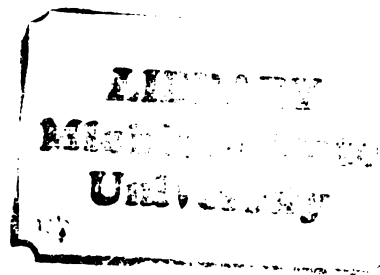


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PERCEPTIONS ABOUT COOPERATIVE EDUCATION
PROGRAMS IN POST-SECONDARY EDUCATION
INSTITUTES IN KUWAIT

By

Ali Taqi

A DISSERTATION

Submitted to
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ABSTRACT

PERCEPTIONS ABOUT COOPERATIVE EDUCATION PROGRAMS IN POST-SECONDARY EDUCATION INSTITUTES IN KUWAIT

By

Ali Taqi

This study was undertaken to obtain the perceptions and attitudes of employers, faculty, and students toward the cooperative education programs at two-year post-secondary technical and vocational institutes in the State of Kuwait. To accomplish this, four groups affecting cooperative education were selected to respond to questionnaires designed to test seven hypotheses developed in this research to identify the perceptions and attitudes of the subject groups of cooperative employers, non-cooperative employers, faculty and students. A secondary purpose was to determine why employers are not participating in the program in the numbers anticipated by program planners.

To insure the validity of the questionnaires and to make certain the instructions and questions were clearly stated the instruments were pilot tested by five members of each group.

The study revealed varied perceptions and attitudes among the study subjects. Only non-cooperative employers

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were unaware of the program, and all the groups were found to favor the concept of cooperative programs. Co-op employers supported the program mainly as a service to the country or community and secondarily, as a means to cut personnel turnover. This study also showed that both employers and students preferred a variety of time formats designed to fit their needs, rather than the traditional arrangement of one term of work alternating with one term of study. All groups expressed interest in obtaining more information about the program.

The major findings of the study revealed a lack of confidence and communication between employers and co-op students, poor administration or coordination of the program by institute staff, lack of information among employers about the program due to a lack of appropriate publicity for the program. No economic or transportation problems appeared to be significant in this study. Based on the findings and conclusions of the study and the statement of the problem, several recommendations were developed.

DEDICATION

To my wife and my parents in grateful appreciation
for all their encouragement.

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CHAPTER ONE

THE PROBLEM

Introduction

In recent years, in Kuwait and other countries, particularly those in the Third World, cooperative education has been given new emphasis in the field of education. Because of tremendous changes in all phases of economic and social life following the discovery of oil in Kuwait, and a severe and current shortage of semi-skilled labor, there is a resurgence of interest in employment training and career-related work experience, particularly concepts and programs of cooperative education. Experiences in the past decade in Kuwait education have shown that human resources development programs have dealt only with high-level manpower needs (e.g., professional, scientific and technological personnel). More recently, this scope has widened from "a relatively narrow and fragmentary concept of manpower planning toward a larger conceptual view of the 'overall' development of human resources." (Khalil, 1975, p.60).

The need of less developed countries for semi-skilled, skilled and professional people requires a

substantial change in the quality and efficiency of education and training programs, so that people of varying abilities, capacities and interests are prepared for skills and professions that fit labor market and social requirements (USAID/NEC, 1965, p.1). This is the case in Kuwait today. It is apparent there is a need for Kuwait society to bridge the large gap between the demands of business and industry for workers at all levels, but particularly skilled labor, and the output of its educational institutions to meet that demand.

Kuwait officials and policy-makers are concerned about finding solutions to this problem. In the five-year development plan for 1970/71 to 1975/76, policy-makers emphasized the need for developing vocational education:

The plan aims at developing human resources by setting up technical skills and scientific knowledge, spread of education, developing the potential abilities of the population and raising their production efficiency through planned education and training. (Kuwait Ministry of Planning, 1971)

The speed of the modernization movement in Kuwait has affected various areas of production and the provision of services in both the public and private sectors. It has created demand for new types and greatly increased manpower at all levels. Policy-makers in the country have been encouraged, by this increased demand for workers, to accelerate the establishment of an organized, functional

educational system, for technical and vocational education to supervise all cooperative programs in post-secondary institutions in Kuwait.

Educational policy-makers recommendation (Number 6.4) to the Committee on Education and Manpower emphasized that:

Coordination between the educational institutes and the labor market must take place to facilitate field training at the actual work sites, where graduates would be employed after graduation. The institutes should take part in evaluating students' work during this training. (Ibid)

It became the main objective of Kuwait's Institutes of Cooperative Technical and Vocational Education to apply this and other recommendations, as stated in their handbook, "to utilize the objective of Cooperative Vocational Education. The students of these institutes will receive practical field training at the actual place of work where they may be employed after graduation." (Naja, et al., 1979, p. 52).

The need for this type of education has been reiterated in Kuwait since 1945 in the face of the shortage of skilled labor (Alessa, 1981, p.57). The real push for vocational education in general and cooperative programs in particular, however, came in response to Ministerial Decree No. 7-711 in 1978. The decree was issued specifically to designate the duties and responsibilities of the Department of Technical and Vocational Education. In Part

Two, Item Number 3, expressly establishes a Division of Cooperative Education under the heading, "Field Training and Follow-Up of Technical and Vocational Education Students," to play a role as liason between educational institutions and employers.*

One year later, policy-makers for vocational education in the Arab countries met at Tunisia under the aegis of the Arabic Association for Culture, Education and Science (AACES), Department of Education, from November 1-15, 1979. These policy-makers and planners for vocational and technical education in the Arab World considered cooperative vocational education from an integrated point of view in which classroom vocational instruction would constitute one part and training in their societies' enterprises would constitute another. They stressed the role and importance of such co-op education in Recommendation #9 issued after that meeting (AACES, 1979, pp. 7 and 12). Directed toward meeting manpower needs, it focused attention on the economic environment in which educational planners have to work (Khalil, 1979, p.6).

Institutes of Co-Operative Technical and Vocational Education

In accordance with this strategy, Kuwait's institutes of technical and vocational education (two years or more of

* This writer has been designated by a ministerial decision as a first head of the division.

post-secondary education) were entrusted with creating appropriate cooperative plans in those institutions. The Department of Technical and Vocational Education had established these institutes, the focal point for this study, in 1972-73. They include:

1. the Teacher Education Institutes, (one for males another for females).
2. the Health Institute for Females.
3. the Business Institute, (One for males another for females)
4. the Kuwait Institute for Applied Technology, (for males).

In the years since their inception, enrollments at these institutions have increased from 207 (70 males and 137 females) in 1972/73 to 4,242 in 1980/81 (1,901 males and 2,341 females). The number of teachers rose accordingly, from 37 teachers in 1972/73 (18 males and 19 females) to 543 teachers in 1980/81. Based on these figures the student enrollment projection for 1990/91 is more than 20,000 students. (Kuwait Ministry of Education, 1978; and AL-ANBA, 1982, p.2).

Statement of the Problem

With increasing numbers of students enrolled in cooperative education in Kuwait, there is concern among educational and economic planning and policy-makers to insure

high quality educational training for vocational students, especially since skilled and semi-skilled workers are in very short supply in the country. In this situation, it would be logical to assume that many employers would want to become involved with co-op programs, for the work co-op students could do while in training and a chance to hire them when they complete their programs. This is not, however, the case. The problem is that few employers are involved in co-op programs. In 1981, there were only 48 throughout the country participating in a program that had been reorganized to make improvements in 1976. Even then, some were anticipating dropping out of the program (Rust, 1977, p.17).

The purpose of this study was to discover why only a small number of employers were participating in cooperative educational programs in two-year, post-secondary vocational and technical institutes in Kuwait. Students, faculty and employers' perceptions and understanding of the existing cooperative education program were identified and used as data for the study. This data is treated statistically and interpreted to make recommendations for the improvement of existing cooperative education programs at post-secondary institutions in keeping with the perceptions of all three groups.

Hypotheses

In undertaking the study, several hypotheses was tested:

1. Students, faculty and employers have different perceptions about cooperative education programs at two year post-secondary institutions in Kuwait.
2. In contrast to non-cooperative employers the cooperative employers, students and faculty have better knowledge of cooperative education programs.
3. Students, faculty and employers favor the concept of cooperative education programs.
4. The cooperative employers (who are involved in this program) and non-cooperative employers consider their participation as a social obligation to offer services to their community and country.
5. Most employers lack information about cooperative education programs at two-year post-secondary education institutions in Kuwait.
6. The employers are discouraged from participating in these programs because of poor administration or coordination by the educational institutions.
7. Both students and faculty have a perception that employers, supervisors, and coordinators are not cooperating sufficiently to bring about a successful cooperative education program in post-secondary institutions in Kuwait.

Definition of Terms

To provide a degree of commonality and limit semantic confusion, the following terms are defined as they are used in this study.

Post-Secondary Education: a general term that includes all formally organized education beyond completion of the twelfth grade. "Institutes" is a conventional English term for two-year post-secondary colleges.

Vocational Education: A planned order of educational experiences, the purpose of which is to prepare students and or retrain other individuals with skills needed in a country's labor market.

Cooperative Program or Plan: A plan under which students of vocational institutions receive practical field training at an actual place of work where they may be employed after graduation.

Cooperative Education: A cooperative work-study sequence of vocational education for persons who, through a cooperative arrangement between the school and employers, receive instruction by the alternation of study in school and on a job in various occupational fields. This concept has been broadly interpreted to include paid students, students who are still trying to identify a career, or those who have been assigned voluntary positions. All of these programs in Kuwait are sponsored and supervised by the Ministry of Education or the Central Training Department of the Ministry of Social Affairs.

Cooperative Employer: Any employer who participated in cooperative programs by training the students; when the school, the employer, and the students worked together for the students' educational attainment during the 1980-81 school year.

Coordinator of Cooperative Education Programs: Refers to a faculty member who is directly responsible for

the classroom phase of a cooperative education program and for coordinating the work phase of the program in the community. At post-secondary institutions in Kuwait, the coordinator's position refers to a post similar to that of a Director of Co-op programs in the United States.

Director of Cooperative Education: A person who is responsible for the overall operation, development and coordination of the program. His duties in the United States include counseling, teaching, speaking, writing, editing, traveling and visiting employers. In Kuwait, the director is not a faculty member but he should be a member of the Technical and Vocational Education Department. His job is similar to that of his colleagues in the United States except for teaching.

Term: The academic term in post-secondary institutes in Kuwait consists of fifteen weeks including counseling and registration.

Significance of the Study

There is no doubt that students, faculty and employers are the main factors in the success or failure of any co-op program, therefore, distinguishing their perceptions, needs and expectations is a matter of importance.

The situation in Kuwait now is similar to the situation the United States for a decade, which was described by Gore "There is the evidence of the complete 'dropout'

culture of romantic 60's. And, to some extent, business firms also have been reflecting a sense of isolationism and noninvolvement. (Gore, 1973, p.46)

The research and studies in Kuwait on this issue are very few and may be counted on the fingers of one hand. In the United States, also, there was a lack of studies and research concerning employers' perceptions and attitudes toward cooperative programs compared to other aspects of co-op. Supporting this, Margaret Snell said, "while over 250 articles have been written within the last ten years on cooperative education programs, few studies have been conducted regarding employers' perceptions of these programs." (Snell, 1981, p. 20)

The significance of this study stems from the fact that cooperative education is needed to bridge the gap between the country's need for skilled labor and educational institutes in Kuwait. There are numbers of training centers established all over the country for this purpose, but these are not adequate to the need and, as the General Secretary for the Kuwait Labor Union said, "Most of these contemporary training centers lack much equipment and tools needed to achieve the purpose of contemporary training." (Al-Kandari, 1981)

The results of the study may have an impact on decisions about the current cooperative program at post-secondary

school institutions in Kuwait. It indicates the need for necessary change in the current program to eliminate misconceptions by students, faculty and employers regarding cooperative education programs.

This study could have an impact on recruiting students for the cooperative education programs at planned comprehensive Community Colleges in 1984-85 with 30,000 students expected to enroll (Adams and others).

The results background information and expectations could also be of considerable interest to Kuwait University and its colleges and faculties which are involved in planning cooperative type educational programs.

Methodology

In order to identify perceptions regarding the cooperative education programs at post-secondary education institutes in Kuwait, four different groups were identified. The first group was students, both those who have participated in such programs before, and those who have not participated (Group I). Group II consisted of full-time faculty members from post-secondary vocational education institutes. Group III was composed of cooperative employers, those who had participated in the past or who were currently involved in co-op programs. These were selected from cooperative employer lists kept by post-secondary institutes during 1980.81. Group IV was composed

of employers who had not been involved in co-op programs, including small and large, private and public and business and industry personnel managers, presidents and vice-presidents. These were selected from the Industrial Directory at the Ministry of Industry and Trade, and the Chamber of Commerce Annual Directory for 1981.

Instrument Development

The content and format of the instrument were partially adapted from a questionnaire constructed by Dr. Wadworth Balcom, in the Education Department, of the University of Miami. (1976, p.159). After determining the questions, the first step was to translate the questionnaire into Arabic language since Arab managers predominate in Kuwait businesses. The translation was made by Al Shafiea, Director and Professor of Arabic Language in the Technical and Vocational Department at Ministry of Education.

To insure the validity of the questionnaires for post-secondary institutes in Kuwait, and to make certain that the instructions and the questions were clearly stated, the instruments were administered to a pilot group of students, faculty and employers, in addition to being reviewed by representatives from the vocational and technical department in the Ministry of Education. During a 1982 summer visit to Kuwait, the researcher had the opportunity to test

the instrument with pilot groups which consisted of (5) members of each group; (5) students, (5) faculty members and (5) employers, in addition to (3) senior employers at the Vocational and Technical Department. Based on the results of the pilot testing, some adjustments and modifications were made. The results of the pilot study were compiled and a revised instrument designed. The instrument was further refined after careful review with Mr. Al-Shafiea, a professor of Arabic and Literature at post-secondary institutions. These adjustments were completed prior to the production of the final questionnaire, a copy of this questionnaire appears in Appendix 1.

The names of students and faculty were obtained from the registrar's office in each institution. Of these, 150 students were selected at random from both male and female students to represent the total number of 4,200 students in post-secondary institutions in Kuwait. The 75 faculty members were selected randomly from approximately 520 faculty and staff members at these institutions. The names and addresses of 77 co-operative employers in the 1980-81 are available from an employers' directory available at the cooperative education section in each institution. The employers who had never been involved with co-op programs were surveyed by distributing 77 questionnaires to management personnel or owners of that number of firms, randomly

selected from more than 6,000 firms and factories in the country.

Statistical procedures for this study included analyses of frequency and percentage. The results are illustrated by tables.

Scope and Limitations

1. The students sample includes full-time cooperative students (who participated in the program or are currently enrolled) and non-cooperative students from Kuwait's post-secondary institutes.
2. The faculty members were selected from full-time employees at the same institutions. Therefore, the faculty members from Kuwait University, who are involved part-time in cooperative education programs, were not included in this study.
3. The research sample was drawn from those students enrolled in two-year post-secondary educational institutions in Kuwait in the academic year 1980-81, which included the following six-institutions:
 - (2) Institutes of Business Administration (one for males, another for females)
 - (2) Teacher Training Institutes (one for males, another for females)
 - (1) Institute of Health
 - (1) Kuwait Institute for Applied Technology
4. The cooperative employers are those listed in the institutions' directories for 1980-81.
5. This study is limited to researching the perceptions of students, faculty and employers regarding co-op education programs, factors related to economy, manpower and the local job market. The political structure of the country is not examined.

Overview of the Study

Chapter Two deals with a review of literature pertinent to cooperative education in the United States and Kuwait that includes the history of co-op education and recent research done in this area in both countries.

Chapter Three sets forth the methods and procedures for the study. The instruments are described in detail, as well as the procedures used for selecting the sample for the study. Collection of the data and its treatment are also described.

