 in 1984-85, 1,203 in 1985-86, 1,132 in 1986-87, 1,175 in 1987-88 (UNT: Center for Cooperative Education, Working Student Book, 1983-1988) (see appendix E).

The sizeable growth of student placement and the success of the program was achieved as a result of the following reasons:

1. The development of strategies for academic involvement in the program. One of the keys of a successful cooperative education program depends on the level of the academic faculty members' commitments. The program has faced and overcome some negative reactions by many of the faculty members who wanted to maintain academic purity in the university. This kind of problem is even more serious when considering liberal arts based institutions, such as

the University of North Texas. Actually, this problem was pointed out by external evaluators, such as Charles Hulet in 1980, and McNutt and Hyink in 1981. However, the program overcame this obstacle and has been successful in bringing academic commitment to itself by changing its administrative structure to the academic side and by appointing a new director from the faculty which brought more faculty involvement to the program.

2. A strong commitment by the top leaders of the university. The program created a close relationship with Chancellor Hurley from the beginning of his term as president of North Texas. He assisted several big developmental changes in the program in 1982 by deciding to fund it from the student service fee and by spearheading an administrative change of the program to the academic division of the university. As a result of this, the program's value was upgraded and became more visible, as well as drawing more attention from students, employers, and university faculty and administrators. From 1983 to 1988, Hurley supported the program by continuously mentioning it to the public and by encouraging the staff to place 2,000 students in jobs by 1990, the centennial year of the university (UNT: Center for Cooperative Education, 1982).

3. The development of a reliable funding source is another key to any program's success, and it is the most critical prerequisite for many organizations. The program

had experienced funding problems in its beginning stages which endangered its existence and created a rapid turnover rate in its staff. The program received significant amounts of money from the federal government by demonstrating the need for a comprehensive program during the fiscal years of 1983-84, 1984-85, and 1985-86. As mentioned earlier, the number of student placements had dramatically increased during these 3 years from 591 in 1982-83, to 835 in 1983-84, to 1,123 in 1984-85, and then to 1,203 in 1985-86. After government funding ended, the program created its own relatively reliable funding source through the university.

4. The dedication of high-level staff members whose working qualifications and sense of loyalty is very important for the successful development of any organization. During the time period from 1983-84 to 1988-89, the program consisted of highly dedicated staff members with good qualifications. First of all, Larry Bowman, the director, came from the university faculty and drew strong faculty commitment to the program. He also served on the editorial board of the Journal of Cooperative Education. Altenloh, the associate director, brought in different approaches and placement sources as a result of being involved with various professional organizations. The coordinators developed some specialized professional employers for students. Because most of the staff members worked for many years, they linked alumni to the program.

The program also had very dedicated and qualified secretaries who provided assistance to the students without pressure.

5. The excellent internal and external environmental resources are also a key factor in a successful organization either profitable or non-profitable. The two main clients of cooperative education are students and employers; the program did not have much of a problem developing these. The student enrollment of the institution had increased year by year from 1983 to 1988. The total enrollment of the fall semester of 1983 was 20,424 students, but the numbers rose to 24,894 in the fall semester of 1988, with an increase of approximately 5,000 students during five years. Also, employment resources were not a problem for the program during that 5-year period, even though there was an economic crisis in Texas statewide, including the Dallas-Fort Worth metroplex due to a decrease in the price of oil in late 1985. Because of the good clientele and resources, the program was still able to place students in appropriate jobs.

Development of the Employer

In the 1983-84 academic year, the program began the first year of its 3-year comprehensive cooperative education which made it possible to cover almost all of the major academic areas on campus. Therefore, the program had to

develop a wide variety of work places to serve the many new discipline areas; this had not been possible in the past. The three very qualified coordinators, Altenloh, Goetschius, and Enis, were regarded as the best in the developmental history of the program because they created new positions one by one in both the Dallas-Fort Worth metroplex and in other areas all over the nation. As mentioned earlier, the number of student placements increased year after year, and the number of employers topped more than 350.

The program did not limit its employers to the United States but developed for the first time a co-op exchange program in the summer of 1984 through Arthur Gionet, a faculty member in the university foreign language department, with French universities in the summer of 1984. The UNT co-op placed 15 students from 10 weeks to 3 1/2 months during the summer session at several higher education institutions in France. Also, 11 French students came to the university for approximately 8 weeks during the same period of time and were placed in various campus positions, from the office clerks to cafeteria helpers (D. Cowder, personal communication, May 7, 1984).

According to Gionet, because the cooperative education program sent him to many co-op-related conferences in Colorado, California, and Massachusetts, he could determine how to use the principle of cooperative education in his department by using the American approach in which students

work while they go to school. He achieved his concept of a foreign-exchange type cooperative education program by arranging with a woman who he met during a trip in France to send a female student to France in the summer of 1983.

Gionet later found positions on campus in every department for his specialized foreign-exchange program. He then spoke with the French Consul to explain this program, was given several names of French colleges and universities, and with the assistance of university administrators, he visited France. He was accepted by the French educators and recruited ten French students easily. At their request, he created five more jobs and brought 15 French students to the University of North Texas. His foreign exchange program with French universities continued up to the 1987-88 academic year with an exchange of approximately 140 students. Based on this program, two faculty members were also exchanged. In addition, he has almost achieved sistership city relations between Denton and one of the French cities (A. J. Gionet, personal communication, October 26, 1989).

The cooperative education program also reached Walt Disney World in Florida and has placed about 100 students during the four years from 1985 to 1989. Almost every semester a representative of Walt Disney World comes to the university and recruits students majoring in hotel/restaurant management, marketing, radio/tv/film,

physical education/recreation, and other major disciplines. A sophomore student from Dallas expressed her working experience at Walt Disney World by saying, "It's a wonderful program as well as an experience. I worked as a hostess in a resort hotel during the summer of 1988" (McKean, 1989).

In the spring semester of 1988, the program provided a position in the U. S. Olympic Committee for a senior student who came from Cincinnati, Ohio, where cooperative education first evolved in 1906. She began work for the co-op from January 6 as a coordinator for the volunteer committee at the U. S. Olympic headquarters in Colorado Springs, Colorado. She was a communications student at UNT and expressed the idea of combining her communications studies with athletics. She was selected because of her excellent experience in sports, her public relations abilities, faculty recommendations, and 3.9 GPA in her major field of study (Johnson, 1988).

During Bowman's directorship from 1983-84 to 1987-88, the program extended its working positions to various corporations as a result of hard working, qualified coordinators. A number of Dallas-Fort Worth metroplex radio and TV broadcasting companies employed the students of radio/tv/film; many more federal government offices in Washington, D.C. and regional headquarters provided positions for students of different majors. The North Texas area independent school districts hired elementary,

secondary, administrative leadership, and library and information science students. Other higher education institutions in Texas, such as Baylor University, University of Texas in Austin, Southern Methodist University, Texas Christian University, Texas Woman's University, University of Texas in Dallas, accepted UNT students, placing them with the career center, public services, the medical center, the library, and other places (UNT: Center for Cooperative Education).

Many small and large companies from the public and the private sectors provided positions for the cooperative education program. These positions were in nearly all major areas of the university's disciplines from accounting to radio/tv/film and architecture. Appendix I contains more specific information on the relationship between the students' major areas of study and their jobs.

Funding

From the beginning of Bowman's directorship without the worry of financial matters, the program operated smoothly because of the \$427,100 which was given to the program by the federal government as a 2-year cooperative education demonstration fund (Fulton, 1983). The federal money, as was always the case, was not distributed to every program seeking it, so UNT had to be very competitive to bring in this funding. In its second year, one program had

experienced a lack of money and, as a result, its continuation was endangered. The staff members had worked very hard and provided various extensive documents to explain the importance of the demonstration grants to the program. The grant proposal included the following information:

1. a plan of operation: (a) design of product, (b) plan of management, (c) project objectives and purpose of program, and (d) equal access and treatment for under-represented groups;
2. planning for the demonstration project;
3. the integration of the demonstration project: (a) organizational structure, and (b) curricular needs for co-op students;
4. quality of key personnel which provided all full-time staff members educational and professional background at that time, as well as their work qualifications;
5. budget and cost effectiveness;
6. an evaluation plan;
7. adequacy of resources (facilities, equipment, and supplies);
8. continuing support (fund and resources and faculty commitment);
9. employer support;
10. a commitment to cooperative education (relationship between the idea of co-op and mission of the university);

11. work experience. The proposal was equipped with such various appendices entitled as follows: (a) Dallas/Fort Worth Area Map, (b) Departmental Budgets, (c) Placement Information, (d) Central Co-op Staff, (e) College of Business Administration, (f) College of Arts and Sciences, (g) College of Education, (h) Center for Rehabilitative Studies, (i) Goals for 1983-84 - 1984-85, (j) Co-op Annual Report, (k) Advisory Council Evaluation Comments, and (l) Forms Used. (UNT: Center for Cooperative Education, 1982)

A well-provided grant proposal was sent to Washington in January of 1982, and the staff members were notified of grant approval in August of that year. Initially, they requested a 3-year comprehensive demonstration grant, but they only received funding for 2 years with the promise that if the program kept on the proper track indicated by an evaluation at the end of 2 years, it would receive an additional \$145,000.

At the end of the 3-year comprehensive demonstration funding, the program was changed from being medium sized with 591 students placed in 1982-83, to being a large and comprehensive program with more than 1,200 placements in the 1985-86 fiscal year. This rapid growth proved two things: the first was how valuable and important the federal grant is for the development of cooperative education in the University of North Texas; and the other is that the program of cooperative education at UNT has plenty of capability

because of its qualified staff members, a large student pool, an excellent external environment which contains a variety of employers, and university support from the administrators and the faculty. However, what the program really needed was funding which would make it possible to hire more staff members to work with students and employers and for more space and facilities.

At the end of the federal funding, the program found a relatively reliable funding source in part by the student service fee allocated from the dean of students' office and from a portion of state money through the office of the associate vice president for academic affairs. The program was placed in its proper position in the division of academic affairs along with other academic departments, and at that point, no longer needed to worry about whether or not it would continue into new fiscal years. It received \$201,875 in 1986-87 and \$188,543 in 1987-88 from the two sources (UNT: Budget 1986-87, 1987-88).

Evaluation

During the period between September of 1983 and August of 1988, the program was evaluated once by an outside evaluator. It was a 3-day comprehensive evaluation from February 26-28, 1985. William D. Taylor, Director of Cooperative Education at the University of Alabama in University City was asked "to make a thorough study of the

entire co-op program and to provide recommendations that would enhance the future development of the program" (Taylor, 1985, p. 1).

The criteria of the evaluation were as follows:

1. Introduction, which contained why, how, and by whom the evaluation was performed,
2. Institutional setting, which referred to the university and its promising geographical condition,
3. Co-op program philosophy and plan of operation, which mainly concerned the relationship between the program and the individual academic departments in the university,
4. Program operation structure which indicated the program's position in the university system and its staffing and facilitating,
5. Student recruitment/orientation, which emphasized the use of student orientation for co-op recruitment,
6. Student placement procedure, which demonstrated how a co-op student is placed in a certain position,
7. Records, the recommendation being to utilize the computer for record keeping processes,
8. Program budget and staffing, which pointed out the staff member's professional qualifications and their low salaries,
9. Employer relations, which commented on the satisfaction of the employer's attitude toward the program and its students,

10. Faculty relations, which presented a strong commitment to the program by the faculty members and the administrators of the university (Taylor, 1985).

In the conclusion, the evaluator praised the program as being tremendously successful and reported that the Title VIII grant money was used very effectively to spearhead the wide range of its growth. Lastly, the evaluator made the following recommendations for further development of the program:

1. Office location of the program should be relocated to a more central and visible place.
2. The program needed to develop a standardized student application form, registration process for each co-op work period, and a certification of co-op experience.
3. Increase co-op staff members' salaries.
4. The need to prepare institutional funding after the end of Title VIII fund.
5. The title of the head of the program needed to be changed to "Dean" rather than "Director."
6. Provide a written distinction between the co-op program and other types of student employment services.
7. A computerization management information system for the program needed to be developed in the near future to meet the rapidly growing needs of the program's placements (Taylor, 1985).

Because of the restricted annual budget, the program was evaluated only once during the five years from September 1983 to August 1988 of Bowman's directorship of the program.

Conclusion

One of the significant observable facts about the program during Bowman's leadership was that it had the first faculty-originated director which contributed greatly to its growth. He upgraded the program and moved it to a more centralized location in the administrative system of the university. The other value of Bowman as a director was that, under his leadership, the program and its staff members, including himself, participated actively in national, regional, and state level professional organizations and served the associations in various ways which brought the possibility of different working positions to students and different managerial approaches to the program. This also made them ambassadors for the program and the university.

North Texas Co-op also upgraded its standing from office level to a "center" during this time period. Through this change, the program gained status, giving it a better image both inside and outside of the university community, even though big changes did not occur when its name changed to "A Center for Cooperative Education."

During that period, the employers that participated were very diversified and developed many unexpected work positions in the region, as well as in the nation, and in foreign countries by means of an exchange program. The development of this kind of heterogenous work place made a successful liberal arts-based cooperative education program possible.

The most visible development of the program was in the amount of funding from the federal government and the rapid growth of student placement during the time period of comprehensive cooperative education demonstration funding. By using the federal funds effectively, the program placed approximately 1,200 students in major-related work places.

As mentioned in chapter 2, colleges and universities do not evaluate their cooperative education programs if they lose the qualification of federal funding. But the program at UNT was evaluated once intensively after ceasing its eligibility for federal funding. The program had a good reporting system placed in the Office of Associate Vice President for Academic Affairs, nationally and internationally well-known, capable staff members, strong student numbers with more than 26,000 students on the campus, and the rich diversity of employment resources in the Dallas/Fort Worth metroplex. What they did not have all of the time and what endangered the existence of the program was a need for strong funding.

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CHAPTER 7

SUMMARY, OBSERVATIONS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purposes of the study were to describe the development of cooperative education at the University of North Texas, to provide evidence of potential outcomes of the program, and to introduce some selected elements of the program to other colleges and universities. In order to achieve such purposes, the research covered the following areas: how the program was established in 1976 and how it developed its staffing and organization, students, employers, funding, and evaluation during the 12 years from September 1976 to August 1988.

The study utilized the historical and descriptive approach to investigate and analyze the development of the program by using such documents as directors' annual reports, federal grant proposals, program evaluation reports, the university budget, on-campus newspapers, and other available information such as brochures, handouts, and folders. To make up for insufficient documents, personal interviews were conducted with all directors and other available persons who had worked with the program.

Cooperative education at the University of North Texas was established on the first day of September in 1976 in the dean of students' office; it combined existing internship programs in several academic departments which allowed credits but, basically, no monetary gain with the student employment program which provided jobs for pay but without credit.

From the fall semester of 1975, the major staff members of the dean of students office, Joe Stewart, the Dean of Students, Barbara Jungjohan, Assistant Dean of Students, and Barbara Houston, Director of Student Employment Services, met to discuss what other programs could help students to reach their career goals after graduation or could help those who had to stop their further education because of financial problems.

In making the final decision to establish the cooperative education program, several factors were considered: (a) the university-wide commitment to the new program which was found in the purposes and goals of the institution, (b) the large number of students who came from low-income families, (c) the more than half of the total number of students in the university who had some type of work position, (d) the good geographical location of the university, and (e) the possibility of a federal grant.

After reaching an agreement to establish the cooperative education program in the dean of students

office, staff members sent a letter to the U. S. Department of Health, Education, and Welfare to ask how to get a federal grant in order to establish a cooperative education program. An application form and guidelines of the federal grant proposal were received and submitted to HEW by putting together many kinds of information. The university did not expect to be funded after sending in the request in February of 1976; however, they were informed that a grant in the amount of \$35,000 was awarded as a start-up fund.

With the acknowledgement of the Title VIII funding in May of 1976, the dean of students office promoted Joe Birmingham to a full-time position and asked him to do the remaining work on the establishment of the program. Birmingham was a doctoral student in the department of higher education and had an internship in the dean of students office. Because of this experience, he became the first director when the program opened in September 1976.

After Birmingham hired a part-time secretary, he left the program to gain some practical training. It was brief, but he learned much about how to operate the program more effectively. After returning to the office, he did his best to utilize what he had learned at the training camp. He visited classrooms to present the cooperative education concept, met students on a one-to-one basis on the campus, and discussed the program with journalists from the campus newspaper. He had a problem, however, getting enough

students to fill working positions, placing only 4 during the first semester; but 41 were placed as a result of his hard work in the program's first academic year of 1976-77.