Chapter Four includes the analysis of the data. Chapter Five comprises the summary and conclusions, discussion and implications for further study in cooperative education.

CHAPTER TWO

LITERATURE REVIEW

In viewing the literature the researcher hopes to shed some light on the evolution of co-op programs and recent research in this area. The findings and ideas from the precedent literature has helped in providing background for the study and theoretical grounding.

This chapter is divided into seven sections: (1) The historical development of cooperative education programs in the United States, (2) The historical development of co-op programs in Kuwait, (3) Goals and objectives of co-ops in the United States, (4) Objectives and goals of co-ops in the State of Kuwait, (5) Related research studies in the U.S., (6) Related research studies in Kuwait, and (7) Summary of the chapters.

Historical Background of Co-Op Education Programs in the United States

It is generally accepted that the history of co-operative education dates back to the early 1900s, or some years earlier. Wanat and Snell state that, "Cooperative education has been in existence for a long time; it is not new, it is no longer experimental." (1980, p.v.). Elements

of Cooperative Vocational Education has been found in education systems for over a hundred years. Wanat and Snell even date this back to 1824, when an orphanage at Potsdam encouraged boys to learn trades in the community (Ibid,p.3).

It was common in England during the nineteenth century for children to work in factories part of the day, while still attending school. In this regard, Hudson (1955), mentions that the roots of the cooperative program movement in United States were similar to the Mechanics Institute movement in Great Britain, which provided a new means of developing relationships between education and manual labor (p. 13). Programs at these institutions and similar institutes in the United States--such as Gardiner in Maine in 1822--required students to spend twenty-three hundred hours in shops operated by the school which manufactured goods for the open market (Ibid, p.14). This program is the one most closely related to the present cooperative education program system. Bill Patterson of Tennessee Technological University in 1958 adopted a co-operative program in which every co-op student was required to spend a full year on the job site (Welch, 1982, p.96). Two universities adopted this system later on: Vanderbilt University in 1976 and Murray State University in 1977. Review of the literature in the field shows a general belief that cooperative education programs were inaugurated by

Dean Herman Schnieder in 1906 at the University of Cincinnati. This way, "the first cooperative program that combined work and study as an integral part of the educational process (Wanat and Snell, 1980, p.4). In 1906, the first group of twenty-seven young men began their training under the cooperative system, divided into two groups, that alternated every other week between shop and classroom. Dean Seneider's first cooperative program was established in the field of Engineering.

The passage of Smith-Hughes Act of 1917 (Public Law 347 of the 64th Congress)--approved a month and a half before the United States entered World War I--was significant for cooperative education development. The Federal Board for Vocational Education recognized cooperative courses and encouraged schools to establish these courses (Ibid). The 1936 George-Dean Act (Public Law 673 of the 74th Congress) was another important milestone in development and growth of cooperative education programs (Reimer, 1976, p.11). This act, for the first time, had in its regulations an annual appropriation for distributive occupations, and the federal funding for this program was contingent upon the operation of these programs on a cooperative basis between schools and their local communities.

For the first time in 1921, Antioch College instituted a cooperative education program on the initiative of Mr. Arthur Morgan, the President, that included courses

other than engineering. This program required students to be trained through a combination of liberal arts and vocational courses. The liberal arts courses grounded all students in the significant ideas and methods of biology, geology, chemistry, physics, literature, social history, economics, and philosophy. A set of vocational courses was designed to teach the techniques of administration, transportation, marketing, purchasing, personnel and so on--as well as specialized courses in chemistry, education and engineering (Henderson and Hall, 1949, p.4).

During the same period of time, two year colleges--most of which were technical institutes--adopted cooperative programs (Barbeau, 1972, p. 23). The movements at this level was began by Rochester Athenaeum and the Mechanics Institute in New York in 1912. The Ohio College of Applied Science and Wyomissing Polytechnic Institute in Pennsylvania followed with two-year cooperative technical programs. These curriculums were predominantly engineering (Heerman, 1973, p.5). The Collegiate Cooperative Education Association was assembled in 1926 under the direction of Herman Schneider at the University of Cincinnati. Soon thereafter, the Cooperative Education Division of the American Society of Engineering Education was formed and became the medium of exchange among educators and employees engaged in cooperative education. In 1922, Riverside Junior College in California began cooperative programs in engineering, business,

nursing, library work and architecture. This was the first junior college in the United States to adopt a cooperative program (Barbeau, 1974, pp. 5-12). In 1924, Garland Junior College in Boston offered its own cooperative program, and by 1939 fourteen Junior colleges had established similar programs (Barbeau, 1972).

The growth of cooperative programs in community colleges was significant, but "it was in the later part of the 1960's, however, that such programs began to flourish" (Perloff and Sussna, 1978, p.54). In 1970, LaGuardia Community College created by New York's Board of Education, as the State's first post-secondary institution to offer a comprehensive program of cooperative education (Abbott, 1978, p. 217). A cooperative programs survey in 1972 showed 105 community or junior college programs compared to 260 community college programs operational in the 1974 survey of undergraduate co-op programs in the United States (Brown and Wilson, 1975, p.1-8). This was a 40 percent increase in cooperative programs in these institutions. This number grew to 600 college and universities in the Winter of 1975, with 120,000 cooperative students involved in that year according to Bender and Holsenbeck (1975).

In spite of recession and inflation, the trend toward cooperative experience has continued to gather strength (Wandsworth, 1976, p.21). Indicators of this phenomenon, including program numbers and sizes, show substantial growth over the past ten years, particularly during 1970 to 1977

period when 857 new programs, involving well over 100,000 students, were developed. Presently there are an estimated 1,047 programs operating in the United States and Canada (19 in Canada) involving over 200,000 students. Approximately 46 percent of these programs are in Junior institutions while the remaining 54 percent are in Senior institutions (McMullen, 1981, p.73). Before concluding this historical review of co-op education in the United States, it is important to mention the contributions industry-sponsored institutions have made to the cooperative education movement. The first program of this type was established by General Motors Institute (GMI) in 1919. Under the direction of Albert Sobey, 492 students took advantage of the opportunity GMI offered that year (Rodes, 1969, pp.1-2). GMI conducted five-year cooperative programs in mechanical, industrial or electrical engineering, and in industrial administration. These programs provided General Motors Corporation with a nucleus of college graduates who were well qualified and highly motivated to assume positions of responsibility and leadership, primarily in engineering and management. Since 1946 General Motors Institute has also enrolled selected students from General Motors' Overseas Operations for special one-or two-year cooperative programs (Heerman, 1973).

In 1962 the National Commission for Cooperative Education was organized through an initial grant from the

Charles Kettering Foundation, with funding and assistance from the Ford Foundation and other organizations (Wilson and Lyons, 1961). There were three basic goals set for this commission to accomplish during its first five years: (1) to double the number of colleges and universities offering cooperative education from 60 to 120, (2) to increase the number of students enrolled in co-op education from 28,000 to 78,000; (3) to strengthen some of the existing co-op programs, especially in liberal arts colleges (Borman, 1972, p.50). During the same year several insurance companies founded a College of Insurance on a five-year cooperative plan of alternating four months of work with the same period of study (Murray, 1969, p.155-6). Two-thirds of the students' tuition was paid by the college. A year later, following the organization of the National Commission for Cooperative Education, the Cooperative Education Association was officially founded in September, 1963, with a comprehensive range of membership, including colleges, employers, and others interested in cooperative education (Heerman, 1973, p.6). In the same year Northeastern University established a program in power system engineering on the cooperative plan of education (Ibid, p.86). This program was initiated with the scholarship and matching-fund support of members of the Electric Council of New England. This program led to a Master's degree in six years, with a bachelor's degree awarded at the end

of five years. Chrysler Corporation in Detroit also provides a two-year cooperative graduate program through the Chrysler Institute of Engineering and participating universities (Ibid). The program leads to a Master's degree and subsequent employment by Chrysler as a professional engineer. With the idea of skilled employee recruitment, Price Waterhouse and Company established its cooperative program for replacement of temporary employees in accounting. The students are required to work three to six months each year at different locations around the country and almost 90 percent of them become permanent staff members (Kuchens, 1968, p.49).

History of Cooperative Education Programs in Kuwait

In the recent years, there has been an increasing interest in cooperative education overseas and placement abroad (D.R. Allen, 1976). The need for cooperative vocational education in the State of Kuwait has been noted by the Kuwaiti government and serious endeavors have been undertaken to cope with the new demands and challenges of the post-oil era. Although some Arab educators feel that Arab oil-rich countries have gone "degree mad"--that the advantages of getting a university education has been blown out of proportion, the Kuwait government seems to be aware of these problems and has introduced an increasing number of vocational education programs (Sapstead, 1980, p.97).

A range of commercial, industrial, religious and teacher training institutions have been built, while many companies, particularly the oil companies, have extensive programs to train and develop employees from the level of field workers right to upper management positions (Ibid, p.98). The revenues from oil have grown steadily since its discovery in 1946. These have allowed the government to implement remarkable programs for the development of the country. Extensive social services have been created such as schools, hospitals and other institutions. Perhaps the most salient results has been that labor demand has far outstripped the country's human resources and reserves of skills (Kuwait Central Training Dept., 1979).

To overcome this problem, and to develop the country's human resources through vocational training, the government implemented its plan in the 1950's by the establishment of three institutions for education and training:

1. Magwa Vocational Training Center of the Kuwait Oil Company.
2. Industrial College of the Ministry of Education in 1954.
3. Central Vocational Training, with Cooperation between the Ministry of Education and Ministry of Labor and Social Affairs in 1950-1960 (Al-Kandari, 1981).

The Curricula of these Centers were geared to training skilled and semi-skilled workers in the occupations of electrician, welder, moulder, blacksmith, turner and auto mechanic. The principal objective of Central Vocational Training was to (1) improve the skills and general conditions of the labor force and to eventually (2) satisfy current and future manpower requirements (Alessa, 1981, p.72).

A few years later, in academic year 1963-64, the Ministry of Education established the Commercial Secondary School which prepares boys of high school age for lower levels business and commercial professions. In academic year 1967-68 the first trade school for girls was opened by the Education Ministry and names the Secondary Technical School for Girls (Kuwait Department of Technical and Vocational Education, 1979, p.12). The purpose of establishing these schools and centers was to answer the immediate needs of several ministries and governmental institutions. Therefore, "they were not established on the basis of manpower required nor were they expected to meet the demand, and the idea of organized training came out in the 1960's". (Al-Kandari, p.2).

In 1971, the Planning Board's (now the Planning Ministry), National Commission on Manpower and Education,

...raised the issue of training coordination, in response to criticism from several quarters inside and outside government circles. The

end point of this was, to set up a committee to: (a) report on Vocational training efforts in all forms, including technical education. (b) identify problems and submit recommendations for better coordination and reconciliation of education and training (cooperative education). (Central Training Department in Kuwait, 1979, p. 2).

This committee submitted a report in December 1971 which has since become a landmark effort in the field of human resource development in Kuwait. It was implied in this report, that a Higher Committee for Vocational Training (HCVT) was needed to organize existing vocational programs and training centers (Ibid, p. 4). Thus, in February 1972, the Department of Technical and Vocational Education was established within the Ministry of Education, to supervise the Cooperative and Vocational Education programs, sponsored by this Ministry, in Kuwait (Hassan and El-Ghannam, 1975, p.6).

During the 1970s, a number of reports on cooperative vocational education were submitted to the Ministry of Education, which undoubtedly had great effect on the development of technical and vocational education and cooperative programs.

A 1974 report from Dr. Bonny Rust, the Dean of West London College in England, on commercial education and its development recommended the establishment of business institutes (two-years post-secondary) to include preparation

for cooperative programs (Rust, 1974). Another report was done by Dr. George Hunting, an expert in Industrial Education in the United Kingdom, who emphasized cooperative education programs in his recommendation, "make provision for reciprocal mobility between the programs of technicians and other types of training in various institutions (Hunting, 1974, p.9). A report by K. Elais in May 1967 was directed toward relating education and to industry, emphasizing the value of co-op education as a practicum, in place of work. His report also stressed the importance of integration between theory and practice (Hassan and El-Ghannan p.26).

It is generally accepted that Kuwait's development of technical and vocational education, with corresponding cooperative programs, actually began when UNESCO personnel and other Arab experts were invited to Kuwait during the period from January 20, 1970 to February 18, 1975 to do five-year feasibility studies (Kuwait Department of Technical and Vocational Education, 1979, p.14). The experts studied and revised the conditions of technical and vocational education and cooperative education programs, within the context of comprehensive perceptions of the Kuwaiti society and the country's labor market. Between 1972 and 1976 several institutions with organized cooperative programs were established, including two Teachers Education

Institutes in 1972 (one for males and one for females); the Health Institute in 1974 (for females only); two Business Institutes in 1975 (one for males and one for females); and the Kuwait Institute for Applied Technology in 1966 which is for males only (Ibid, p.24). All of these institutes provided two-year, post-secondary programs and a special division was established in each of them to supervise and conduct cooperative education programs.

The most recent Kuwait legislation to support the development and acceleration of cooperative programs in these institutions was the Ministerial Decree Number 7111/7, dated October 3, 1978. The Decree, in its first section, identified the role of the Technical and Vocational Department in facilitating cooperative education programs for both males and females. The second section of the Decree, Title 3, sanctioned the establishment of a Division of Field Training and Graduate Pursuits with responsibility for supervising, coordinating and facilitating co-op programs at all institutes of vocational education in Kuwait (Kuwait Ministry of Education, 1978).

Vocational and Cooperative Programs in Other Ministries

Although the Ministry of Education has exerted leadership in this area, other vocational education and co-op programs in Kuwait have been made available through the

efforts of agencies that employ their own trainees. It is worth mentioning that some institutions offering vocational and cooperative programs have been established, either by other government ministries or private sector companies such as the Kuwait Oil Company. For example, the Ministry of Public Works established its own program in 1969, through the Institute of Agriculture, to offer theoretical and practical work-study experiences in agricultural production. Their two-year course includes farming supervision, agricultural farming, animal husbandry, dairy farming, poultry-farming and nursery gardening. The students are all employed by the Ministry of Public Works upon graduation.

This Ministry also established an Institute of Applied Engineering in 1968. Graduates from secondary schools, who are interested in civil engineering, enter a two-year program that includes road and duct building, surveying, building and draughtsmanship and measurements.

Similar programs for interested graduates of secondary schools, have been established by other ministries. The Ministry of Postal and Telecommunication Services established the Institute of Telecommunication Services in 1966. The Institute of Aeronautics was established by the Ministry of Defense in 1969 and offers a 12 to 24 month course of classroom and work study. The Center for the Development of Water Resources was established in 1968 by the Ministry of Water and Power Resources in 1968 (Al-Kandari, pp.2-7).

Vocational and Cooperative Programs in the Private Sector

In the private sector, the Kuwait Oil Company (KOC) established the earliest vocational training center program in 1951, mainly to attract secondary school-leavers. KOC later began to attract graduates of secondary schools and in 1970 a three-year work-study program was instituted for these workers. This program was comprised of one year in the KOC operations department, six months in the United Kingdom (divided between English language classes and instruction at a refinery, and then back to KOC for a further eighteen months in operations (Kuwaiti Digest, 1980, p.7). This program is closely related to the model of "sandwich courses" in the British Vocational educational system. KOC also develops work-study and on-the-job training programs for university graduates. Similar programs exist in Kuwait chemical industry companies.

The Kuwait Central Bank established its Center for Financial Studies in 1970. Its curriculum includes a mixture of theoretical courses in banking and management, along with practical training programs at the job sets. Admission to this program is restricted to Kuwait Central Bank employees and employees of other commercial banks or financial institutions in the country (Faiz, 1974, 72-83).