Margot Hirsch succeeded Birmingham as the second director of the program. She was also a doctoral student in the department of higher education with only her dissertation requirement remaining and had been working in the dean of students office as an intern. She was familiar with the program because of a close working relationship in the office and was promoted to the director's position when it opened.

She repeated in many ways what Birmingham had done because it took more than a year to do basic work for the program in its beginning stage, but she revised the academic requirement for cooperative education students, hired a full-time job developer, and initiated program evaluation by utilizing \$45,000 in federal grant money.

Two notable national level professional conferences were held during her term. The first one was the Third National Convention on Work and the College Student which invited Asa Knowles to speak on the concept and issues of cooperative education. The second one was the Cooperative Education Conference which was sponsored by The Federation of North Texas Area Universities and the National Commission of Cooperative Education which invited Roy Wooldridge to speak.

Before reaching the end of the academic year of 1977-78, each staff member left the program one by one. Because it was basically operating on a limited federal grant, staff members were not offered competitive salaries, the result being a high turnover rate, and this discontinuity hurt the normal phase of growth of the program and even endangered its continuing into the next year. But the dean of students' office played a care-taking role in developing the young program.

While Barbara Jungjohan served as an interim director, the dean of students' office searched throughout the nation for a director by publicizing the job opening in a national magazine. As a result, the program was headed by Ron Lutz, a young and dynamic director, who was the first one selected from outside of Texas and who was thought by many to be the best. He hired two very capable staff members, obtained support from administrators and faculty members, increased student placements by more than three times what they had been, and evaluated the program through the advisory committee for the first time.

Lutz achieved much significant success in the program, the most valuable being his overcoming the financial problems of the program. At the end of the previous year, the program was informed of the inavailability of federal funds. It was an unexpected shock to the staff members because suddenly the existence of the program was

endangered. The staff, under the leadership of Lutz, overcame the financial problem through hard work and better personal relations with administrators and faculty members of the institution.

At the end of the academic year, however, the program faced problems because of the loss of its director and coordinator. Therefore, Dianne Altenloh had become the first full-time staff member who continued her position into the next academic year in its three-year history.

George Scoggin was placed as the fourth director of the program in September 1979 after being selected over nine other applicants because of his academic and professional experience. He had worked for many years on the campus as a student and an instructor, and he was well accepted by faculty members as a part of the academic community. He also had few problems contacting businesses because he was familiar with what they needed from the cooperative education program.

A real problem, however, arose in the office of the program. Because Scoggin had just come from the defense industry which had been dominated by very authoritarian leadership, he was accustomed to that leadership style; but it was not right for the academic environment. After he received advice from his immediate supervisor to be a little softer on his staff, he changed his leadership style by

adopting different communication theories and different types of human management skills.

During the directorship of Scoggin, there were two significant changes in the program. The first one was the movement of the program's office to the second floor of the health center from the university union building on September 4, 1981. The staff members were not pleased because the new location was not in the center of the university, and the building had not been used for several years. They accepted the move and made a new start by utilizing the larger space although with the move cost the program its close relationship with other programs in the student division. It was, however, able to establish and maintain its independence without being considered a sub-function or extended program of the student employment or career planning and placement services.

The program faced a bigger challenge in August 1982. Under the new leadership of the institution, the administrative structure was reformed. As a result, the program was placed under the supervision of the vice president for academic affairs instead of the dean of students office. The idea of the move was originally suggested by Bruce Stoughton who evaluated the program in 1978. Then, the idea was achieved through the assistance of Alfred Hurley's leadership after he accepted James Muro's

report on cooperative education which included the idea of moving the program to the division of academic affairs.

One of the immediate responses to the move was that when the members of the Task Force on the Mission and Goals of the institution developed a list of goals for the institution, they placed "Expand and Improve the program in Cooperative Education" as one of the items in the institutional policy manual which was distributed to all administrators and faculty members.

Scoggin was supported by dedicated staff members, such as Dianne Altenloh, Karen Goetschius, Loveta Enis, and Kim Maurer. These employees made up for Scoggin's shortcomings by bringing liberal arts, handicapped, and other students majoring in the programs of radio/tv/film, fashion merchandising, industrial psychology, and journalism into the program. Due to the hard work of these dedicated staff members, the number of student placements increased year by year from 125 in the 1978-79 academic year to 591 in 1982-83.

To expand their professional knowledge and to develop a better personal relationship with prospective employers, the staff members attended various professional meetings as much as possible. The program maintained its membership in various national, regional, and area organizations which helped the program develop students' working positions.

During these years under Scoggin, funding sources were relatively secured by the federal grant and institutional funds. The program was funded by Title VIII amounting to \$84,996 in 1979-80, \$80,000 in 1980-81, and \$76,000 in 1981-82. The program requested \$1.15 million for a comprehensive cooperative education demonstration fund from the newly established U. S. Department of Education, but it was turned down by a narrow margin. Therefore, the program faced a similar financial problem to the one it had experienced in the 1978-79 academic year. The program, however, was not entirely in turmoil because Chancellor/President Al Hurley made a very quick decision about the program by requesting that \$76,000 be given to the Student Service Fee Committee.

Because of good funding sources and the requirement established in the federal grant proposal, the program was evaluated most frequently during these years by Charles Hulet in 1980, by Dorothy McNutt and Bernard Hyink in 1981, and by John Dromgool and Dorothy McNutt in 1982. These evaluations provided much valuable information for the program's future development.

After Scoggin left the program in 1983, Altenloh covered the vacancy as an interim director while the office of vice president for academic affairs formed a search committee to find a new director of the program. At that time, some faculty coordinators suggested that it would be helpful for the program to gain better academic support if

its next director were selected from one of the faculty coordinators. The search committee selected Larry Bowman who was a full-time, tenured faculty member and who served the program as a chairman of the cooperative education advisory board.

With the appointment of a faculty member, the program's value was significantly upgraded by being considered an important part of the administrative system in the institution. The valuable contribution of Bowman was that he could maintain a one-to-one equal position with other faculty members and many administrators of the university by keeping a similar level of respectability. He also had more opportunities to have formal or informal communication channels with many faculty members. Another value of Bowman as a faculty member and the director of the program was that he was involved in professional and scholarly organizations. He served as an editor of the Journal of Cooperative Education from 1984 to 1987, and he was also a special editor of the 25th anniversary issue of the same journal.

In September 1986, under Bowman's leadership the program changed its name to "A Center for Cooperative Education" to enhance its visibility, status, and credit to the university members, as well as the outside community, especially to the employers.

Altenloh was promoted to associate director during Bowman's directorship. Since being hired by Lutz in early

1979, she had worked for many years as a secretary, a coordinator, an assistant director, and an interim director. Such work experience in the program made her a major factor of continuity in the program. She had the ability and knowledge to train new members to adjust to the program, to resolve many difficult situations with good judgment, and to be a substitute in Bowman's position since he could not stay in the office all of the time. Another of Altenloh's valuable contributions to the program was that she had worked for several national, regional, and state level cooperative education organizations.

The program enjoyed its total \$572,100 comprehensive cooperative education demonstration funds for 3 years from September 1983 to August 1986. The federal funds were expertly utilized by developing work places for students of almost all discipline areas. During the funding period from 1983-84 to the 1985-86 academic year, student placements increased rapidly from 591 in 1982-83 to 1,203 in 1985-86. After the end of the federal grant, the program was supported by being given a percentage of student service fees through the dean of students' office and a certain amount of state allocation through the office of associate vice president for academic affairs.

During these years, the program expanded its places of student employment from the Dallas/Fort Worth metroplex to all over the nation and in some other countries. Through

the program, more than 100 students were placed at Walt Disney World in Florida, one student worked for the U. S. Olympic Committee in Colorado, and approximately 140 students were exchanged with several French universities up to the 1987-88 academic year since its beginning in 1983.

The program was evaluated once during the period of Larry Bowman's directorship by William Taylor for 3 days in 1985. He included several recommendations: that the location of the program should be in a more central and visible place, the title of the head of the program needed to be changed to "dean" rather than "director," and a computerization management information system should be developed for the program.

Observations

The following observations developed as a result of the study:

1. The leadership in the program contributed to the growth of cooperative education at the University of North Texas.
2. The federal grant (Title VIII) contributed to the development of cooperative education at the University of North Texas.
3. The organizational change of the cooperative education program at the University of North Texas from the

dean of students office to the academic affairs office positively influenced the expansion of the program.

4. The staff members' dedication with loyalty to the program and their continuity in the program contributed to the increase in student job placements.

5. The active affiliation of the program and its staff members in national and regional level organizations contributed to the development of the diversity of employers for the program.

6. The faculty-originated director of the program contributed to bringing more commitment of faculty members to the cooperative education program at the University of North Texas.

7. The positive position of top leaders of the institution to the program contributed to the continuous growth of the cooperative education program at the University of North Texas.

8. The program evaluations by external experts contributed to the positive development of the cooperative education program at the University of North Texas.

Conclusions

Based on the summary and observations of the study, the following conclusions have been made.

Cooperative education at the University of North Texas was started in September 1976 by three major staff members

in the dean of students' office by combining existing intern programs in the academic departments and the student employment program in the dean of students' office after receiving a \$35,000 start-up fund from the federal government through Title VIII.

The program was relocated three years later to the division of academic affairs to operate more effectively by attracting more commitment from the academic side, its administrators, and faculty members. The movement brought more attention from the academic community members and upgraded its position in the university system, as well as rapidly increasing its student placements.

There were five directors, ten coordinators, ten full-time secretaries and many part-time student workers, and most of them contributed to the development of the program through hard work. During its initial three years, the program experienced difficulties in starting its new academic year because of completely new staff members, but later, it stabilized because of the many time-honored, experienced staff members who contributed significantly to its rapid growth.

As a result of the work by dedicated staff members, such as visiting classes, meeting students one-to-one, and articulating about the program in the campus newspaper, the student numbers increased year by year from 41 in 1976-77 to 1,175 working students in the 1987-88 academic year. Most

of the cooperative education students were very positive about the concept behind the program and gained much practical experience, as well as financing their studies.

Because of the rich resources of businesses and industries in the Dallas/Fort Worth metroplex, the program brought in more than 300 highly qualified employers. With the development of a comprehensive cooperative education program, the staff members developed a wide variety of employers from all over the nation, and locally. The program also developed a foreign exchange program with several French Universities.

The program was totally dependent on federal funds in its early years of development. As a result, when the program did not receive federal funds, its existence was endangered. However, in its later years, the funding source became relatively secured by the university with a percentage of the student services fee through the dean of students' office and by a state funding through the office of the associate vice president for academic affairs.

The program was evaluated five times by outside professional evaluators and once by the advisory committee members of the program. Every evaluation pointed out problems with the program which needed to be corrected and also found new ways for its further development.

Recommendations

The following recommendations are provided for further research:

1. It is recommended that this study could provide basic information for another study based on an academic department to investigate how the program is utilized for the enrichment of classroom learning at the University of North Texas.

2. It is recommended that this study could provide basic information for another study based on attitudes of administrators, faculty members, students, and employers to find each group's recognition, perception, and willingness to participate in the program at the University of North Texas.

3. It is recommended that this study could provide basic information for another study based on strategic planning management techniques to react positively to possible problems and issues in the future for the program at the University of North Texas.

4. It is recommended that this study could provide basic information for another study based on evaluations of the program to measure overall contributions to the institutions, students, employers, and the society on the whole by using a survey instrument.

5. It is recommended that the study could provide basic information for another study based on the development

of new and constant funding sources to provide better services for more students at the University of North Texas.

APPENDIX A
LETTER OF AGREEMENT

Sang Kil Kim
Department of Higher Education
University of North Texas
Denton, Texas 76201
November 28, 1988

Director of Cooperative Education
University of North Texas
Denton, TX 76201

Dear Director of Cooperative Education:

I am a doctoral student in the Department of Higher Education at the University of North Texas. I am going to study "A Development of Cooperative Education at the University of North Texas: 1976-1988" for my doctoral dissertation as a partial fulfillment of the requirements for the degree of Doctor of Philosophy.

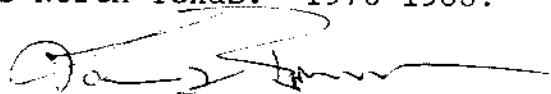
Your authorization and assistance in supplying any information and data that would lead to the completion of my dissertation will be greatly appreciated.

Yours sincerely,



Sang Kil Kim

I authorize Mr. Sang Kil Kim to study materials that I will make available to enable his doctoral dissertation study to be completed entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988."



Director of Cooperative Education
University of North Texas

APPENDIX B
LETTER OF INTENTION

Sang Kil Kim
308 Bradley #36
Denton, TX 76201
December 27, 1988

Joel M. Jeter, President
Cooperative Education Association
Prince Georges Plaza Professional Park
3311 Toledo Terrace, Suite A101
Hyattsville, MD 20782

Dear Mr. Jeter:

First I would like to thank you for sending me a copy of "News Brief." I am an international student from Seoul, South Korea working in the doctoral program in the Department of Higher Education Administration at the University of North Texas, and I am also a member of the American Cooperative Education Association. I am currently writing my doctoral dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988."

The reason I chose this subject is that I am going to establish a cooperative education program in South Korea to help students, universities, business and industrial corporations, and all of society. The results of this study should be very helpful to me in developing cooperative education in my country. I hope to learn how and why this program will benefit South Korea, how to obtain funds for the program, what some of the problems will be, and what benefits and values can be expected.

According to your News Brief, published December, 1988, you approved a complimentary membership for Professor Cai Peiye of Shanghai, who is responsible for having established cooperative education programs at three universities in China. Do you know of any cooperative education programs in South Korea? If so, could you please supply me with the names of the universities involved and the name of the director of each? Because I left my country five years ago, I do not have this information. How can you encourage and

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support me in establishing cooperative education programs in South Korea, hopefully by 1990? What other advice can you give me in regards to my future plans of developing cooperative education in my country and participating in worldwide cooperative education activities?

Lastly, I wish you and the Cooperative Education Association, headed by you, God's endless blessings in the future. I will be looking forward to your answer soon.

Sincerely yours,

Sangkil Kim

Sang Kil Kim
Department of Higher Education
University of North Texas

APPENDIX C
INTERVIEW QUESTIONS

Sang Kil Kim 197
308 Bradley #36
Denton, TX 76201
(817) 383-2147

Dear

I am a doctoral student in the Department of Higher and Adult Education at the University of North Texas. I am preparing "A Development of Cooperative Education at the University of North Texas: 1976-1988" for my doctoral dissertation.

In order to complete my research, I need your assistance. You are named as a previous employee of the program, and, since records from those early years are scarce, I must rely, in part, on your memory.

If possible, I would like to schedule a visit with you to discuss your perceptions of the program as you saw it. The enclosed questionnaire will serve as an outline of our discussion. In the event we are not able to meet, please take the time to write responses to any or all of these questions. Feel free to respond to those you are comfortable with. Also, additional comments are welcome.

You may be interested to know that the UNT co-op program is significantly different from the time you were here. It has grown into a nationally recognized model and has been distinguished by the Department of Education as one of the top ten in the nation. Five full-time professionals and two full-time support staff, along with a variety of student assistants make an average of 1200 placements per year involving most majors on campus. You can see why a written history of this program would be important.

I will be calling you soon to schedule a visit at your convenience.

Respectfully yours,



Sang Kil Kim
Graduate Student at the
University of North Texas

Staffing and Organization

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1. Describe your educational and professional background before you applied for the position in cooperative education at UNT.
2. How did you first learn of the cooperative education program at UNT? When and where were you placed in your position?
3. What was your professional philosophy concerning cooperative education, and what was your leadership or management style at UNT?
4. What was the staffing and organization of the program at that time? Describe the responsibilities and contributions of staff members.
5. What was your contribution to the development of cooperative education at UNT? (Year by year if needed)
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
6. Was there any mission that you couldn't accomplish? If so, why?
7. When did you leave the program and why?

Funding

1. How was the program funded at that time? (Federal grant, institutional fund, etc.)
2. Were there any financial difficulties during the time you were involved with the program?
3. Was there any strategy to ensure funding?

Evaluation

1. What kind of evaluation was performed on the program?
2. What was the criterion for evaluation of the program?
3. What was the result of the evaluation? (Positive and negative areas of the program)
4. What was the overall influence of the evaluation for the development of the program at UNT?