Goals and Objectives of Cooperative Education

In tracing the goals and objectives of cooperative education, it is apparent that, over time, the goals and objectives of any given program tend to expand to reflect the program's ability to cope with ad hoc demands and changes in the need for the program. This is particularly true when programs are providing skills in a rapidly changing society where not only skills, but entire occupations and industries, become obsolete or change radically, sometimes in just a few years. Cooperative education, because of its close relationship to the work place, has an advantage over other forms of education in keeping up-to-date and training students in relevant, needed skills, but putting this advantage to good use means maintaining flexibility in specific objectives and keeping other objectives general enough to allow for almost any needed change. Hudson in 1955, summarized the general objectives of cooperative education.

1. Work experience directly related to the student's major fields of study.
2. Vocational guidance
3. Personal and Social Development
4. Financial Aid to Students.
(Hudson, 1955, p.81).

His study was an early effort in the field, that showed 60 percent of the colleges involved in the study considered work experience in the major field as the most important objective. Another 33 percent chose Guidance

and Student Orientation as the most important co-op objectives. From this study it may be concluded, that although most cooperative institutions claim to pursue all of these objectives at some point in their programs, some differences in priorities and emphasis are evident. For example, Antioch College's institutional goals, as stated by its Vice President Emeritus, gave priority to personality growth due to real life personal relations on the job. Antioch's second goal is career orientation and preparation through better integration of studies. A third goal was to help students gain knowledge and learning by bringing real world experiences into the classroom (Dawson, 1973, pp.1-5).

The National Conference on Cooperative Vocational Education (1969) identified four major objectives of cooperative education:

1. To earn money in order to remain in school...the work-study program.
2. To develop the necessary social skills and work attitudes and habits necessary for job tenure or entry into the vocational training programs.
3. To develop a viable career plan based realistic self-appraisal and accurate occupational information.
4. To develop a well-balanced combination of vocational competencies that enable graduates to advance more rapidly in satisfying careers (1969, p.19).

Another objective of cooperative education was identified as success motivation and the development of successful and realistic social attitudes (Knowles, et al., 1971). It is also important for cooperative education to prepare students to enter the social and economic worlds. "The task of helping students find relevancy is one which is fast being recognized as crucial for society and economic structures to continue to function as intended." (Jacobs, 1973, p.14).

In this regard, Collins, in 1975, also pointed out the motivational goals of cooperative programs. He said that some liberal arts institutions provide co-op programs because they enable their students to deal with the practical as well as the theoretical aspects of course material. They "enable the student to break through the 'ivory tower' effect of the sometimes isolated campus and also to engage in service types of employment which they regard as important". (Collins, 1975, p.16).

Dube (1981) described cooperative education objectives according to the interest of those served by such programs: students, educational institutions and employers. For students, he says, "the Co-op program aims to reinforce and expand learning, develop personal growth, and provide career direction". The Co-op plan enables educational institutions to provide, "a superior education and compete more effectively for students in a declining student-age pool." And, as far

as employers are concerned, there are "the economic advantages of using cooperative programs for meeting their long- and short-term manpower needs (Dube, 1981, p.9). Brazzail, on the other hand, identifies co-op program objectives of employers as, "a means for companies to meet the demands of personnel turnover and growth, to accommodate changes in needed skills and knowledge, and to improve job performance." (1981, pp.50-53)

At a conference of California educators and 35 corporate presidents, Tom Clausen, Bank America President, emphasized the importance of co-op programs, saying that a "businessman's success as manager depends on the quality of students available to him into his company." (Beal, 1981, p. 24). As for the educational institutions concerned, Shive and Rogers suggest three objectives for educators' involvement with businesses in cooperative programs: (1) schools need the tax revenues generated by the business presence, (2) they need the work opportunities provided for their graduates and (3) they are dependent upon business support in trying to generate overall community approval for school programs (Jerrald and Joseph, 1979, p.286-90). Don Iugua, a member of the U.S. House Committee on Science and Technology, in his comments on a bill to increase university research funding, stated that the reason for university-industry cooperation is that the universities create new knowledge

while industry puts that new knowledge to work. Cooperative education, in the final analysis, is but one means of human resource development. In this respect Herbert Striner, Dean of the College of Business Administration of American University, told a conference of educators and industrial leaders that, "the United States must adopt a philosophy which sees education and training throughout life as an absolutely necessary national investment in human resource development (Watkins, 1980, pp. 1 and 4). This objective was echoed by Orfila Aleganho, Secretary-General of the Organization of American States, who said that, "the focus on cooperative education rests on developing human resources perhaps the most difficult challenge for mankind today." (Orfilla, 1981, pp.12-16).

Although it is generally understood that the goals and objectives of co-op education involves blending schooling and experience along parallel tracks, Cross, at the 14th International Conference for Cooperative Education indicated that the objective of co-op education in the 1980's is, "to lead the way in integrating and enriching the total learning experience for workers entering classrooms, as well as for students entering employment." (1979, pp. 5-14)

The objectives of cooperative education have been expanded and diversified and extended beyond a national framework. In recent years, especially in the last decade,

considerable thought has been given to international objectives of cooperative education. Dube asserts that such programs can be a means to internationalize education, since he feels it is evident that, "the need to relate education and work is a worldwide concern". (Dube, 1981, p.9). Sprinkle views this shift to international education and the exchange of students as a relatively new development for co-op education in the United States (Sprinkle, 1981, pp. 99-107).

The aims of the Second World Conference on Cooperative Education in April 1981 confirmed this trend toward better understanding between nations through international education and encouraging the transfer and use of technology to developing countries by educating and training nationals in the use of that technology. David Nicol of the United Nations Institute for Training and Research also believes that cooperative education can play a major role in this "transfer of technology". (Nicol, 1981, p.17-21). Such international co-op education could be a good solution for developing countries where lack of facilities, qualified instructors and equipment limit training opportunities.

The goals and objectives of international cooperative education exchanges are somewhat different than more traditionally defined approaches. In general terms, these objectives are to: (1) provide the student with a general international or cultural awareness; (2) to provide the student with improved language fluency in a foreign language;

(3) to provide the student with the next level of field study skills which would normally be associated with a domestic experience or; (4) some combination of all three (Sprinkle, pp.99-107).

Goals and Objectives of Cooperative Programs in Kuwait

The objectives of Kuwait's cooperative education programs stem from the goals the country's policy-makers hold for vocational and technical education and the country's general trend toward upgrading its indigenous labor force to substitute for foreign labor as much as possible. The Report on Vocational Training in Kuwait (1981) states that co-op programs were established, from the beginning, to meet the constantly growing demand for manpower. Within this goal, two objectives were identified: (1) to alleviate the heavy reliance of the country on foreign labor and (2) to develop the country's human resources through cooperative and vocational programs.

The policy makers of Kuwait directed citizens inside and outside government circles to adopt a new set of objectives. They tried to inculcate such objectives as the dignity of manual labor, non-tribal allegiance and acceptance of an intricate system of labor relations (Status of Vocational Training in Kuwait, 1981). In contrast to the situation in developed countries, the issue of dignity for manual workers has to be made an

objective in vocational training, for several social and cultural reasons. People in less developed countries, such as Kuwait, feel manual workers are inferior members of the work force; white-collar workers are given much higher status (Alessa, 1981, p.75).

The Five-Year Plan of 1981/82-1985/86 concerning construction programs, identified the objectives of cooperative programs in Kuwait as "the program that enables the students to overcome the problems they are faced with in their own lives, to continue their education, and to promote their scientific and occupational standards. (p.83)

Until this point, the objectives of top education programs were directed to the labor market and disregarded educational philosophy. Heerman pointed out this problem by calling attention to:

...evidence that a particular brand of institutional education philosophy may be 'lifted' without sufficient thought to its relationship to institutional mission. There is, then, a clear danger that meeting community needs and designing cooperative education to conform to college philosophy may be secondary to launching a program--any cooperative program (Heerman, 1973, p.9).

Drega Hurley, in her report to the Ministry of Education, sets forth four objectives for cooperative education programs in the Medical Secretaries Branch of Kuwait Business Institute:

1. To provide the students with some practical knowledge related to the nature of medical services and administrative organizations in hospitals, primary care units and the Ministry of Public Health; to give them (students) an opportunity to utilize the knowledge gained at the Institute.
2. To give the student the opportunity to understand basic office practice in the environment in which ultimately, she will be working.
3. Train the students in the actual use of equipment and machines available in the fieldwork centers.
4. To acquire the behavioral skills necessary for students to become an integral part of the health care team (Hurley, 1981, p. 12).

The Business Institute's Annual Directory for cooperative programs summarizes its objectives: (1) to open channels between the labor market and the institutes' students; and between the labor market and the institutes' administration and faculty members; (2) to inform the employers about the theoretical and practical experiences of the students and about their ambitions (Institute of Business Administration, 1981, p.1).

To attain the objectives of the technical and vocational education institutes, their students are offered cooperative programs at actual job sites where they might seek employment after graduation. The overall objectives of such programs were identified by the Ministry of Education as:

1. To assimilate theoretical and practical courses offered by the institutes.
2. To act as an evaluative criterion of the students' success in their studies.
3. To prepare students to carry out their future roles efficiently.
4. To acquaint the students with the nature and actual problems of the work which they may face in the future (Technical and Vocational Education in Kuwait, 1979 p. 53).

Related Research And Studies on
Cooperative Education in the U.S.

Values and Benefits of Co-Op Programs

One of the earliest studies of cooperative education programs was Hudson's research at Michigan State University in 1955. Hudson mailed 70 employer questionnaires and, with a 93 percent rate of return, found that co-op students show higher attendance, better quality and quantity of work, and more ability to get along with others. "Employer attitudes toward the employment of co-op students were almost entirely favorable," (p. 5). Another survey conducted by LeLievre at the University of Cincinnati, showed that, among accounting graduates at that University, 93.1 percent of the students believed their co-op work aided in testing their interest and aptitude for their chosen fields and 84.7 percent thought their co-op work made their academic study more meaningful (Thomas, 1981, p.15). Another

study by Wilson and Lyons of the relevance of cooperative education for graduate and undergraduate students was inaugurated in July 1958. The research concluded that in cooperative education, "theory and practice are more closely related, and students therefore find greater meaning in their studies (1961, p.4-5). Also in 1961, another study conducted at the University of Cincinnati reported that of all the graduating students of that year who were required to take the Graduate Record Examination (258 students), 145 had had cooperative education. The results showed the mean G.R.E. score for co-op students was 523 compared to 501 for the full-time students (Gore, 1972, p.7). Gore conducted another survey of 398 co-op and non co-op graduates from 1964 to 1969, and found that the scores of co-op students increased more than those of non co-op students. He also concluded that, "as time goes by, the co-op students gain more in salaries and increase more in position and responsibility compared to non co-op" (Ibid, p.9). Nevertheless, in another study in 1972, he found that co-op students did not have a monetary or professional advantage over full-time students at the time of graduation (Ibid, p.33). James Wilson, in 1969, found that co-op education coordinators gave priority to student personnel orientation and counseling functions. His study also recognized the professional speciality of coordinators in finding and helping students

to find co-op jobs (James, 1969, p.51). In a survey of strengths and weaknesses of co-op programs in the secondary schools of Kentucky, responses from a total of 767 students, 42 teachers, and 502 employers revealed that career preparation was considered the greatest strength of the co-op program. However, student interest, knowledge, and understanding of the business world were viewed as weak. Students and faculty members regarded poor job placement as the major weakness; the employers considered students' lack of adequate preparation in communication skills to be the major weaknesses of the program (Clemons, 1971). In the same year, a study to discover the effect of job environment on co-op students was done at the University of Waterloo in Canada. The research concluded that, "students would be more willing to endure their early work terms if they were made aware of the improvement that takes place in subsequent terms" (Row and Lumley, 1971, p.10). Doris Fitzgerald (1971) of New York University, in her two-year study to determine the effects of occupational motivation on academically disadvantaged high school students, found that guaranteeing specific part-time jobs upon attainment of stated levels of achievement in job-oriented programs and guaranteeing full-time employment upon graduation motivated general curriculum students to higher academic achievements. The results of a study to discover the meaning of work to women students in a cooperative education program, conducted

at Northeastern University in the Winter Term 1972/73, revealed that, "co-op work experience is positively influencing women's career commitments and identity" (Kany, 1973, p.41). A similar study concerning women's participation in cooperative education programs, by Mosbacker (1973), indicated that the total number of women in co-op programs had increased about three times as rapidly as the number of men, during the 10 years preceeding the survey.

Employer Attitudes

One of the few research studies concerning employers' involvement in cooperative programs was conducted by Gore of the University of Cincinnati. In a survey of 208 firms providing jobs for co-op students in Business Administration, the results showed that the firms viewed their involvement in co-op programs as a good way to attract college graduates to their firms, as well as a good way to interest well-trained men in their particular kind of work. A similar study at the University of Houston identified the attitudes and policies of participating employers. A survey of 71 Houston co-op employers revealed that the co-op concept had strong support from top management. The study concluded that increasing the retention rate of talented, educated personnel was the major objective of industry/business employers (Slusher, 1973).

Attitudes of Co-Op Students and Faculty

A study by Winner to compare the job satisfaction of male and female cooperative education students, indicated that female co-op students were significantly more satisfied with their jobs than male co-op students (Winner, 1973, p. 43). A study of faculty attitudes toward cooperative education was conducted by Pratt in 1974. The findings indicated that almost all faculty members considered co-op programs to be of some value. Pratt also found that 74 percent of the Liberal Arts and 50 percent of the Engineering students he surveyed preferred optional co-op programs in all curricula. Another job-satisfaction study done in 1974 revealed that Sophomores and Juniors who were placed in curriculum-related co-op work assignments, were far more satisfied with their work experience than sophomores and juniors placed in unrelated co-op assignments (Winner, 1974, p.35). In a study of job satisfaction at Northeastern University, the subjects were bachelor's degree nursing students. The results indicated that autonomy and self-actualization were the most important, and job security the least important, aspects of the nurses' co-op work satisfaction (Winner, May 1975, p.51). Hansen and Boardman reviewed literature related to cooperative education and conducted a questionnaire survey to determine the best practices in co-op programs in 26 selected two-year colleges. They concluded that the

expansion of cooperative education depends upon the continued harmonious working relationship of students, faculty and employers. They also recommended that careful attention be given to each aspect in the organization and administration of the program (Hansen and Boardman, 1975). Another study of students' attitudes conducted at the University of Houston in the Summer of 1973 indicated that co-op students were well adjusted to their work environments and maintained positive attitudes toward their employers, supervisors, and co-workers (Backe, 1975). In 1976 a case study was adopted for Northeastern University to identify the benefits employers derive from their cooperative education programs. The study results indicated the following benefits to employers: (1) providing a good source of manpower, (2) giving other professional workers released time, (3) improving personnel selection processes, and (4) enhancing relations with the participating colleges (Wooldridge, 1976, p.5). A similar study with broader bases was conducted at the Detroit Institute of Technology in Michigan. The Detroit study indicated that, the cost of recruiting co-op students is less than the cost of recruiting non co-op candidates. The research also showed high ratios of efficiency, acceptance and recruiting for co-op students compared to non co-op students (Hayes, 1976). Also in 1976, an important study from the University of Miami identified co-op student, non

co-op student, faculty and employer perceptions regarding co-op programs. The study revealed that of these four groups affected by cooperative education, only non co-op students were unsure of what cooperative education is. Employers, faculty, and non co-op students "were not as aware of co-op variations in work patterns as were co-ops". (Wadsworth, 1976, p. 75). A similar study was done one year later at Macomb County Community College (MCCC) in Michigan. Results showed that employers indicated a favorable rating for the employees trained by MCCC and perceived them as efficient and enable them to learn quickly (Breeman, 1977, p.57). With regard to liberal arts co-op programs, questionnaires were mailed to 485 institutions to discover the weaknesses and strengths of such programs. It was found that five factors affected the success of these programs: (1) cooperation of the faculty, (2) flexible program operation, (3) students learning objectives, (4) job placements, and (5) cooperation of employers (Kinnison, 1977).