Student

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1. Approximately how many students applied and were placed while you were associated with the program? What was the average student salary?
2. What subjects were being studied by students involved in the program? Which departments allowed credit for the cooperative education student?
3. What was the unique pattern of the student body at that time?
4. Was there any department or discipline that changed its policy in relation to the cooperative education program?
5. Who was selected as an honor student? Was there any dishonor (trouble making) to the development of the program? If so, please provide specific examples.
6. What were your specific contributions for recruiting and placing students?

Business and Industrial

1. How many businesses and industries participated in the program?
2. What was the unique pattern of employer involvement? (Type of business, geographical location, etc.)
3. What were your efforts in locating employers who were willing to hire cooperative education students?
4. What were the overall employers' contributions to the development of the cooperative education program at UNT?
5. Did you visit students in the workplace. If so, what do you think you accomplished with these on-site visits?

APPENDIX D
STAFF MEMBERS OF COOPERATIVE EDUCATION AT
THE UNIVERSITY OF NORTH TEXAS:
1976-1988

STAFF MEMBERS - UNT CO-OP

STAFF/ ACADEMIC YEAR	DIRECTOR	COORDINATOR	SECRETARY (Full time)
1976-77	Joe Birmingham		
1977-78	Margot Hirsch	Debbie Sheridan	Darlene Walker
1978-79	Ron Lutz	Barbara Houston	Dianne Altenloh
1979-80	George Scoggin	Jacquelyn Kelly Dianne Altenloh	Kim Maurer
1980-81	George Scoggin	Dianne Altenloh Jane Lewis	Loveta Cofer
1981-82	George Scoggin	Dianne Altenloh Loveta Cofer Karen Goetschius	Judy Peterson
1982-83	George Scoggin	Dianne Altenloh Loveta Cofer Karen Goetschius	Laverne Chastain
1983-84	Larry Bowman	Dianne Altenloh Lovena Enis (Cofer) Karen Starkey (Goetschius)	Laverne Chastain
1984-85	Larry Bowman	Dianne Altenloh Loveta Enis Karen Starkey	Janet Cole Margaret Bills
1985-86	Larry Bowman	Dianne Altenloh Loveta Enis Karen Starkey	Janet Cole Margaret Bills
1986-87	Larry Bowman	Dianne Altenloh Loveta Enis Janet Cole	Harriet Laney Margaret Bills
1987-88	Larry Bowman	Dianne Altenloh Loveta Enis Kathy Kreiner	Harriet Laney Virginia Aldridge

APPENDIX E
THE NUMBER OF STUDENT PLACEMENTS BY THE
COOPERATIVE EDUCATION DEPARTMENT AT
THE UNIVERSITY OF NORTH TEXAS:
1976-1988

CO-OP STUDENT EMPLOYMENT

DIV. YEAR	TOTAL	ALTERNATIVE (Full time)	PARALLEL (PTime)	NUMBER OF EMPLOYERS	\$ EARNED (Appx.)
1976-77	41	18	23	N/A	N/A
1977-78	50	34	16	42	\$45,000
1978-79	126	69	57	171	195,000
1979-80	215	122	93	156	425,000
1980-81	291	130	161	135	640,000
1981-82	395	170	225	150	860,000
1982-83	591	237	354	200	1 mill.
1983-84	835	113	722	250	2 mill.+
1984-85	1028	95	1123	300	N/A
1985-86	1203	207	996	300	N/A
1986-87	1132	248	884	350	N/A
1987-88	1175	196	979	400	N/A

APPENDIX F
OUTSTANDING COOPERATIVE EDUCATION STUDENTS
AT THE UNIVERSITY OF NORTH TEXAS:
1976-1988

OUTSTANDING CO-OP STUDENT OF THE YEAR
UNIVERSITY OF NORTH TEXAS

YEAR	NAME OF THE STUDENT	MAJOR	EMPLOYER
1977-78	David Sullivan	N/A	N/A
1978-79	Stephen Crozier	Computer Science	Sun Oil Co
1979-80	David Wietzel	Finance	Xerox Corp
1980-81	Bianca Bolton Danise Bartlet	English Education	Texas Inst Teacher Aid
1981-82	Russell Hamilton David Tolleson	Accounting Computer Science	Ernst &Whtny Harris Data Comm.
1982-83	Stephen Chudej Robert Valliant	Radio/tv/film Personnel & Industrial Rel	Boy Sc of Am Dallas Fed. Savings
1983-84	Richard Ray	Computer Science	IBM
1984-85	Melanie Bagwell Duglas Green	Personnel Mngmt Computer Science	Parkland Hos IBM
1985-86	Dale Legband Bryan Clintsman	Computer Science Accounting	IBM MBank
1986-87	Sheril Ray Richard Dews	Communication Computer Science	IBM IBM
1987-88	Patricia Flynn Michal Gray Dona Hays	Business Computer Production Opertn Management Accounting	IBM Jostens G. Thornton
1988-89	Bruce Laible Jackquelyn Peters Scott Wesembrink	Computer Science Industrial Tech Finance	IBM NASA Conoco

APPENDIX G
FUNDING OF THE COOPERATIVE EDUCATION DEPARTMENT
AT THE UNIVERSITY OF NORTH TEXAS:
1976-1988

FUNDING ON CO-OP
UNIVERSITY OF NORTH TEXAS

SOURCE YEAR	TOTAL \$	FEDERAL \$	UNIVERSITY ACAD AFFAIRS	STUDENT AFFAIRS
1976-77	35,000	35,000		
1977-78	62,619	45,000		17,619
1978-79	28,000		28,000	
1979-80	109,480	84,996	25,484	
1980-81	106,257	80,000	26,257	
1981-82	106,294	76,000	30,294	
1982-83	108,925.47		32,925.47	76,000
1983-84	120,000	427,100	40,000	80,000
1984-85	126,146		41,352	84,794
1985-86	173,587	145,000	71,772	91,815
1986-87	181,875		75,307	106,568
1987-88	188,543		76,207	112,336

APPENDIX H
EVALUATION OF COOPERATIVE EDUCATION AT
THE UNIVERSITY OF NORTH TEXAS:
1976-1988

EVALUATION ON COOPERATIVE EDUCATION
UNIVERSITY OF NORTH TEXAS

DATE	EVALUATOR	POSITION OF EVALUATOR
Feb 1, 1978	Bruce Stoughton	Prof & Dir of Cooperative Education at University of Houston
1979	Advisory Committee for Co-op at UNT	Administrator - 4 Faculty - 4 Director of Co-op - 1 Employer - 3 Student - 2
Jul 23-24, 1980	Charles Hurlet	Grant Officer from New Jersey
Jun 25-26, 1980	Dorothy McNutt	Chairperson of Division of Business at College of Mainland
	Bernard Hyink	Director of Cooperative Education at California State Univ in Fullerton
Mar 25-26, 1982	John Dromgool	National Commission for Cooperative Education
	Dorothy McNutt	Chairperson of Division of Business at College of Mainland
Feb 26-28, 1985	William Taylor	Director of Office Cooperative Education University of Alabama, University

APPENDIX I
INFORMATION ON STUDENT MAJOR AREAS
AND WORKING PLACES

MAJOR AREA	WORKING AREA
Accounting	U. S. Dept. of Agriculture UNT Internal Audit (2) Trinity Industries Taylor Publishing Co. PFAU (2) Cheshire and Fuller Schneider Energy Northern Telecom Image Science Farmers Insurance Parkland Hospital M. Bank IBM (3) UNT - Business Services Bailey, Vought, Robertson & Co. John Baines, CPA
ADMG (Administrative Management)	Washington Inventory Denton County Historical Museum IBM (2)
MGMT (Management)	Boeing Electronics UPS (United Parcel Services) IBM Social Security Administration Apex Building Materials
Architecture & Engineering	John Edward Hughes, Inc. Duncan Design Association Herring Design Group Donna Vaughan & Associates White Water Corporate Design Wilson & Associates
Art	SMU Publication Services University Store - Graphic
Advertising Art	3M National Advertising Dallas Times Herald Disneyland Art Accounts in Dallas Dirtie Design in Dallas Looking Glass Software Martin Paul Healing Center Education Service Counselor