The results of a survey of community employers involved with Bakersfield College Co-op Programs in California indicated that these employers believed that course work very much improved the students' employment career, and that the program was effective in reducing turnover and training costs. (Warrene, 1978). A similar study done at LaGuardia Community College on Long Island revealed findings similar to the Bakersfield study. The LaGuardia study found

that the employers surveyed unequivocally rated co-op graduates as superior to other employees in motivation, job skills, and abilities (Ehrlich, 1977). A comparative study funded by the U.S. Office of Education and conducted by Applied Management Sciences, Inc., in 1978, indicated that all forms of compensation costs were less for co-op student employees than for regular employees. Research also concluded that "it may be less costly for employers to hire co-op students" (Deans and Others, 1978, p.5). Research conducted by the Graduate School of Business at the University of Pittsburgh in 1978 concluded that high-technology industries pay higher cooperative education employee salaries than medium and low-technology industries. As compared to medium and low-technology industries, high-tech industries also invested more training and supervisory resources in their cooperative education employees and were more likely to offer such employees jobs upon graduation (Puloff, 1978). Brown and Wilson conducted a comprehensive study that included a survey of non-participating employers. The findings indicated that the major reason for not participating in co-op programs, was that the nature of educational programs did not meet the employer's needs. Further, some employers encouraged specific examination of the student-employer relationship (Brown, 1979). Another study of this aspect of cooperative education was conducted by Winner and Snell (1981) who examined secondary level program. They found

that "employees identified the variables associated with student competencies as being of the greatest importance to them, with financial and regulatory consideration only at an approximate mid-point of their stated concerns." (p.32). In 1980, Martello and Shelton designed an experimental study matching co-op students to non co-op students according to race, sex, age, and level of education. Co-op students were rated higher on the CMI Attitude Scales, Knowing Yourself Scale, Knowing About Jobs, and Choosing a Job Scale, compared to non co-op students. The findings of another survey at Northeastern University, however, included senior students of nursing and revealed a lack of correlation between cooperative work experience and academic learning. Further, it was discovered that students choose their employers on a highly individualized basis, not always related to their educational values (Willis, 1980). However, another research project studied the impact of Title VIII funding on cooperative educational programs. In contrast to Willis's findings in 1980, the Title VIII study found that 90 percent of the co-op programs sampled, "provided work terms that were entirely or generally related to the student's academic major" (McMullen, 1981, p.67). Another study conducted in 1981 involved 1103 high school students in Experience-Based Career Education (EBCE). This research revealed that, "most students feel they learn best at a job site when given challenging tasks to perform" (Owens, 1981, p.57).

Studies and Related Research on
Cooperative Education in Kuwait

Among the few studies done in this field in Kuwait is one by Berga Hurley (1981), who made a thorough investigation into co-op programs of the Medical Secretarial students at Kuwait Business Institute. In the first part of the study Hurley interviewed some directors of hospitals who reported that the students' levels of oral English and medical terminology were well below the expected standards for a medical secretary, while other directors reported that the work produced by the students was much better than that of graduate medical secretaries they had employed. The study, which included the physician and surgeons who had the direct responsibility for the student's training remarked that:

1. The co-op programme was basically sound and provided the student with a good overview of the work of the medical secretary.
2. many students showed keen interest and initiative once unfamiliarity with the hospital environment had been overcome.
3. every student should have been issued a medical dictionary, a shorthand dictionary and an Arabic/English dictionary.
4. that the Kuwait Business Institute should examine the curriculum of the medical secretaries' courses and revise them to fit the needs of hospital staff.
5. that there was a certain reluctance on the part of a few doctors to cooperate in the training of the students.

In a survey of hospital coordinators, it was revealed that they believed that Kuwait Business Institute was not prepared to listen and discuss changes with those persons involved in the co-op program. Coordinators also felt that the only graduate candidates accepted in the program lacked the necessary skills required to fulfill the jobs. They also identified a need for orientation sessions before attending the program.

Her study included directors of the Ministry of Education, who emphasized the need for an "in-depth" analysis of co-op programs in conjunction with personnel from the employers. Institution coordinator research demonstrated that most personnel involved in training the co-op students were unfamiliar with the program and "although the course guide had been widely distributed to the heads of departments, in many cases it had remained unread or had not been passed on to other staff." (Ibid, p.13).

Students' attitudes toward the co-op program demonstrated that, while the students were satisfied that they were able to participate in an organized training program, many were dissatisfied about the work they actually did. Individual analysis of the student reaction scales showed that the non-graduates did not feel that they were getting as much benefit from the training program as the graduate candidates.

The results of this research also indicated that students had a hostile reception from clerical and typing

staff, who felt threatened that trained medical secretaries would place their own jobs in jeopardy. "In some instances, these staff were deliberately obstructive and situations became extremely difficult for the student to handle"(Ibid, p.18). At the same time, another study conducted at the Business Institute in 1981 revealed that the students gained the maximum benefit from the co-op program (Ministry of Education, 1981).

Summary of the Chapter

The literature review has revealed that cooperative education, a vital part of the educational process, has increased in scope and size in a rapid and seemingly unending manner during the last decade. Cooperative education can be considered one strategy to prepare students to enter today's social and economic world. Helping students find relevancy in their studies is being recognized as crucial for society and the economy to continue to function as intended under the next generation of workers.

Historical Development

The cooperative education movement in the U.S. dates back to the 1900's. It was inaugurated at the University of Cincinnati by Dean Schneider of the School of Engineering.

Many new ideas and techniques have been used to bring cooperative education strategy into the modern curricula. Other theories have continued to be a part of a long and well established traditional philosophy which has functioned successfully with the Smith-Hughes, George-Dean, George-Bardon, Vocational Education (1963) and Vocational Education (1968) Acts as a catalyst for cooperative education. It is predicted that cooperative education, in both United States and Kuwait, will see continuous growth. A major reason for this dramatic growth is, "the federal government. Their program of grants for support to cooperative education has made exploration, planning, and implementation of programs possible for many institutions." (Wilson, 1975, p.2).

In recent years, not only in Kuwait but in many other countries, partially those of the Third World, cooperative education has begun to occupy an important and prominent place in the field of education. The endeavors by the Kuwait government to establish and develop cooperative education began in the 1950s to overcome the shortage of skilled labor in the country. The private sector also has exerted efforts to bring this program to success.

Goals and Objectives

Although the objectives and goals of cooperative education vary from country to country and from one discipline to another, there are some general points which are

agreed upon. The major objectives of cooperative education can be summarized as:

1. to give relevant education to the students entering the social and economic world today.
2. to develop a viable career plan based on realistic self appraisal and accurate occupational information.
3. to develop a well-balanced combination of vocational competencies that enables graduates to advance more rapidly in satisfying careers.
4. to enable students to deal with the practical as well as theoretical aspects of course material (motivational goals).
5. to enable educational institutions to provide a superior education and compete more effectively for students in a declining student-age pool.
6. to meet employers' demands of personnel turnover and growth to accommodate change in needed skills and knowledge, and to improve job performance.

The goals and objectives of cooperative education in Kuwait in addition to those mentioned above are:

1. to inculcate such objectives as the dignity of manual labor, non-tribal allegiance and acceptance of an intricate system of labor relations.
2. to meet the demands of the labor market for semi-skilled and skilled labor in short and long run.
3. to inform employers about the theoretical and practical experiences of the students and about their ambitions.

Related Research

Studies and research into cooperative education began in the early 1950s in the United States. The great number of studies compiled from then until now, covers cooperative education programs in a variety of educational disciplines and helps to indicate the need for additional research that can help correlate the understanding of cooperative education educators into a unified discipline. Many of the problems and innovative ideas are universal in nature, and solutions can be helpful to several different areas of the educational field. Those studies concerning student, faculty and employers showed positive attitudes toward co-op programs. Research has found that co-op students show higher attendance, better quality and quantity of work, and more ability to get along with co-workers than other students. Employers attitudes toward the employment of co-op students were found to be almost entirely favorable. In other research co-op students were found to be more intelligent than those not in co-op programs according to Graduate Record Exam (GRE) scores, and most researchers noted that cooperative programs made classes more meaningful to students.

Among the very few studies done in Kuwait, the need is apparent for further research to discover employers' attitudes toward the program. Hurley indicates in her study

there is a need for "in-depth analysis of cooperative programs in conjunction with personnel from employees." (1981, p.13).

CHAPTER THREE

POPULATION, INSTRUMENTATION AND DATA COLLECTION

In order to determine whether students, faculty and employers differed in their perceptions and attitudes toward cooperative education programs in two-year post-secondary technical and vocational institutes in the State of Kuwait, these hypotheses were developed.

1. The students, faculty and employers have different perceptions about cooperative education programs at two-year post-secondary institutes in Kuwait.
2. In contrast to non-cooperative employers, the cooperative employers, students and faculty know what cooperative education programs are.
3. The students, faculty and employers favor the concept of cooperative education programs.
4. The cooperative employers (who are involved in this program), and non-cooperatives employers consider their participation as a social obligation to offer services to their community and country.
5. Most employers lack information about cooperative education programs at two-year post-secondary education institutes in Kuwait.
6. The employers are discouraged from participating in these programs because of poor administration or coordination by the educational institutions.
7. Both student and faculty have a perception that employers' supervisors and coordinators are not cooperating sufficiently to bring about a successful cooperative education program in these institutes.

Three groups of related parties were of concern: the students, who constitute the body of any cooperative educational program and who the program is designed to benefit, the faculty members whose support and cooperation is vital in preparing the students for the program with appropriate direction; and, finally, the employers without whose cooperation the program cannot exist.

Accordingly, three different questionnaires were developed to identify the differences in the perceptions and understanding of students, faculty and employers. The questionnaire results were intended to reveal these differences in perceptions regarding cooperative education programs.

Population and Sampling

Four groups of population were of concern in developing this study. The first group consisted of students, both co-ops (those currently or previously involved in a cooperative programs) and, non co-op students. The student population at all two-year post-secondary education institutions in Kuwait comprised approximately 4,200 male and female students, as of April 15, 1982. Of this group, those students who were non-Kuwaiti (about 517 male and female students) were subtracted from the total number.

The non co-op students were randomly selected from 1-16 by using a table of random numbers. When a number was

selected, it was then necessary to determine from the registrar's records of students' nationality if the student selected was of Kuwaiti nationality. If he met that qualification, he was accepted as a subject for this study. The reason that the researcher used only Kuwaiti students was that the non-Kuwaiti students do not have the same opportunities for employment after they graduate, because of the preference for training and hiring Kuwaitis. Therefore, excluding the non-Kuwaiti students from this study was essential to prevent inconsistency in data and biased results.

The same procedure was followed in selecting the cooperative students. The names of these students were available from co-op student's records at field training and the follow-up division in each institute. The numbers selected, were checked with the registrar's records to identify the students' nationality. The researcher also focused more on co-op students than non co-ops. The justification for this was that the co-op students have actual experience on the job site and are more acquainted with the strengths and weaknesses of the program. Accordingly, the students' population actually consisted of one non co-op student to every two co-ops.

Group number two consisted of full-time faculty members at post-secondary institutions. A total of 75 questionnaires were distributed to 571 teachers and faculty members of technical and vocational institutions in Kuwait. The

subjects were selected from registrar's records in each institution. This number represented only the full-time faculty members at these institutions; all part-time teachers at Kuwait University who were involved in part-time teaching or counseling were eliminated from the lists.

The third group consisted of cooperative employers or those who were currently involved in co-op programs.

Names and addresses of these employers were obtained from each institution separately. Records from an employers' directory available at the field training and follow-up division of each institution revealed the names and addresses of all cooperative employers and their locations, in addition to the names of the contact persons in charge of the co-op program in each firm. The list for 1981/82 was checked out and 45 cooperative employers, with 77 branches throughout the country, 77 were identified and all of them were used as subjects to respond to the final questionnaire.

A significant problem was encountered in determining non co-op employers for the study. This group was the fourth group of concern and included small and large, private and public, business and industry, personnel managers, presidents and vice-presidents. Names were selected from the Industrial Directory at the Kuwait Ministry of Industry and Trade, in addition to the Annual Directory of the Chamber of Commerce for 1981/82. Employers totaled approximately 6,000. After randomly selecting employers,

the telephone directory was used to determine their location and the contact person in charge to be contacted.

Instrumentation

There is general agreement among researchers that questionnaires are an acceptable method of obtaining necessary data, in order to accept or reject a hypothesis. (Van Dalen, 1966, p.525). Thus, the need for developing a suitable questionnaire to elicit the data necessary to test the hypotheses was obvious.

The content and format of the instrument were partially adapted from an instrument constructed by Dr. Roger Wadsworth of the University of Miami, Education Administration Department (1976). The purpose of his study was to identify student, faculty and employer perceptions regarding cooperative education at Miami-Dade Community College, South Campus. Major findings for that study appeared to be: a lack of adequate publicity for the program; need for flexibility in the program; stronger coordination and commitment by employers; a lack of economic resources and insufficient staffing.

The first step was to translate appropriate parts of the questionnaire into Arabic because Arabic-speaking managers predominate in firms and institutions all over the country. The translation was accomplished with the assistance and supervision of Mr. Al-Shafied, director and

professor of Arabic language in the technical and vocational department. Also Mr. Sabri Al-Fadhil, the chairman of the Research and Translation Division in that department. A long-time teacher in the Business Institute was consulted in this process to insure proper translation of the words without losing the purpose.

In order to further refine the questionnaire to eliminate possible areas of ambiguity, vagueness, bias, and confusion, it was decided to conduct a pilot study. It was also desirable to ascertain whether or not the responses of the subjects would indeed reflect the kind of information that this study aimed to obtain. Therefore, the preliminary questionnaire, with an appropriate cover letter of explanation accompanied by an official letter signed by the chairman of the Technical and Vocational Department of the Ministry of Education (in Arabic) was distributed to a group of five students, five faculty members, five cooperative employers and five non-cooperatives, in addition to three senior members of the Technical and Vocational Department. All pilot study subjects were asked to complete the questionnaire and were then interviewed to obtain their reactions. The pilot study was developed using three co-op and two non co-op students. The student questionnaire was written in two parts. The first part concerned student demographic data and the second part aimed at discerning their participation and attitudes.

The questionnaire was designed to take only 10-12 minutes to fill out. The pilot study resulted in changing some items in the students' questionnaire. The students' nationality, for example, was found to be a sensitive area by the panel and made non-Kuwaiti students feel discriminated against. The student panel also suggested "less than 150 K.D." instead of "100 K.D." in the question pertaining to students' income per month because of the high rates of income in the country. A time table for question number 12 in the student questionnaire was eliminated because it was found to be difficult for students to indicate the exact date for continuing their education after graduation. The student panel also crossed out the response "to gain more money" in the question related to why they favored the co-op program, because the payment was not competitive in most cases with similar jobs outside.

The faculty questionnaire (See Appendix 1) was administered to a panel of five faculty members, including a teacher from the Business Institute for Boys, the Chairperson of Career Development in the Student Service Division of the Business Institute for Girls, two professors at the Applied Technology Institute and one Science teacher from the Health Institute. The pilot study panel crossed out the response "to assist students financially" in the question about why they favored the plan, for the same reasons given by the students' panel. The faculty panel also added

"no monetary incentives" to the question about why they don't favor the plan. The faculty questionnaire was determined to take seven minutes to complete.

The employers' pilot study group was composed of five co-ops and five non co-ops (see Appendix 1). The employer panel suggested a one-part questionnaire instead of two parts, as in the student questionnaire, because the two-part instrument looked too long and might discourage manager-respondents. They also asked that the designations "Kuwaiti and non-Kuwaiti" managers be changed to Kuwaiti, Arabic and non-Arabic for ethnic reasons. The pilot group also added "over 5,000,000 K.D." to the question on the firm's budget. Based on the results of the pilot testing a few minor adjustments were completed prior to the production of the final questionnaires.

Procedures for Data Collection

Prior to collecting data from students and faculty members, it was necessary to obtain official permission from the Ministry of Education, which was obtained with no obstacles (See Appendix 2). It is also worth mentioning that data was obtained by personal visits by the researcher to the groups' involved in the study. No questionnaires were mailed to any party.

The students were classified according to their career departments, and, with the cooperation of the chairman

of each department, the questionnaires were distributed to the student subjects in their classes. Students were asked to return questionnaires within a week to their teachers in class and those teachers were asked to turn them in to the field training division at each institution. The number of questionnaires returned from students was lower than expected because of Muslem holiday vacation. From the total number of 150 questionnaires, only 63 were obtained on time, 29 were turned in two weeks later than the deadline date, and were accepted because of the intervening holiday. Two questionnaires were not included in the results because students did not follow questionnaire directions and three were turned in too late to be of use. The students' questionnaire was accompanied by a letter (in Arabic) signed by the researcher explaining the purpose of the study and the importance of their cooperation. Follow-up procedures were oral reminders given in visits to each class after the deadline date. Each questionnaire was given a code number so that any anomalies in return rates could be identified and the cause traced (i.e., no returns from one class might mean that teacher had forgotten to turn them in).

The faculty members were divided according to their departments, and the questionnaires were distributed by personal visits to each institution. The faculty questionnaire was accompanied by two cover letters. The first letter, signed by the researcher, was to emphasize the purpose and

importance of the study; the second letter, signed by the director of Technical and Vocational Education in the Ministry of Education, gave his support and asked their cooperation with the research.

The registrar's records for 1981/82 showed 517 faculty members, of whom 75 were interviewed. The cover letter asked them to return the questionnaires after one week and 71 questionnaires were received. Only one questionnaire was found to be inconsistent and unusable. No follow-up procedures were necessary to obtain the questionnaires.

Seventy-seven questionnaires were delivered to 45 co-op employers in their branches all over the country. A cover letter signed by the researcher accompanied each questionnaire and, where necessary, a copy of the official letter from the Ministry of Education was distributed. This letter showed that the researcher's request to do the study had the approval of the Undersecretary for Technical and Vocational Education at the Ministry of Education in Kuwait and was helpful in obtaining employers' confidence and cooperation. The employer questionnaire was five pages long and took 10 minutes to complete. In the cover letter two weeks were given as a deadline for questionnaires to be made ready for pick-up by the researcher. All questionnaires were coded to allow for follow-up procedures. A total of 43 responses were collected from offices of employers in the two weeks

after distribution and another 23 questionnaires were collected after the first and second follow-up. Only one questionnaire was unusable because of inconsistencies. The same procedure was used to collect data from non co-op employers. The diverse locations of different corporations and firms all over the country made this procedure difficult to complete but it was felt that personal visits elicited a more complete response than a mailed questionnaire and that limiting the area might have biased the response. Only 23 questionnaires were picked up from non co-op employers on time, 25 questionnaires were turned in one week later, and 12, three weeks later. Only one response was unusable and four questionnaires were received too late and were not used. Follow-up procedures used with both groups of employers were telephone calls by the researcher preceeding his visit to pick up responses. The results of the survey efforts are detailed in Table 3.1 below.

TABLE 3.1 RESPONSES TO SURVEY QUESTIONNIARE

Group	Popula- tion	Number Sampled	Number Returned	Percentage of Return
Students	3600	150	97	65
Faculty	571	75	71	96
Co-Op Employers	77	77	66	86
Non Co-Op Employers	6000	100	57	57

Statistical Treatment

The data were analyzed on the C.D.C. Michigan State University Computer System. The results will be presented in Chapter Four. Findings will be presented in tables using frequencies, percentages and means.

CHAPTER FOUR

ANALYSIS OF THE DATA

In this chapter a general analysis of data derived from student, faculty, and employer questionnaires is presented. The chapter is designed to present the analysis of the data in a way that facilitates testing the hypotheses presented in Chapter One. Additional details of the findings will be discussed in the succeeding chapter.

Overview of the Results

To determine employers', faculty and students' perceptions and understanding of cooperative education programs, the question, "Do you know what the cooperative education program is?" was asked of each group. Only 19.2 percent of employers who had not been involved in co-op programs said "yes", while 87.7 percent of cooperative employers replied affirmatively to this question. Of the faculty, 91.4 percent answered "yes", and 82 percent of students said "yes". It is clear from this data that of all four groups, only non-cooperative employers were generally uninformed about cooperative education programs. The relative percentages are presented in Table 4.1.

TABLE 4.1: AWARENESS AND KNOWLEDGE OF THE CO-OP PROGRAM

	Students Percentage	Faculty Percentage	Employers	
			Co-Op Percentage	Non Co-Ops Percentage
Yes	82.0%	91.4%	87.7%	19.2%
No	11.2%	8.6%	1.5%	53.8%
Unsure	6.8%	0.0%	10.8%	26.9%

All four groups were asked to describe a cooperative education program. Among these groups non co-op employers by a margin of 41 percent were unsure about the program. Of these, 34.4 percent of them described it as part-time work. The answers ranged from "part-time work for students" to "the traditional alternating of full-time work with full-time study in a student's career field". Cooperative employers chose the "alternating" response over others by 37.2 percent, faculty by 39.2 percent and students by 27.5 percent. Of the non co-op employers, only 9.8 percent made this choice which was the lowest margin among all the groups. The biggest difference in perceptions of cooperative education programs appeared between non-cooperative and co-op employers. Comparing the responses for all groups, reveals the inconsistency among them in understanding variations in cooperative education programs.

Data also revealed an overwhelming acceptance of the cooperative education concept among all four groups. The question, "do you favor the concept of co-op education?" brought responses that were 70 percent or more in the affirmative in all groups (Table 4.2).

TABLE 4.2: ACCEPTANCE OF CO-OP EDUCATION

Responses to, "Do You Favor the Concept of Co-op Education?"	Employers		Faculty %	Students %
	Co-op %	Non-Co-op %		
Yes	96.9	78.8	70.0	88.0
No	3.1	5.8	--	8.7
Undecided	--	15.4	--	3.3

Those in favor of the co-op education program concept, were asked, "why do you favor co-op programs?" Co-op employers favored, as a first reason, "to attain better employees who are more educated" by 29.5 percent. The reasons given by this group were "to save money and effort" (26.7 percent), and to "cut personnel turnover" (22.9 percent). The non-co-op employers responded differently than co-ops. They chose "service to community" most frequently (33.7 percent). Next in frequency were, "to expand the source of personnel" (29.1 percent) and "to obtain better employers" (25.6 percent). Faculty and students' responses

were similar to each other. The faculty chose "integrating theory and study with experience" (44.2 percent) most frequently and students chose "to gain experience" (58.4 percent) most frequently, while faculty mentioned this as a secondary choice. Both faculty and students favored "to assist students in finding the right career" as the third reason. Those who were not in favor of the program were asked to give reasons why they were not. Very few reasons were given to this question since the majority of subjects accepted the concept. Of those who did respond, co-op employers favored "it takes too much time to train students who may not stay" as the primary reason (44.4 percent), while "students are not qualified for our jobs" (22.2 percent) was the second most popular reason. Non-co-op employers gave different reasons, in that 53.6 percent said they "did not know about the program". This response supports the need for employers to be informed about programs to obtain their participation. Some 23 percent of non co-op employers mentioned "no budget for co-op programs" as a second reason. No responses were generated to this question from the faculty. Students checked "lack of financial support" (38.1 percent) as their most frequently mentioned response.

All of those who were aware of the cooperative education program were asked, "how did you hear about the program?" Co-op employers mentioned a "college and institutional

mailing" overwhelmingly by 53.3 percent. The second most frequent response was "own experience" as a second one. Non-cooperative employers heard about the program from, most frequently, "the newspaper or other organization" at 40 percent, "own experience" by 30 percent, and "college and institute's mailings" by 20 percent. Faculty members mentioned "personal involvement"(43.3 percent) "from a college" (31.3 percent), and "official announcement or memorandum" (31.3 percent). Students heard of it mostly via "institutes directory or brochure" (36.0 percent), from "another student" by (30.7 percent) and "a faculty member (20 percent). The data shows that different means and methods were effective in reaching different groups of concern in this study. Each method could be enhanced or broadened to reach more organizations, faculty and students.

Students and employers were asked, "what types of cooperative program, for students working in their career field, best fits your needs?" Co-op employers preferred by 27.5 percent to have students for part-time work, or by 21.7 percent to have them full-time on the job for 2 terms (6 months or more) as first and second choices. Non co-op employers also chose part-time student work by 30.5 percent but preferred to hire college and university students or graduates on a permanent basis by 18.6 percent.

Co-op and non co-op employers mentioned "students work for pay like other employees" by 26.1 percent and 22.0 percent, respectively. Students answer to this question showed a preference for full-time work for at least one term by 40.5 percent. The traditional alternating of full-time student work with full-time study was chosen by 26.6 percent. "Part-time work" was selected by 15.2 percent.

All employers (cooperatives and non-cooperatives), faculty and students were asked "what would you like to know about the cooperative education program at technical and vocational institutes?" Co-op and non co-op employers had similar requests for information about specific career fields involved (34.5 and 32.1 percent, respectively). The second choice they wanted to know about was "how the program functions" by 22.4 and 29.5 percent respectively. "Whom to contact for information" was chosen by 19.8 percent of co-ops and 20.5 percent of non co-ops. Faculty members chose "who to contact for information" as their first choice by 40.6 percent and "what career fields are involved" by 21.9 percent. "How does the program function?" was selected by 34.0 percent of the students. The data means a lack of information exists inside the educational institutions and within the co-op programs themselves.

From all groups, those who knew what cooperative programs were, were asked to determine what the strengths of the co-op program were. Cooperative and non-cooperative

employers answered similarly to this question. Their responses were "able to look at employees on a temporary basis to see if they will fit into the organization before hiring them permanently." (57.5 percent for co-ops and 39.6 percent for non-co-ops). The next most favored response was "students already have skills for the job" (17.8 percent for co-ops and 30.2 percent for non co-ops). Faculty favored "great maturity of students developed" by 21.8 percent, the "learning of human relations skills" by 15.1 percent, and "exploration of careers" by 14.7 percent. Students' responses to this question were similar to the faculty. They favored "learning of human relations skills at work" by 27.4 percent, "greater maturity of students is developed" by 19.4 percent and "exploration of career" by 16.0 percent. The same groups were asked about the weaknesses of cooperative education programs.

Cooperative employers favored "poor administration and coordination by the educational institution" by 29.9 percent. The next most frequent weakness, indicated was "don't always receive well qualified students" (21.5 percent). It is not clear why employers who had not had co-op students most frequently selected this response (33.3 percent) to this survey item. Non co-ops listed other reasons such as inadequate training time and economic factors while faculty members chose "poor job supervision by the employer" (22.1 percent) as the most frequent weakness.

They also felt the program suffered from "mostly temporary jobs" and "students more concerned with earning credits than learning skills" (19.8 percent and 18.3 percent respectively). Students identified "lack of monetary incentives" (by 18.7 percent) as the greatest weakness of the program and then "poor supervision by employers" (17 percent) and "inadequate coordination between school and employers" (12.6 percent) as other weaknesses. A lack of communication and coordination between employers and educational institutes is evidenced by the data. It is also worth noting that both students and faculty blamed inadequate employer supervision for program weaknesses while both students and co-op employers felt there was poor coordination of the program at the institute level. A mutual lack of understanding and sincere commitment to resolving the problems is evident in the tendency of the educators and employers to blame each other (i.e., the educators said "employer supervision" and the employers said "institute coordination".) Students gave these reasons second and third place, following "lack of monetary incentives."

Cooperative and Non-Cooperative Employers

The cooperative and non-cooperative employer questionnaire included several questions to elicit demographic data, including nationality, sex, and occupational

status. This was in addition to the other part of the questionnaire that concerned their opinions and perceptions about cooperative education programs. Synthesis of the demographic data of employer-respondents indicated that males overwhelmingly outnumbered females by 87:13. Of the 113 employers who identified their nationality, the non-Kuwaiti (non citizen) employers were in the majority. Data revealed 53.1 percent non-Kuwaiti, 42.5 percent Kuwait, and only 4.4 percent non-Arab employers. It was noted that, while still in the minority, Kuwaiti employers were better represented among co-op employers than non-cooperative employers or the employer group as a whole. Data showed 47.7 percent Kuwaitis to 52.3 percent non-Kuwaitis were co-op employers. Among those who did not employ co-op students, 35.4 percent were Kuwaitis, while 64.6 percent were not Kuwaitis. Over 40 percent of the responses obtained were from persons aged 31-40 years and over, 60 percent of them had been in their positions for five years or more. Over 85 percent of returns were from persons in high ranking positions such as personnnel directors (31.6 percent), presidents or vice-presidents (17.5 percent) and divisional or department supervisors (26.3 percent). This is a good indicator of the validity of the data, because most of the answers came from personnel in direct charge of their programs for five years or more. Furthermore, most of those who were cooperative employers are the contact persons for information about

cooperative program. Their positions and experience in the job makes them the most knowledgeable persons on this issue. Their opinions are considered reliable. Cooperative employers were 50 percent from the public or government sector, 26 percent from firms that are both private and public and 23.4 percent from the private sector. The non-cooperative employers were 70.6 percent private, 21.6 percent public and 7.8 percent from firms both private and public. Overall, 44.3 percent of the respondents came from the private sector and 37.4 percent from the public or government sector. Seventy percent of respondents represented large organizations with 500 or more employees which were considered more able to provide opportunities for co-op programs in their firms, compared to other smaller organizations. Of the cooperative employers, 50 percent had over 500 employees, 23.4 percent employed from 101-500. Of the non co-ops, 40.4 percent were firms with 101-500 employees and 28.8 percent had over 500 employees. Service and production and manufacturing firms predominated, which indicates the expanding role of these sorts of firms in the economy. Consideration should be given to meeting their needs for skilled labor as their demand increases.

The results also showed that commercial banks and financial companies provided numerous opportunities for co-op students, even though they recorded lower percentages. A question about the annual budgets of the sample firms was

answered by 110 employers, and showed that over 49 percent had a budget from one million K.D. to over 500 million. Over 20 percent of employers indicated their firm's budgets were between 100,000 K.D. and a half million K.D.; 6.4 percent indicated their budgets were somewhere between 500,000 to one million K.D. Some employers (22.7 percent) were not willing to specify their annual budgets, mostly because they were considered confidential, others were not sure what their budgets were. Although private firms predominate in frequency, they tend to be smaller and employ fewer people than the government and quasi-government establishments.

TABLE 4.3: SIZES AND BUDGETS OF FIRMS SURVEYED

Types of Firms	%	Number of Employees		*Annual Budget in K.D.	
			%		%
Private	44.3	1-50	14.7	less than 100,000	10.9
Public	37.4	51-100	13.8	100,001-500,000	10.9
Both	18.3	101-500	31.0	500,001-1,000,000	6.4
		over 500	40.5	1,000,000-5,000,000	26.4
				Over 5,000,000	22.7
				Don't Know	22.7

*One K.D. (Kuwaiti Dinar) = 3.4 American Dollars

Cooperative and non-cooperative employers were asked "do you know what cooperative education is?" Co-op employers, by 87.7 percent said "yes", 11 percent were not sure, and only 1.5 percent denied knowledge. Only 19.0 percent of non co-ops replied "yes", 80.7 percent of them did not know what a co-op program was or were unsure. This indicates that most employers, who were not co-op employers, were not informed about the program. Both the cooperative and non-cooperative employers were asked to describe the cooperative education program (Table 4.4). A total of 37.2 percent of co-ops described the program as "alternating full-time work with full-time study", 23.3 percent described it as "part-time work for students". Non-cooperative employers chose "part-time work for students" (34.4 percent), "a volunteer or intern plan" (9.8 percent) or checked some other description. The vast majority, 41 percent of these employers, were unsure how to describe the co-op plan.