MAJOR AREA	WORKING AREA
BCIS (Business Computer Information Science)	UNT Computing Center Harris Methodist Health Services IBM Fidelity Investments Cal Tex J. C. Penney Travelers Data General UNT Housing Department Texas Utilities General Dynamics Dallas Info Mart
Chemistry	ARCO Forensic Consultant Services
Biology	Trac Labs, Denton, TX Sandy Lake Animal Hospital
CSCI (Computer Science Information)	U. S. Dept. of Agriculture IBM Readiform - The MasterCare Corp. UNT Micro Maintenance UNT Computing Center Texas Instruments UNT CSCI Lab Christian Fidelity Life Insurance
Counseling	Pastoral Counseling and Education Ctr. Texas Christian University (Student Center) Dallas Synagogue School Marillac Social Center University of Texas, Austin (Career Center)
Economics	IBM Wall Street Journal Fidelity Investments National FSI, Inc. Lilly Dodson
Educational	Krum ISD Lewisville ISD Carrollton/Farmers Branch Desoto ISD Duncanville ISD Richardson ISD

MAJOR AREA	WORKING AREA
	Canyon Creek Christian Academy Private School in Richardson Dallas, Denton, Fort Worth, Plano ISDs
ENGL	IBM TI (Texas Instruments) Image Science
Technical Writing	Convex Computer Language Research Inc.
Math	Garland High School
Spanish	South Garland High School
Fashion Merchandising	Mervyn's Prestonwood J. C. Penneys, Denton Marshall Fields Pat McGees, Valley View Banana Republic Contempo Casuals The Limited, Denton Discovery & Creation Lane Bryant, Denton
FINA (Finance and Banking)	IBM Northern Telecom Drug Emporium Fidelity Investments U. S. General Accounting Office 1st State Bank of Denton City of Hurst Sun Production Tandy Corp. General Dynamics UNT Microcomputer Maintenance Image Science
RHAB (Rehabilitation Studies)	UNT Center for Rehabilitation Studies State Commission for the Blind in Austin Texas Employment Commission Denton State School Special Care School Lighthouse for Blind

MAJOR AREA

WORKING AREA

Counselor
Education

Family Plan Help Center - Richardson, TX
Family Services in Fort Worth, TX
Program Advisor Student Activities
International Student Office
Collins County MHMR
Denton County MHMR
Richardson Medical Center
Denton Counseling and Education Center
Student Employment at UNT
Brookhaven Community College
University of Texas at Dallas Counseling
Richland College Counseling Center

Interior Design

Burke Engineering Architectural Design
The Design Studio
Sandy Smith, Inc.
Eddie Garcia & Assoc.
Fox and Jacobs
Brueton Industries
Fabrics & Frames Furniture
George Cameron Nashville
Parker & Crosten
Metroplex Business Interiors, Inc.
Wilson & Association
Cromwell Architects
Interior Networks
State of Washington Employee
Security Department
Pace Collection
Duncan Design Association

Fashion Design

Creative Image
Montgomery Ward
Team Design
Cheers Original
Lord & Taylor
Lynn French

Industrial
Technology
Education

LTV Aerospace
TI (Texas Instruments
Andrew Corporation
CBS Mechanical
Andrew Corporation
IBM
Cooper's Copy & Printing
Property Search
Energy Economics

MAJOR AREA	WORKING AREA
ITEC (Industrial Technology)	IBM, General Motors Comar Turbo Bell Helicopter Textron Slide Masters Sanden Texas Instruments Peterbilt Hypergraphics
Insurance	Humphreys Insurance Agency
Journalism	Dallas Business (Professional Development Inst. - North Lake College Beebower Photography
Library Science	Calhoun Jr. High School W. T. White High School Denton Public Library Nimitz High School Dallas Morning News Thornton Elementary Willis Library, UNT Woodrow Wilson Elementary Texas College of Osteopathic Medical Science Library
MPA (Management Public Administration)	City of Hurst City of Coppel City of McKinney City of Denton City of Dallas City of Flower Mound
Marketing	IBM Sack 'n Save Albert & Hall Assoc. Sally Beauty Co. Walt Disney World J. C. Penney's Sunmark Industries General Electronic GTE-SW Northern Telecom Dillard's Ericsson Radio System

MAJOR AREA

WORKING AREA

PAIR
(Personnel and
Industrial
Relations)

IBM
First State Bank
Bell Helicopter Textron
Recognition Equipment
Sally Beauty Co.
Northern Telecom
U. S. Insurance Group
Vantage

PUAD
(Public
Administration)

IBM
City of Rockwell
City of Longview
Noxell Corp.
UNT Housing Dept.
TSI Imports

Public Relations

KDLX/KLIF Radio
Liz Oliphant & Associates.
Murdock Engineering
Focus Communications
Pilgrims' Way Baptist Church
IBM
Computer Time

ADLE
(Elementary
Education)

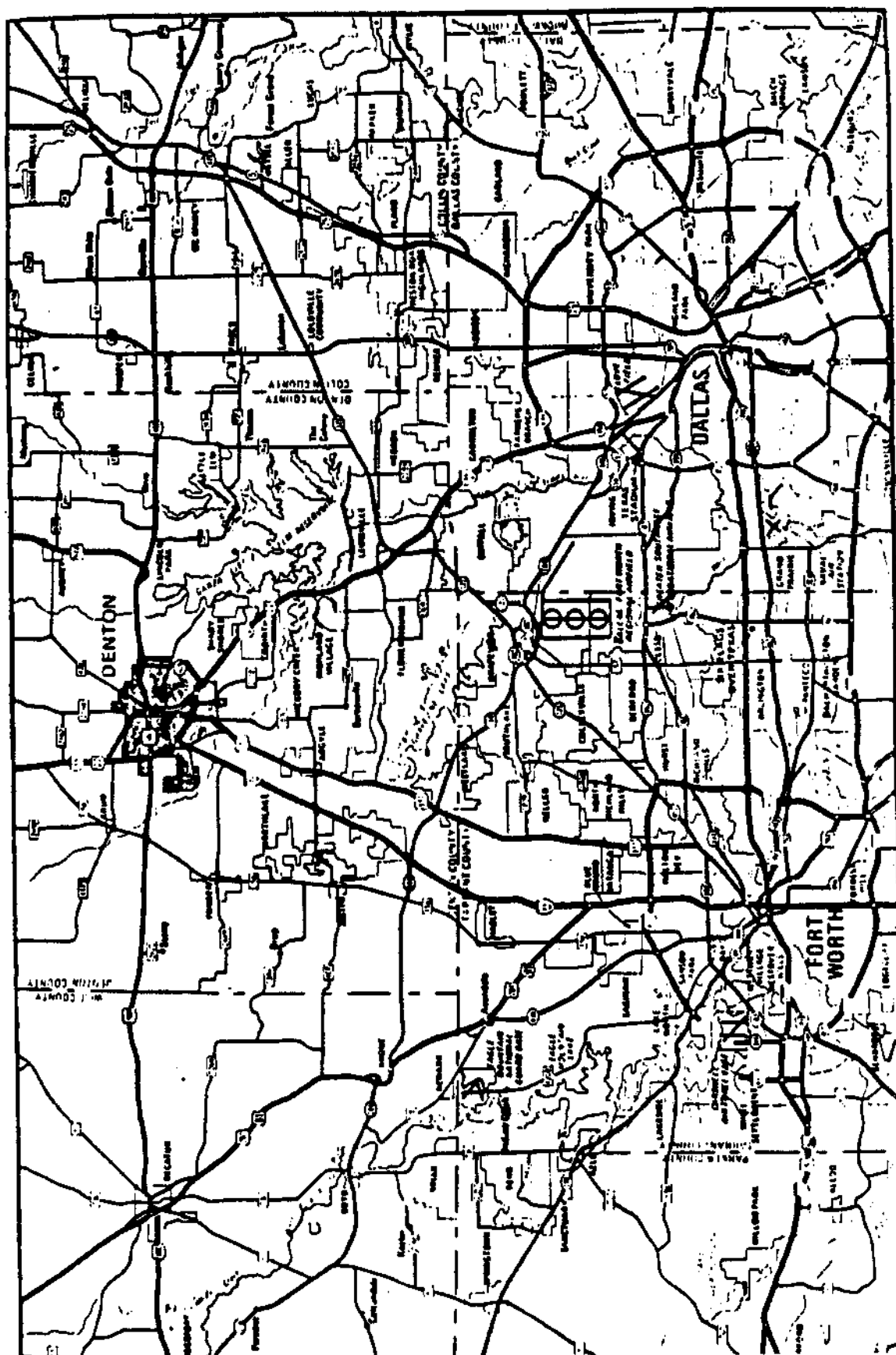
Birdville ISD
Hurst-Euless-Bedford ISD
Keller ISD, Denton ISD
Aubrey ISD, Era ISD
Lewisville ISD, Wichita Falls ISD,
Dallas ISD
Dallas Catholic Diocese
Red Oak Catholic Diocese
Alvarado Catholic Diocese
San Antonio ISD, Arlington ISD
Plano ISD, Irving ISD,
Valley View, ISD
Fort Worth, ISD