TABLE 4.4 EMPLOYERS' PREFERENCES AMONG CO-OP PLANS

Description Choices	Co-ops Percentage	Non-Co-Ops Percentage
Part-time work for students	23.3	34.4
Full-time work for students	20.9	4.9
A volunteer or intern plan	18.6	9.8
Alternating full-time work with full-time study	37.2	9.8
Unsure	--	41.0

Employers (co-ops and non co-ops) indicated various sources of information about the co-op program. The majority of cooperative employers, 63.3 percent, heard about it from a college or university mailing. Some 13.3 percent heard from their families or their own school experience and 10 percent from a fellow employees. Only 30 non-cooperative employers answered this question and 40 percent of them said they had heard about the co-op program from the newspaper or another organization, 30 percent of them from their families and school experience and 20 percent from a college or institute mailing, which shows a fairly diverse but limited public relations effort.

The majority of cooperative employers were involved in technical and vocational co-op programs (42.1 percent) some 28.3 percent were involved with the Kuwait University Summer Co-Op Program, and 5 percent with other programs. Of those who responded to this question, 41 percent had been involved in the program for one year and 23 percent had been involved three to five years. The largest group supervised 11-20 students (39.7 percent), while 25.4 percent had over 20 students, some 15.9 percent had 6-10 students and 19 percent trained less than 5 students. (Table 4.5)

Research results revealed that both groups of employers sampled were in favor of the concept of cooperative education programs. A total of 96.9 percent of co-op employers and 78.8 percent of non co-ops favored the concept,

TABLE 4.5 CO-OP INVOLVEMENT OF EMPLOYERS, BY YEARS, NUMBER OF STUDENTS, AND TYPE OF INSTITUTION

Kind of Institution	N=76 %	Years Involved	N=67 %	Number of Students	N=71 %
Kuwait University	28.3	less than 1 year	41.0	less than 5	19.0
Voc. & Tech. Institution	50.0	1-2 years	18.0	6-10	15.9
Both	13.3	3-5 years	23.0	11-20	39.7
Don't Know	3.3	Over 5 years	18.0	Over 20	25.4
Other	5.0				

while only 3.1 percent of co-ops and 5.8 percent of non co-ops responded negatively. Some 15.4 percent of non co-ops were undecided. Those who expressed an opinion were asked to give reasons (Table 4.6); 63 cooperative employers with 105 tallies indicated "to obtain better employees who are more educated" (29.0 percent), 41 non-cooperative employers answered the question, marking 86 tallies. The most frequent response was "as a community service".

Neither group of employers believed that their employees were reluctant to train co-op students for fear of losing their own jobs in the future. Co-op employers, by 56.9 percent, denied this, although 24.6 percent said

TABLE 4.6 EMPLOYERS' REASONS FOR SUPPORTING CO-OP PROGRAMS

Reasons Employers Favor Co-Op Programs	N=63 Co-ops %	N=41 Non Co-op %
To obtain better employees, more educated	29.5	25.6
To save money and effort	10.5	3.5
To cut personnel turnover	8.6	7.0
As a community service	26.7	33.7
To expand the sources of personnel	22.9	29.1
Other	1.9	1.2

there was a strong indication this was true and 16.9 percent said "yes, but it does not really affect the program." Non-co-op employers, also, responded in the negative by 40 percent, some 37.5 percent said, "Yes, but it does not really affect the program" and 22.5 percent said "yes there is a good indication that this is true." While these high-ranking personnel primarily rejected the idea of trainer-student rivalries negatively affecting the co-op programs, the literature has indicated otherwise, particularly Berga's study of the hostility shown student medical secretaries by clerks and typists in the hospitals. This discrepancy may exist only in isolated situations or it may reflect a

realistic concern of the majority of supervisors or trainers, who are non-Kuwaitis and may reasonably fear losing their jobs to co-op graduates they have trained. Since the question was outside the scope of this study, however, it could not be resolved here.

When asked whether "the communication problems are because of non-Arab supervisors," both groups of employers said yes. Co-op employers answered "yes" by 66.1 percent, and "no" by 32.3 percent. Non co-ops answered "yes" by 60 percent and "no" by 40 percent. On another aspect of the communication problem, the data indicated that co-ops and non co-op employers prefer direct contact with educational personnel, rather than going through bureaucratic channels in the Ministry of Education, as is currently practiced. Cooperative employers favored this by 79.4 percent and 48.9 percent of non-cooperative employers thought it seemed the best way to communicate on mutual concerns.

Agreement was evident between the two employer groups with relevance to co-op students' wages. Seventy-one percent of co-op employers and 63 percent of non co-ops stated that payment should be made by the employers to create loyalty and enthusiasm, while 22.2 percent of co-ops and 26.1 percent of non co-ops said students should be paid through the educational institutions. A small percentage felt pay should come from both.

When both groups of employers were asked to identify the type of cooperative format which best fit their needs, co-ops' answers ranged from 27.5 percent for part-time work to 26.1 percent for alternating full-time work with full-time study. Non co-ops chose the same types with 30.5 percent favoring part-time and 22.0 percent for the traditional mode of alternating full-time work with full-time study. It was worth noting that co-op employers favored full-time work on the job for two terms (6 months) or more, which is unusual in the State of Kuwait. A significant number of non-cooperative employers (18.6 percent) expressed a preference for hiring graduates from college and universities instead of training them.

TABLE 4.7: TYPE OF CO-OP FORMAT PREFERRED BY EMPLOYERS

Type of Program	Co-Ops % N=69	Non Co-Ops % N=59
1. Full-time work for 2 terms (6 months) or more	21.7	10.2
2. Part-time student work	27.5	30.5
3. Full-time work alternating with study	26.1	22.0
4. Students paid like other employees	20.3	16.9
5. None (hire college or uni- versity graduates)	4.3	18.6
6. Other	--	1.7

Those employers who had been involved in cooperative education programs were asked to select the strengths and weaknesses of the program from the choices given in the questionnaire. The most frequently mentioned element of strength for the co-op program, as determined by cooperative employers, was its "ability to look at an employee on a temporary basis to see if that individual fits into the organization before hiring someone permanently." (Table 4.8). Non-cooperative employers preferred the same advantage by 39.6 percent. As the next most selected choice, both groups preferred "students already have skills for the job" and "free recruitment program" was the third most frequent choice for both groups.

TABLE 4.8: CO-OP PROGRAM STRENGTHS AS SELECTED BY EMPLOYERS

Strengths of Co-Op Program	Co-Ops % N= 73	Non Co-ops % N= 47
Free recruitment program	15.1	18.9
Obtain employees for lower wages	2.7	9.4
Students already have skills	17.8	30.2
To look at employees before hiring	57.8	39.6
Other	6.8	1.9

When asked to select the weaknesses of the cooperative educational program, the two weaknesses selected most frequently by co-op employers were "poor administration or coordination by the educational institutions" (29.9 percent) and "don't always receive well-qualified students" (21.5 percent). Some 18.7 percent checked other reasons, such as "not informed about the program in advance," "student training occurs mostly during Ramadan Month (Muslim Fasting month) which is not appropriate for employers, most training activity occurs in summer time when personnel are on vacations and leaves (Table 4.9).

TABLE 4.9: CO-OP PROGRAM WEAKNESSES SELECTED BY EMPLOYERS

Weaknesses of Co-Op Program	Co-Ops	Non Co-ops
	% N= 77	% N= 33
Don't always receive qualified students	21.5	33.3
Supervisors don't have time to train	15.9	18.2
Need to explain the plan continuously	7.5	9.1
The plan is tied to economic factors	6.5	18.2
Poorly administered or coordinated by the educational institution	29.9	3.0
Other	18.7	18.2

Fewer non-cooperative employers responded to this question. Of the 33 who did, 30.3 percent selected "don't always receive well-qualified students for positions."

When employers were asked what they would like to know about the cooperative education program at Vocational and Technical Institutes in Kuwait, more responses were received from non co-op employers than co-ops. The ratio of responses was 2.15:1.8, respectively. The data revealed strong indications that both groups of employers wanted to know more about co-op education programs, but those who were not involved, perhaps naturally, seemed to have more questions. The first item co-op employers wanted to know was the career fields that were involved (34.5 percent). "How the program functions" was given second priority (22.4 percent). The non-cooperative employers had the same priorities, except that even more of them wanted to know how the program functioned (29.5 percent). The third priority of both groups was "who to contact for information" and "the involvement of academic credits" was last on the list. There were few "other" questions (Table 4.10).

TABLE 4.10: INFORMATION EMPLOYERS WANTED ABOUT CO-OP PROGRAMS

What Employers Wanted to Know	Co-Ops % N= 66	Non Co-ops % N= 44
How the program functions	22.4	29.5
Who to contact for information	19.0	20.5
What career fields are involved	34.5	32.1
How academic credits are involved	19.8	16.1
Other	3.4	1.8

Faculty

As far as can be determined, this was the first study to assess faculty members' attitudes and perceptions of cooperative education programs in Kuwait. Excellent cooperation was provided the researcher; 93 percent of the questionnaires were returned and faculty seemed pleased that an interest was being taken in their profession.

Demographic Data

Faculty members were 57 percent male and 43 percent female. The question of nationality of faculty members was answered by 80 percent of the respondents, 20 percent did not respond. The results showed that 91.0 percent of the respondents were non-Kuwaitis and only 8.9 percent were

Kuwaitis. Respondents were 90 percent from the teaching faculty, 8.6 percent from administration and 1.4 percent from the student service department. As previously noted, only full-time staff were included in the study. More than 55 percent of respondents were aged 31 to 50 years old and 57 percent have been working in technical and vocational institutions in Kuwait from 6 to over 8 years (See Appendix C, Table 4 for details).

When faculty were asked if they knew what a cooperative education program was, 91.4 percent answered "yes" and 8.6 percent did not know. They were also asked to indicate their sources of knowledge about the co-op program. Some 43.3 percent attributed their knowledge to personal involvement and another 31.3 percent cited contact with a colleague. Taken together, these indicate personal contact is the most common method used to reach faculty members.

TABLE 4.11: SOURCES OF FACULTY KNOWLEDGE OF CO-OP PROGRAM

Source of Information	Percentage N = 67
Institute directory, newsletter, official memo.	22.4
A colleague	31.3
A student	3.0
Advertising board at the institute	0.0
Personal involvement	43.3
Other	0.0

Faculty members' description of cooperative education programs indicated differential understanding of the program. The majority, 39.2 percent described it as alternating full-time work with full-time study, but a large number (34.2 percent) described it as "full-time work". Almost 17 percent described it as "part-time work which should be career-related", some 7.6 percent marked "volunteer or intern plan for students to find a career field," and 2.5 percent did not know.

Faculty were asked whether they favored the concept of cooperative education, and further asked to give reasons why they favored it or why they did not. They were unanimously (100 percent) in favor of the concept, indicating excellent support for the program. The faculty members (N = 71) marked a total of 147 responses as their reasons for favoring the program. The greatest number of responses (44.2 percent) indicated support for the program because it integrated theory and study with practice, another 24.8 percent supported the work of experience aspect (See Appendix C, Table 5 for details).

The question of whether they were willing to allow for co-op students' problems, drew a varied response, reflecting tolerant attitudes toward some arrangements and inflexibility concerning others. Over 95 percent of faculty members were tolerant about, "taking course change suggestions

to meet employers' needs;" and only 4.5 percent said "no". On the other hand, 65.7 percent said they were not willing to allow co-op experience to slow down a students' graduation time. There was general agreement students could "add or drop a course after it began". They showed less flexibility about rescheduling an exam for students, possibly because rescheduling an exam after reporting the final grades to the administration department or the Office of the Dean, requires some bureaucratic procedures (See Appendix C, Table 6 for details).

When faculty were asked what they would like to know about the Technical and Vocational Institutes' Cooperative education programs, the data indicated the lack of effective internal communications within the institutes. The response most frequently selected was "who to contact for information or referral of students?" Other responses are shown in Table 4.12.

TABLE 4.12: FACULTY QUESTIONS ABOUT CO-OP PROGRAMS

Kind of Information Desired	Percentage N =70
How the program functions	15.6
Who to contact for information	40.6
What career fields are involved	21.9
What jobs are open	10.9
How academic credits are awarded	9.5
Other	1.5

Those faculty members familiar with the program were asked to list its strengths and weaknesses. Seventy faculty members provided a total of 225 responses which gives enough data for reliability. The highest priority among the strengths was given to "greater maturity of students is developed," "exploration of career," and "learning of human skills while at work," in that order (See Appendix C Table 7 for details).

The same group of faculty members responded to different items in considering weaknesses, with a total number of responses of 131. The most frequently identified weaknesses were "poor job supervision by the employer" and "mostly temporary jobs." See Appendix C, Table 8.

Students

The student questionnaire was designed in two parts to facilitate future research in cooperative education programs in Kuwait. The study revealed that from a total number of 92 returned questions 69.6 percent of the students were currently involved in cooperative education programs and 30.4 percent were not involved. Sixty-four percent were male and 35.9 percent female, with 73 percent aged 19 to 24 years old, and 30.6 percent with grade points of 3.0 or more, 28 percent 2.5-2.9. (See Appendix C, Table 9).

Students were asked if they had identified a career and 83.7 percent said yes, while 16.3 percent answered "no".

The most frequently choices were finance (Insurance and Banks), Mechanics and Construction Technology. Some 29.7 percent of the students were working for pay from which 37.9 percent worked in jobs related to their career choices and 62.1 percent worked in unrelated jobs; 50 percent of them worked 6 hours a day, mostly on night shift jobs, and 31.8 percent worked less than 6 hours (See Appendix C, Table 10). The majority of the students were planning to continue their education after graduation (62 percent) and the others said "no" or were undecided.

When students were asked if they knew what the co-operative education program was, a large margin of 82 percent said "yes", 11.2 percent said "no", and 9.8 percent were unsure. None of those who said no or were unsure had been involved in the co-op program. Those who knew what the co-op program was, were asked how they had heard about the program. Some 56 percent checked, "institute's directory or Ministry of Education brochure," 30.7 percent were informed by another student and 20 percent learned from faculty members. The results evidenced that students' methods of getting this information were different than that of faculty and employers (See Appendix C, Table 13 for details).

Students were asked to describe a cooperative education program. In contrast to other groups (faculty and co-operative employers) students, by large margin of 44 percent, described the co-op program as part-time work, 27.5 percent

said it was alternating full-time work and study (See Appendix C, Table A14). Students answered solidly in the affirmative when asked "do you favor the cooperative education program." A majority of 88 percent were in favor, 8.7 percent did not favor it, and 3.3 percent were undecided. Those who favored the program were asked to indicate why; 58.4 percent stated "to gain experience", 21.2 percent said "to help find the right career field", and 9.7 percent indicated "to earn more credits for graduation". Only 8 students did not favor the co-op program, and checked 21 responses, the most frequent reason given for not favoring the program was "lack of financial support or encouragement from employer or the educational institute" (38.1 percent), 19 percent indicated "jobs located too far away." (See Appendix C, Table 11).

Students were asked, "what type of cooperative education best fits your needs?" The majority (40.5 percent) of students chose full-time work for at least one term, and 26.6 percent chose alternating full-time work with full-time study, another 15.2 percent chose part-time work. Some 13.9 percent of students checked "full-time on the job for at least two terms." This is a large percentage in favor of at least two terms on site and is unusual in Kuwait.

When students were asked if the co-op program should be voluntary or compulsory, 72 percent preferred to have it on a voluntary basis according to desires of the students,

12.3 percent preferred a compulsory program for all students, and 15.7 percent preferred a compulsory program for some career fields and voluntary for others. Only 51 students wanted to know more about cooperative education programs, marking 150 responses. The items that most wanted to know were "how the program functions" (34 percent), "who to contact for information" (28.7 percent), "what career fields are involved" 20 percent, and 16 percent wanted to know how academic credit was involved.

The students who were familiar with the program were asked to identify the strengths and weaknesses of the program. A total of their 212 responses showed "learning of human relations skills while at work" to be the most popular choice of strengths and "coordination between employer and institute" as the least popular (4.7 percent). Appendix C, Table 12 has more details. The same group of students was asked to list weaknesses of the program and checked 230 responses. The most frequently checked weaknesses by students were "lack of monetary incentives", "poor supervision by employers" and "lack of information and communication," respectively (See Appendix C, Table 12 for details and percentages).

In this chapter, the major findings of the study concerning cooperative education programs at technical and vocational institutes of post-secondary education, for

cooperative employers, non-cooperative employers, faculty of the institutes, and students has been presented. Analysis of the data concerning various perceptions and understanding of cooperative education programs by the various groups were illustrated and discussed. Details concerning the percentages of their responses are furnished in tables in the chapter or in the Appendix. In the following section, a discussion of what the data showed as a test of the hypotheses is presented to determine whether the hypotheses can be accepted or rejected.

Hypotheses Discussion

Hypothesis One

Hypothesis One stated, "students, faculty and employers have different perceptions about the cooperative education program at two-year post-secondary institutions in Kuwait." To test this hypothesis, the following question was administered to all groups (Co-op employers, non co-op employers, faculty, and students).

、 Question: How would you describe a cooperative education program? (You may circle more than one.)

1. Part-time work which should be career-related for students.
2. Full-time work which must be career-related.
3. A volunteer or intern plan for students to find a career field.

4. A plan of alternative full-time work with full-time study in a student's career field, for which credit may be given.
5. Unsure.

Responses received from all four groups are shown in percentages in Table 4.13; the number of responses to each choice is illustrated by mean \bar{X} , for all groups.

Tables 4.14 and 4.15 include a summary of all responses. The results show that 86 cooperative, 61 non-cooperative employers, 75 faculty members and 109 students responded to the question. Each of the five possible responses were checked by different numbers of subjects. As shown in Table 4.15, answer number one was checked most frequently ($f=102$), with a mean \bar{X} 25.5 representing 30.4 percent of the answers. The lowest frequency (f) was accorded response five. It received only 29 checks with a mean \bar{X} of 7.25, representing 8.7 percent of the answers. The second highest was number four with a f of 99, 24.75 mean \bar{X} representing 29.6 percent. Other answers ranged between the latter two. Differences in perception were evident from the responses to this question. The first description of "part-time work" ($f=102$) was not the best description. The second most frequently chosen description ($f=99$) was the traditional alternation of full-time work with full time study that characterizes co-op programs. These responses indicated a lack of real understanding about cooperative education programs at vocational and technical institutes in Kuwait.

TABLE 4. 13 SUMMARY OF RESPONSES SHOWING HOW EMPLOYERS (COOPERATIVE AND NON-COOPERATIVE),
FACULTY AND STUDENTS DESCRIBED A COOPERATIVE EDUCATION PROGRAM

Response Number	Co-Op Employers		Non Co-Op Employers		Faculty		Students		Total Number
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	
1	20	23.3	21	34.4	13	16.5	48	44.0	102
2	18	20.9	3	4.9	27	34.2	15	13.8	63
3	16	18.6	6	9.8	6	7.6	14	12.9	42
4	32	37.2	6	9.8	31	39.2	30	27.5	99
5	-	-----	25	41.0	2	2.5	2	1.8	29
TOTAL	86	-----	61	-----	79	-----	109	----	335

TABLE 4.14: HOW THE GROUPS REPLIED TO EACH ITEM OF THE QUESTION AND MEAN \bar{X} FOR EACH RESPONSE

Response Number	Co-Op No. Answers	Empl. No. Answers	Non Co-Op No. Answers	Faculty No. Answers	Students No. Answers	Row Total T	Mean \bar{X}
1	20		21	13	48	102	$\bar{X}1= 25.5$
2	18		3	27	15	63	$\bar{X}2= 15.75$
3	16		6	6	14	42	$\bar{X}3= 10.5$
4	32		6	31	30	99	$\bar{X}4= 24.75$
5	<u>0</u>		<u>25</u>	<u>2</u>	<u>2</u>	<u>29</u>	$\bar{X}5= 7.25$
	86		61	79	109	335	

NOTE: Q 11 Employers

Q 8 Faculty

Q 15 Students

TABLE 4.15: QUESTION ONE RESPONSES BY FREQUENCY DISTRIBUTION AND MEAN \bar{X}

Response Number	Frequency Distribution	Percentage	Mean \bar{X}
5	29	8.7	7.25
3	42	12.5	10.5
2	63	18.8	15.75
4	99	29.6	24.75
1	<u>102</u>	<u>30.4</u>	25.5
	335	100.0	

Therefore, the findings affirmatively support accepting the hypothesis that different perceptions exists among different groups of concern, employers, faculty and students.

Hypothesis Two

Hypothesis Two stated "In contrast to non-cooperative employers, cooperative employers, students and faculty know what the cooperative education program is."

To test this hypothesis the following question was administered to all four groups (cooperative and non-cooperative employers, faculty and students).

Question: Do you know what a cooperative education program is?

Three choices were offered to respond to this question. Respondents could answer with "yes", "no" or "uncertain".

Answers received are illustrated by number and percentage in Table 4.16. Table 4.16 shows that among all four groups of concern, non-cooperative employers had a high frequency of "no" or "uncertain" responses which reflects their lack of knowledge about the program.

Faculty members had the greatest frequency of "yes," representing 91.4 percent. Cooperative employers had 87.7 percent, students scored 79.3 percent, and non-cooperative employers were significantly lower with only 19.2 percent "yes" responses. Therefore, it is apparent from the data that non-cooperative employers are less informed about the program than the other groups. Some suggestions in this regard are provided in the next Chapter.

TABLE 4.16: SUMMARY OF RESPONSES TO QUESTION TWO BY NUMBER OF FREQUENCIES AND PERCENTAGES

Question Response	Co-Op Employer		Non Co-Ops		Faculty		Student	
	No.	%	No.	%	No.	%	No.	%
Yes	57	87.7	10	19.2	64	91.4	73	82.0
No	1	1.5	28	53.8	6	8.6	10	11.2
Uncertain	7	10.8	14	26.9	--	----	9	9.8
TOTAL	65		52		70		92	

Hypothesis Three

Hypothesis Three stated that "The students, faculty and employers favor the concept of cooperative education programs."

The following question was developed to test the hypothesis and administered to all groups involved.

Question: Do you favor the concept of cooperative education?

Responses obtained from students, faculty and co-operative and non-cooperative employers are illustrated in Table 4.17 by number and percentage.

Data obtained from these answers showed solid support for cooperative education program among all groups, without exception. Unanimous support came from 100 percent of the

faculty members. Cooperative employers gave 96.9 percent "yes" answers, students were next with 88 percent and non-cooperative employers, even though they lacked information about the program, supported its concept by 78.8 percent. The mean \bar{X} shown in Table 4.18 supports the finding, in that the mean \bar{X} of "yes" answers was 225. "No" or "undecided" drew responses with mean \bar{X} of 13 and 11, respectively.

Hypothesis Four

Hypothesis Four stated, "The cooperative and non-cooperative employers (those were not involved in cooperative education) consider participation in the program a social effort to offer services to their community and country.

To determine if the hypothesis was true or false, the following question was administered to both cooperatives and non-cooperative employers.

Question: If yes to question 3, why do you favor the plan?

The subjects were given six alternative choices of answers with the opportunity to mark more than one answer.

Table 4.19 shows the priorities chosen by both employer groups as reasons for favoring the cooperative education program by frequency and percentages.

TABLE 4.17: RESPONSES TO QUESTION THREE BY NUMBER AND PERCENTAGE

Response	Co-Op Em.		Non Co-Ops		Faculty		Students	
	No.	%	No.	%	No.	%	No.	%
Yes	63	96.9	41	78.8	70	100.0	81	88.0
No	2	3.1	3	5.8	--	----	8	8.7
Undecided or No Opinion	0	---	8	15.4	--	----	3	3.3
	<u>65</u>		<u>52</u>		<u>70</u>		<u>92</u>	

TABLE 4.18: NUMBER OF ANSWERS TO EACH ITEM OF QUESTION THREE BY MEAN \bar{X} OF EACH ANSWER AND FREQUENCY PERCENTAGES

Group X	Yes		No		Undecided/ No Opinion		TOTAL
	No.	%	No.	%	No.	%	
Co-Op Employers	63	96.9	2	3.1	--	--	65
Non Co-Ops	41	78.8	3	5.8	8	15.4	52
Faculty	70	100.0	--	--	--	--	70
Students	<u>81</u>	88.0	<u>8</u>	8.7	<u>3</u>	3.3	<u>92</u>
TOTAL	255		13		11		
Mean \bar{X}	$\bar{X}_1=63.75$		$\bar{X}_2=3.25$		$\bar{X}_3=2.75$		

Item number 4 of the responses was related directly to the hypothesis. A summary of the returns, illustrated in Table 4.19 shows that there was some difference between the rationale expressed by cooperative and non-cooperative employers for participating in the program. From the answers in Table 4.19 it is apparent that co-op employers favored response number 1 "to obtain better employees" (29.5 percent), with number 4, "As a service to the community and country" (26.7 percent) as a second choice. On the other hand, non-cooperative employers favored response 4 "As a service to the community and country" by 33.7 percent, allocating only 25.6 percent of their choices to response number 1, "to obtain better employees". Analysis of the total returns illustrated in Table 4.20 and 4.21 indicated that the tally of

TABLE 4.19: EMPLOYERS' PRIORITIES IN FAVORING CO-OP PROGRAMS

Ques. No.	Question Description	Co-Op Employers		Non Co-Op Employers	
		No.	%	No.	%
1	To better obtain employees	31	29.5	22	25.6
2	To save money and effort	11	10.5	3	3.5
3	To cut personnel turnover	9	8.6	6	7.0
4	As a service to the community and country	28	26.7	29	33.7
5	To expand the sources of personnel	24	22.9	25	29.1
6	Other	<u>2</u>	1.9	<u>1</u>	1.2
		105		86	

TABLE 4.20: RESPONSES FOR COOPERATIVE AND NON-COOPERATIVE EMPLOYERS BY FREQUENCY AND MEAN.

Response Number	Employer Group		Frequency	Mean \bar{X}
	Co-Op	Non Co-Op		
1	31	22	53	$\bar{X}_1 = 26.5$
2	11	3	14	$\bar{X}_2 = 7.0$
3	9	6	15	$\bar{X}_3 = 7.5$
4	28	29	57	$\bar{X}_4 = 28.5$
5	24	25	49	$\bar{X}_5 = 24.5$
6	2	1	3	$\bar{X}_6 = 1.5$

TABLE 4.21: ACCUMULATION OF DATA ACCORDING TO FREQUENCY AND MEAN \bar{X} OF EACH RESPONSE FROM TABLE 4.20

Response Number	Frequency Distribution	%	Mean \bar{X}
6	3	1.6	1.5
2	14	7.3	7.0
3	15	7.9	7.5
5	49	25.7	24.5
1	53	27.7	26.5
4	57	29.8	28.5

responses for item 4 was the largest at 29.8 percent with a mean \bar{X} of 28.5. Response number 1's frequency distribution and mean \bar{X} are shown in Table 4.19. Total frequency was 27.7 percent, with a mean \bar{X} of 26.5. Although the responses indicated some differences in priority between cooperative and non-cooperative employers, the overall body of answers does not support rejecting the hypothesis. Putting it in the best possible light, one might interpret the differences between the two employer groups to mean that employers who had not had co-op employees assumed that others were doing community service by participating in the program and those in the program found that they benefitted themselves (by "gaining better employees") to an even greater extent than they served the community. On the other hand, it might be argued that those who became involved in the program did so because they saw some benefit to themselves. Neither interpretation, however, can be determined correct by the data in this study and they are suggested only to illustrate the need for further examination and as possible hypotheses for further research.

Hypothesis Five

Hypothesis Five stated, "Most employers lack information about the cooperative education program at two year post-secondary education institutions in Kuwait."

Two questions were designed to test this hypothesis. One was designed to detect the awareness of employers in general, regarding the co-op program, and the other was designed to discover specifically whether non-cooperative employers were more lacking in information than co-op employers.

Question: What would you like to know about cooperative education program at Vocational and Technical Institutes in Kuwait?

Five possible responses were furnished to employers with the opportunity to mark more than one answer. Tables 4.22 and 4.23 illustrate the frequency of each response by percentage and mean \bar{X} . Answers from 117 employers including 228 responses or an average of almost two responses per employer showed their interest in learning more about the cooperative education program. It is interesting that even co-op employers who were involved in the program, expressed a desire to know more about it. The results of the study also revealed specific areas where employers felt they had insufficient information. The area of interest to the most employers in both groups was, "what career fields are involved." Assuming a normal degree of self-interest on the part of most employers, one could interpret their interest in this area to mean they were

TABLE 4.22: WHAT COOPERATIVE AND NON-COOPERATIVE EMPLOYEES WANTED TO KNOW ABOUT CO-OP PROGRAM BY FREQUENCY AND PERCENTAGES

Res. No.	Description of Ques.	Co-Op Employer		Non-Co-Ops	
		Freq.	%	Freq.	%
1	How the program functions	26	22.4	33	29.5
2	Who to contact for information	23	19.8	23	20.5
3	What career field are invovled	40	34.5	36	32.1
4	How academic credits involved	23	19.8	18	16.1
5	Other	<u>4</u>	3.4	<u>2</u>	1.8
		116		112	

TABLE 4.23: COOPERATIVE AND NON-COOPERATIVE EMPLOYERS' RESPONSES BY FREQUENCY AND MEANS \bar{X}

Res. No.	Employer Group		No. Of Freq.	%	Mean \bar{X}
	Co-Op	Non Co-Ops			
1	26	33	59	25.9	29.5
2	23	23	46	20.2	23.0
3	40	36	76	33.3	38.0
4	23	18	41	18.0	20.5
5	4	2	6	2.6	3.0
			<u>228</u>		

interested enough in the program to want to know what kinds of trainees were available who might benefit their businesses. The mean \bar{X} showed 29.5 for this response, giving it the biggest margin of 33.3 percent of total frequency.

The second question administered to obtain information about employer knowledge, revealed that non-cooperative employers were significantly behind co-op employers in knowledge about the cooperative education program. The question was "If your organization does not favor cooperative education, why not?"

Seven possible responses were given; employers were given the opportunity to choose more than one.

1. Did not know about it or know how it operates.
2. It takes too much time to train students who may not stay.
3. Students are not qualified for our jobs.
4. There is no budget for co-ops.
5. Supervision of employer.
6. Poor administration or coordination by the education institution.
7. Other.

The summary of responses to this question are illustrated in detail by percentage and frequency distribution in Table 4.24.

TABLE 4.24: SUMMARY OF RESPONSES TO QUESTION SIX BY PERCENTAGE AND FREQUENCY DISTRIBUTION

Response Number	Employer Group				Freq.	%	Mean \bar{X}
	Co-Op	%	Non-Co-Op	%			
1	1	11.1	30	53.6	31	47.7	15.5
2	4	44.4	5	8.9	9	13.8	4.5
3	2	22.2	1	1.8	3	4.6	1.5
4	1	11.1	13	23.2	14	21.5	7.0
5	--	--	1	1.8	1	1.5	.5
6	1	11.1	4	7.1	5	7.7	2.5
7	--	--	<u>2</u>	3.6	<u>2</u>	3.1	1.0
	9		56		65		

No attempt is made to derive employer differences because of the low frequency of returns. Co-op employers favored the program so heavily that their responses to this question were too slight to be of any significance. The most important data derived from Table 4.24 is the frequency with which non-cooperative employers (f=30 or 53.6 percent) indicated they did not know enough about the program or how it operated. This finding provided support to the findings from the previous question which indicated employers' general lack of knowledge about co-op.

Hypothesis Six

Hypothesis Six stated "Employers are discouraged from participating in the cooperative education program because of poor administration or coordination by the educational institution."

To test this hypothesis, both groups of employers were asked to list the weaknesses of the cooperative education program. They were given six possible responses and told they could check more than one answer.