REAL
(Real Estate)

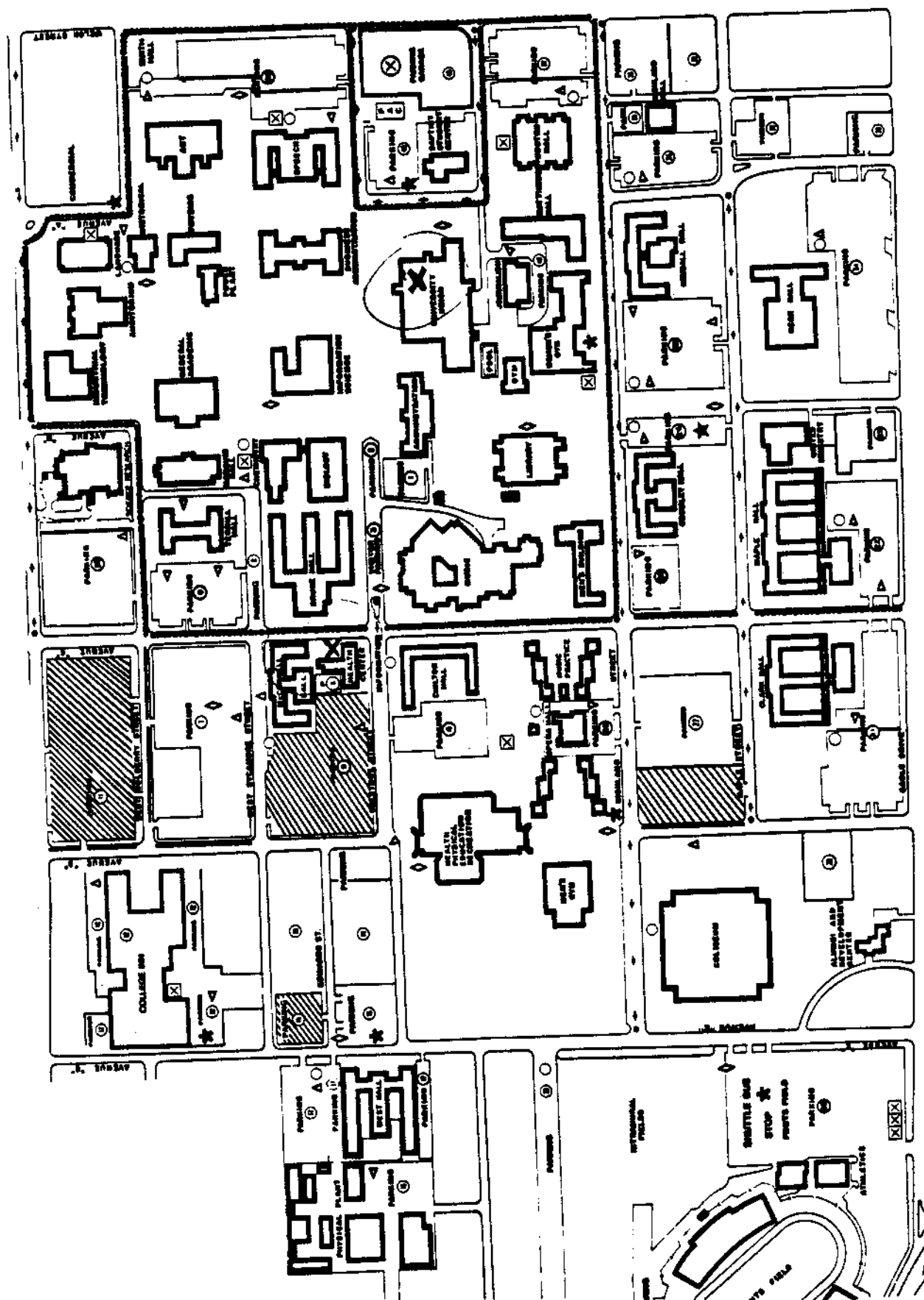
Scoggin Business Properties
The Baldwin Company Realtors
Commonwealth Land & Title Company
Trinity Western Title Company
Century 21
American Appraisal Institute
RE/MAX
J. J. Enterprises

MAJOR AREA	WORKING AREA
RTVF (Radio, Television, and Film)	WFAA Channel 8 Cable Access of Dallas KKDA K104 FM M. Leaman & Associates KDFW - TV Channel 4 Film Dallas Inc. Mary Kay Eagle Radio KRLD Spectradyne Irving Community Television The Studio at Las Colinas Channels 25, 33 and 39 Holden Productions KTVT Channel 11
GEOG (Geography)	Tarrant County (all districts)
HRM (Hotel and Restaurant Management)	Summit Hotel, Marriot Hotel, Best Western Hotel The Aerobic Center DFW Hilton Worshington Hotel TWU Food Service Walt Disney World Europe Park Hotel in West Germany Westmark Inn in Alaska
CRJS (Criminal Justice)	Denton County Sheriff's Office
Studies in Aging	Metropolitan YWCA in Dallas Denton Senior Center United Methodist Homes of New Jersey American Association of Retired Persons in Kansas City Women's Center in Fort Worth Rocky Mountain Methodist Home in Colorado Centerbury Tower, Tampa, Arizona

APPENDIX J
DALLAS\FORT WORTH METROPLEX MAP

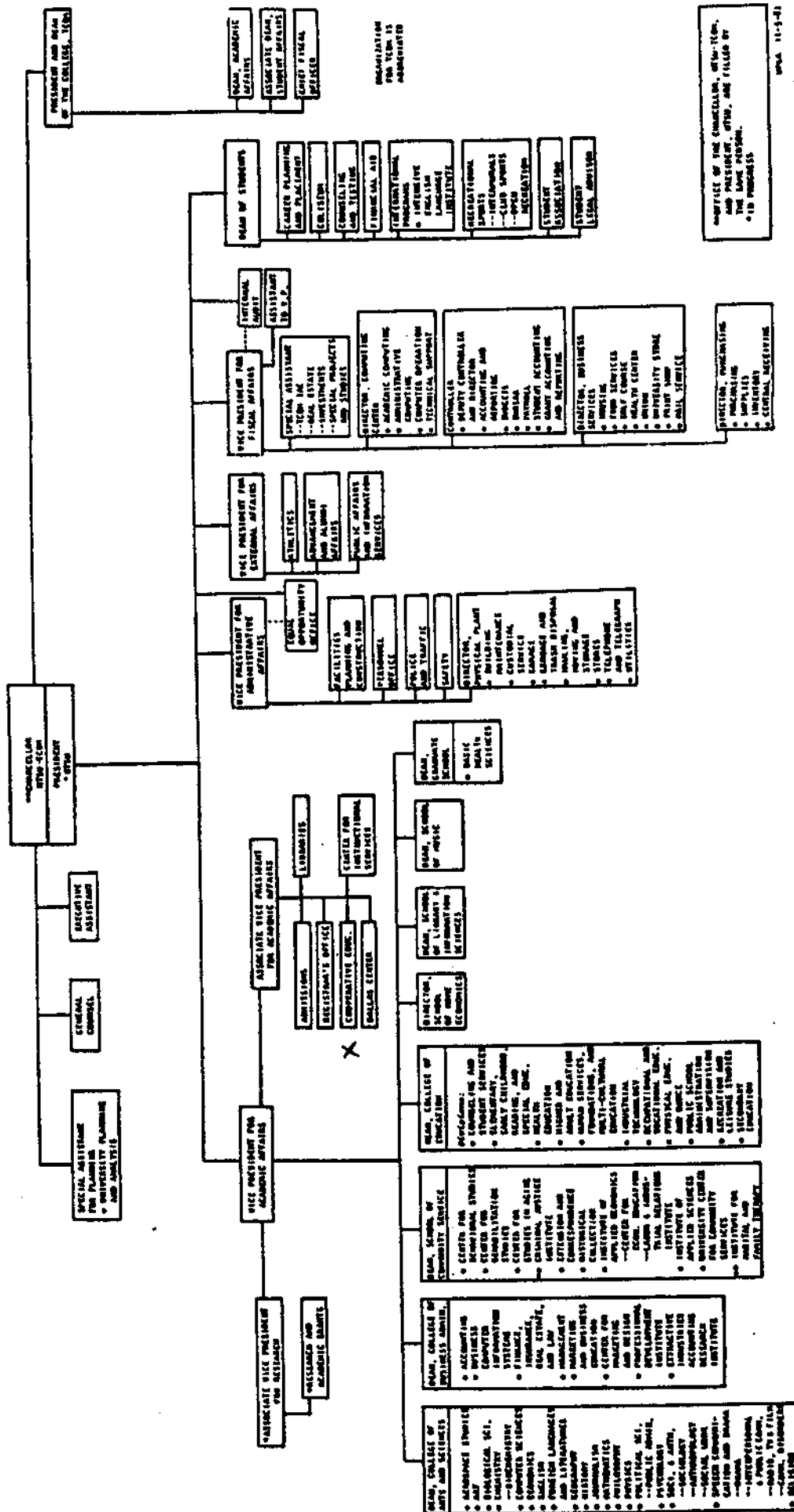


APPENDIX K
UNIVERSITY MAP



APPENDIX L
ORGANIZATION CHART

ORGANIZATIONAL CHART, NTSU--TCOM
November 1962



APPENDIX M
LETTER OF CONFIRMATION BY THE DIRECTOR
OF COOPERATIVE EDUCATION AT THE
UNIVERSITY OF NORTH TEXAS

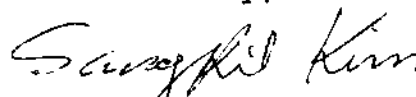
Sang Kil Kim
308 Bradley #36
Denton, TX 76201
November 16, 1989

Dear Dr. Joe Stewart:

I would like to extend my appreciation for your cooperation in helping me with my doctoral dissertation study of "A Development of Cooperative Education at the University of North Texas: 1976-1988."

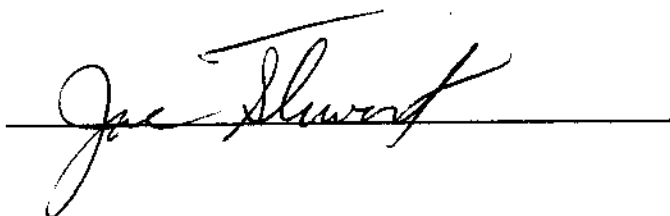
I am sending you a part of the study which is based on personal communication with you concerning the period of your supervision. Please read and verify the study with your signature. If you have any comments, use a separate sheet of paper.

Yours sincerely,



Sang Kil Kim

I have read Mr. Sang Kil Kim's dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988," which describes the program under my supervision. I found the information in this dissertation to be both accurate and complete as far as the record and information provided through the interview.



Sang Kil Kim
308 Bradley #36
Denton, TX 76201
November 16, 1989

Dear Dr. Joseph Birmingham:

I would like to extend my appreciation for your cooperation in helping me with my doctoral dissertation study of "A Development of Cooperative Education at the University of North Texas: 1976-1988."

I am sending you a part of the study which is based on personal communication with you concerning the period of your directorship. Please read and verify the study with your signature. If you have any comments, use a separate sheet of paper.

Yours sincerely,

Sang Kil Kim

Sang Kil Kim

I have read Mr. Sang Kil Kim's dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988," which describes the program under my directorship. I found the information in this dissertation to be both accurate and complete as far as the record and information provided through the interview.

Dr. Birmingham
11-27-89

*Note a couple of minor
edits. Good luck!*

Sang Kil Kim
308 Bradley #36
Denton, TX 76201
November 16, 1989

Dear Dr. Margot Hirsch:

I would like to extend my appreciation for your cooperation in helping me with my doctoral dissertation study of "A Development of Cooperative Education at the University of North Texas: 1976-1988."

I am sending you a part of the study which is based on personal communication with you concerning the period of your directorship. Please read and verify the study with your signature. If you have any comments, use a separate sheet of paper.

Yours sincerely,

Sang Kil Kim

Sang Kil Kim

I have read Mr. Sang Kil Kim's dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988," which describes the program under my directorship. I found the information in this dissertation to be both accurate and complete as far as the record and information provided through the interview.*

Margot Hirsch, Ph.D.

** Please refer to the enclosures*

Sang Kil Kim
308 Bradley #36
Denton, TX 76201
November 16, 1989

Dear Mr. Ron Lutz:

I would like to extend my appreciation for your cooperation in helping me with my doctoral dissertation study of "A Development of Cooperative Education at the University of North Texas: 1976-1988."

I am sending you a part of the study which is based on personal communication with you concerning the period of your directorship. Please read and verify the study with your signature. If you have any comments, use a separate sheet of paper.

Yours sincerely,

Sang Kil Kim
Sang Kil Kim

I have read Mr. Sang Kil Kim's dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988," which describes the program under my directorship. I found the information in this dissertation to be both accurate and complete as far as the record and information provided through the interview.



A handwritten signature, likely of Ronald Lutz, is written over a horizontal line.

Sang Kil Kim
308 Bradley #36
Denton, TX 76201
November 16, 1989

Dear Mr. George Scoggin:

I would like to extend my appreciation for your cooperation in helping me with my doctoral dissertation study of "A Development of Cooperative Education at the University of North Texas: 1976-1988."

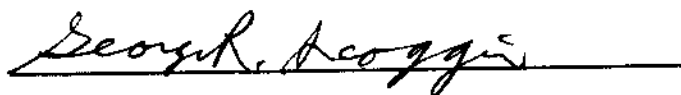
I am sending you a part of the study which is based on personal communication with you concerning the period of your directorship. Please read and verify the study with your signature. If you have any comments, use a separate sheet of paper.

Yours sincerely,



Sang Kil Kim

I have read Mr. Sang Kil Kim's dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988," which describes the program under my directorship. I found the information in this dissertation to be both accurate and complete as far as the record and information provided through the interview.



Sang Kil Kim
308 Bradley #36
Denton, TX 76201
November 16, 1989

Dear Dr. Larry Bowman:

I would like to extend my appreciation for your cooperation in helping me with my doctoral dissertation study of "A Development of Cooperative Education at the University of North Texas: 1976-1988."

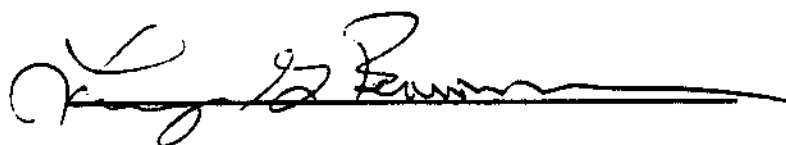
I am sending you a part of the study which is based on personal communication with you concerning the period of your directorship. Please read and verify the study with your signature. If you have any comments, use a separate sheet of paper.

Yours sincerely,



Sang Kil Kim

I have read Mr. Sang Kil Kim's dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988," which describes the program under my directorship. I found the information in this dissertation to be both accurate and complete as far as the record and information provided through the interview.



APPENDIX N
LETTER OF CONFIRMATION BY THE
FACULTY OF HISTORY

November 28, 1989

To: Dissertation Committee Members

From: Larry G. Bowman, Professor of History and
Director of Cooperative Education

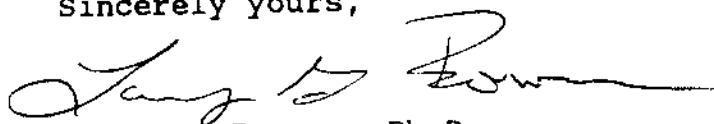
Re: Letter of Confirmation

I have reviewed Mr. Sang Kil Kim's proposal and dissertation entitled "A Development of Cooperative Education at the University of North Texas: 1976-1988."

As a professor of history, I believe this dissertation research design and data analysis conforms to the satisfactory level of a historical study.

Therefore, I will endorse and authorize this dissertation study.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Larry G. Bowman".

Larry G. Bowman, Ph.D.
Professor of History and
Director of Cooperative Education

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