1. don't always receive well qualified students for openings.
2. supervisors don't have time to train several students yearly.
3. need to explain the plan continuously to personnel.
4. the plan is tied to economic factors and/or budgets.
5. poorly administered or coordinated by the educational institution.
6. Other.

Table 4.25 illustrates the overall response by frequency and percentage.

Although the question was intended for those employers who had had experience with the program, some 23 percent of non-cooperative employers also answered the question, making a total of 33 responses with 33.3 percent indicating "don't always receive well qualified students for openings."

TABLE 4.25: SUMMARY OF WEAKNESSES COOPERATIVE AND NON-COOPERATIVE EMPLOYERS PERCEIVED IN COOPERATIVE EDUCATION PROGRAM BY FREQUENCY AND PERCENTAGE

Response Number	Employers Group				Frequency	Mean \bar{X}
	Co-Op		Non Co-Op			
	No.	%	No.	%		
1	23	21.5	11	33.3	34	17.0
2	17	15.9	6	18.2	23	11.5
3	8	7.5	3	9.1	11	5.5
4	7	6.5	6	18.2	13	6.5
5	32	29.9	1	3.0	33	16.5
6	<u>20</u>	18.7	<u>6</u>	18.2	<u>26</u>	13.0
	107		33		140	

Three other reasons each received 18.2 percent response, among them answer number 5, "poorly administered or coordinated by the educational institution." Since these employers were not involved in cooperative education programs, the basis for their answer is unknown, possibly some experience outside the state of Kuwait or personal assumptions. Since their response was low and its basis highly questionable, the validity of the information provided is suspect and should be treated with extreme caution or disregarded.

On the other hand, more than 90 percent of cooperative employers answered this question, marking a total of

107 responses; almost 30 percent opted for "poorly administered or coordinated by the educational institution." Thus, it was given first priority as a weakness in the co-op education program. The second priority (21.5 percent) was given to "don't always receive well qualified students for openings." The cooperative employers' answers are reliable and valuable since they have had past or current experience in co-op programs and also, because of the large amount of returns on the question.

Hypothesis Seven

Hypothesis Seven stated, "Both students and faculty have a perception that employers, supervisors and coordinators are not cooperating sufficiently to bring about a successful cooperative education program."

In order to test this hypothesis, the faculty and student groups were asked to examine a list of items described as possible weaknesses of the program, and choose those they perceived as actual weaknesses. Two different lists of 10 items were administered, one to faculty and the other to students, and respondents were given the opportunity to check more than one response. The list of items given to faculty members and their responses, by percentage, appear in Table 4.26.

TABLE 4.26: SUMMARY OF FACULTY RESPONSES TO QUESTIONS OF WEAKNESSES IN COOPERATIVE EDUCATION PROGRAMS BY FREQUENCY AND PERCENTAGE.

Response Number	Description of the Answer (Weaknesses of cooperative education program)	Frequency f	Percentage %
1	Courses or college dropped to take a job	9	6.9
2	Mostly temporary jobs	26	19.8
3	No job openings in students career field	2	1.5
4	Poor supervision by the employer	29	22.1
5	Lack of encouragement and enthusiasm from employer	23	17.6
6	Students more concerned about gaining credits than learning	24	18.3
7	Lack of information about program-- communication gap	5	3.8
8	Coordinators not knowledgeable in all career fields	4	3.1
9	Coordination between employer and institute officials	9	6.9
10	Other	--	--
	TOTALS	131	100.0

More than 85 percent of faculty members answered the question and marked off 131 responses. The most frequently chosen weaknesses of the program (f=29) was, "poor job supervision by the employers," and the second (f=23) was, "lack of encouragement and enthusiasm from employers." If the nine faculty members who marked, "poor coordination between the employer and educational institute" are included, then 46.6 percent of the choices marked by faculty members blamed employers for program weaknesses. Table 4.26 illustrates the responses by frequency and percentage.

These findings were supported by students' answers. Students familiar with the cooperative program were asked to indicate weaknesses of the program, using a list similar to the faculty list with a few different items. Table 4.27 illustrates the responses by frequency and percentages. Students most frequently marked item 4 "employer, supervisors lack of enthusiasm to train the students" as a weakness (f=29) of the cooperative education program. Some other items, such as "poor job supervision by employers" or "poor coordination between educational institute and employer" were also marked by students to make a total of 30 percent of answers against employers, for blocking the program's success and development. Some other points noted in the students' answers will be discussed in Chapter Five.

TABLE 4.27: SUMMARY OF STUDENTS ANSWERS TO WEAKNESSES OF COOPERATIVE EDUCATION PROGRAM ILLUSTRATED BY FREQUENCY AND PERCENTAGE

Response Number	Description of Items	Frequency	Percentage
1	Mostly temporary jobs	9	6.9
2	No job opening in career field	26	19.8
3	Poor job supervision by employer	2	1.5
4	Employers, Supervisors lack enthusiasm to train the students	29	22.1
5	Lack of monetary incentives	23	17.6
6	Students are concerned about gaining credit than learning	24	18.3
7	Lack of information about the program, communication gap	5	3.8
8	Coordinator(s) of program not knowledgeable in all career fields	4	3.1
9	Coordination between school and employers weak	9	6.9
10	Other	--	--
TOTAL		131	100.0

CHAPTER FIVE

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

In this chapter, a summary of the problem, review of literature and procedures will be presented along with a summary of the findings. The chapter will also provide conclusions based on the findings from the study, recommendations, and suggestions for further research.

Summary

Statement of the Problem

The purpose of this study was to discover why only a small number of employers were participating in cooperative educational programs in two-year post-secondary vocational and technical institutes in Kuwait. Four groups involved in this program were of concern in this study: cooperative employers who are or were participating in the programs, non-cooperative employers (those not in the program), faculty, and students.

In undertaking this study, the following hypotheses were tested:

1. The students, faculty and employers have different perceptions about cooperative education programs at two-year post-secondary institutions in Kuwait.
2. In contrast to non-cooperative employers, the cooperative employers; students and faculty know what the cooperative education program is.
3. That students, faculty and employers favor the concept of the cooperative education program.
4. Both cooperative employers (who are involved in this program) and non-cooperative employers, consider their participation a social obligation to offer services to their community and country.
5. Most employers lack information about cooperative education programs at two-year post-secondary educational institutions in Kuwait.
6. The employers are discouraged from participating in these programs because of poor administration or coordination by the educational institutions.
7. Both students and faculty have a perception that employers, supervisors and coordinators are not cooperating sufficiently to bring about a successful cooperative education program in post-secondary institutions in Kuwait.

Review of Literature

A review of the literature was done to trace the historical development of cooperative education programs in the United States and Kuwait, and to show how the concept has grown over the past 20 years and changed in application. Goals and objectives of the cooperative education program and related research were also identified.

Procedures Used in the Study

Information was obtained by means of questionnaires distributed to all groups: cooperative employers, non-cooperative employers, faculty and students. All data was obtained through personal visits made by the researcher to the groups involved; no questionnaires were mailed. This insured the validity of the questionnaires and generated a higher rate of return. To make certain that the instructions and the questions were clearly stated, the instrument was administered to a pilot group of employers, faculty and students, as well as being reviewed by representatives from the vocational and technical department at the Ministry of Education in Kuwait. The pilot group consisted of five (5) cooperative employers, five (5) non co-op employers, five (5) faculty members and five (5) students, in addition to three (3) senior officials of the Ministry of Education.

Questionnaires were delivered to 77 cooperative employers, 100 non co-op employers, 75 faculty members and 150 students, with returns received from 65 co-op employers, 52 non co-ops, 70 faculty members and 92 students. Data was analyzed on the Michigan State University C.D.C. Computer System. The program was written using the Statistical Package for the Social Sciences (SPSS). Results were illustrated by tables showing frequency, percentages and mean \bar{X} , in some cases.

Findings of the Study

The following findings were determined from this study. First, it was found that each group of concern: co-op employers, non co-ops, faculty and students had different perceptions of the cooperative educational program. The majority of respondents described the program as "part-time work which should be career related for students," especially non-cooperative employers and students. Co-op employers and faculty tended to describe the program as the traditional alteration of full-time work with full-time study. Some respondents chose this description as their second alternative, while others described the cooperative education program as "full-time work" or a "voluntary or intern plan for students to determine a career field." About 50 percent of the non-cooperative employers were unsure what the program was.

It was also found that cooperative employers, faculty and students knew what the cooperative education program was, the only group that did not know about it was the non-cooperative employers, a finding supported by the previous findings. Faculty members appeared to be more aware of the program because of their personal involvement or contacts with colleagues who were involved or had heard about the program. Cooperative employers were next in awareness of the program, mainly because of their own involvement;

40 percent of them had participated in the co-op program for 3 years or more. The student body was also found to be aware of the program, although one third of them had not yet been involved in the program.

All groups: co-op, non co-op employers, faculty and students solidly favored the program. It was found that non-cooperative employers were 79 percent supportive of the cooperative education program which indicates there is considerable potential for enlarging and diversifying the co-op program in the future. Faculty supported the program 100 percent, cooperative employers were 96.9 percent in favor and students were found to be 88 percent in favor of it.

The fourth finding was that non-cooperative employers favored the concept of cooperative education as a service to the community and country, which was only a secondary reason for cooperative employers. The most frequent reason given by cooperative employers was to "obtain better employees and to expand their sources of personnel."

It was also evident that both cooperatives and non-cooperative employers desire more information about cooperative education programs at vocational and technical institutes in Kuwait. They wanted to know how the program functions, who to contact for information and, by the widest margin, "what career fields are involved." It was indicated also that non-cooperatives lacked information about the

program and more than co-op employers, since 55 percent of these non-cooperative employers who did not favor the program failed to support it because they did not know about it.

In the sixth finding, conclusive evidence was found that employers were discouraged from participating in the cooperative educational program because of poor administration and coordination by the educational institutes. The main weaknesses listed by the employers indicated first "poor administration and coordination by educational institutes" and secondarily they "didn't always receive well-qualified students for openings."

It was also apparent that both faculty and students believe that one of the main barriers to developing the co-op program is lack of care and enthusiasm among employers for supervising and training co-op students. This was the most frequently chosen weakness of the cooperative education program.

On the other hand, both cooperative and non-cooperative employers demonstrated a particular interest in the cooperative education program. The most important reason they felt was the opportunity it gave them to look at employees on a temporary basis before hiring them permanently. Faculty favored "developing greater maturity in the students" as their most frequent choice among the strengths of the program, while students preferred the reason that "the program provides human relations skills while at work."

The study also revealed that employers, faculty and students prefer different types of cooperative educational program. The majority of cooperative employers desired students for part-time work; they agreed that co-op students should be paid the same as other employees, another indication of their willingness to participate to improve the program. Meanwhile, students preferred full-time work, for at least one term.

The data indicated that different methods of communication have been found effective among the various groups. For cooperative employers, the primary method of learning about the program was a college or institute mailing or representative, while some of them had information from family or school experience. Non-cooperative employers often heard about the program through newspapers or other organizations or their own school experience. Faculty members heard about the program through personal involvement, via a colleague or official announcement or memorandum issued by an educational institute. Students heard about the program through institutes' directory or brochure or via another student.

The study also revealed that there is no significant economic problem to block the program's progress or improvement and a majority of employers declared there was no resentment from their supervisors toward training co-op students from fear of losing their jobs in the future.

Conclusions

It was necessary to include all pertinent groups, like faculty, students, and employers in cooperative education research to obtain a comprehensive examination of the program. Employers provide the practical facilities, instruction and equipment, the faculty who coordinate the students' programs and link the educational body to employers and, finally, the students who constitute the core of the cooperative education program. Understanding the perceptions of all these groups and their attitudes toward the co-op program was essential to accomplishing the study. The findings of the study have led to the following conclusions.

1. Cooperative employers, non-cooperative employers, faculty and students had different perceptions about the cooperative education program at two-year post-secondary institutes in Kuwait. Their descriptions of co-op programs indicated a lack of knowledge about recent innovations and diversity in cooperative program patterns. All groups except non-cooperative employers knew what the cooperative education program was. Non-cooperative employers by a majority of 80 percent, indicated that they did not know about the program or were not sure what it was.

2. All groups indicated they were in favor of the co-op program. The employers' main reasons for this emphasized service to the community and country. They found it a means to obtain better employees and to expand their sources of personnel. Employers in the program found the greatest benefits in cooperative programs to cut personnel turnover and save money and effort.

3. Those who did not indicate support for the co-operative education program indicated they lack information about it. The second most frequent reason given was not receiving qualified students. The first reason, appeared to be a communication problem, while the second is a problem of program and student coordination which indicated that educational institute's coordinators have not carefully evaluated students' skills before assigning them to jobs to make sure that they are qualified for the job and that the match between student and specific job and employer is a good one.

4. Students, although in favor of the program, were not satisfied by the number of credits obtained for the program and were discouraged by inadequate pay for their work. The problem here is two fold: on one side it is related to educational institute as far as number of credits are concerned, but on the other side the problem of student's pay exist with a mutual interest between employers and educational institute. Research results

showed an optimistic outlook for satisfactory resolution of the issue, since most employers in this study favored paying students the same as other workers.

5. The most successful method for informing employers about cooperative program was institute mailings and representatives, newspapers or other organizations and, their earlier school experience. Faculty learned from colleagues, experience or memoranda. Students learned of the program mostly through the institutes' directory and other students or faculty members. It is apparent that each method worked effectively with a specific group.

6. Employers and students preferred different types of cooperative educational programs to fit their needs rather than having only one traditional arrangement to meet all satisfaction.

7. All groups of concern expressed an interest in more information about the co-op program. The areas requested were "what career fields are involved, how the program functions, and who to contact for information." As one vice-president told the researcher, "first I have to know what the students have been taught in the school, and then I can ask to have them sent here."

8. Another problem noted was a lack of confidence or communication between employers and co-op students. Some students stated in questionnaires or personally to

the researcher that employers refused to assign them to real work situations or to run some machinery or use some equipment. On the other hand, a highly ranked German manager from a paint factory told the researcher that he was astonished by the high level of accomplishment of some co-op students assigned to his firm and offered them permanent jobs upon graduation at a high salary. Apparently there is a communication problem here which could affect the progress of the program.

9. The main reason co-op employers favored the program was the opportunity to look at employees on a temporary basis before hiring them permanently, the next reason was that students already have skills for the jobs. Faculty and students favored the program because greater maturity of students developed and because it provided learning human skills at work.

10. Employers complained about poor administration and coordination by the educational institutes, which is a serious problem and should be given attention, since without good coordination no progress can be expected. Employers also indicated that students were not interested in learning and had no appetite for doing real work. This problem could be related to the students' perceptions of lack of pay for job the way the students are assigned to their jobs. On the other hand, faculty members indicated

that poor supervision by employers was a major weakness of the co-op program.

11. No economic problem appeared to be significant in this study, which is sometimes a major problem in developing cooperative education program in other countries. It was also notable that much of the support for co-op programs came from organizations over 100 employees which are considered large for the State of Kuwait, but smaller organizations also showed support and their cooperation should also be sought.

In conclusion, from the study results it is evident that employers, faculty and students are supportive of the concept of cooperative education programs. The major problems appeared to be lack of communication between employers and educational institutes, lack of information about the program on the part of employers, due to a lack of publicity for the program, weak, insufficient coordination and administration of educational institutes, and lack of confidence and understanding between employers and students.

Recommendations

The following recommendations are developed from the statement of the problem and are based on the findings and conclusions of this study:

1. More than 80 percent of non-cooperative employers were either unsure or did not know what the co-operative education program was. Thus, for the co-op program to develop better communication with the public is essential. To improve communication it is recommended that educational institutes:
 - a. emphasize the methods of communication that have been used and found effective with each group, and enhance efforts to strengthen their efficiency in the future.
 - b. establish a new channel of communication by using mass media facilities such as TV and radio at least once a week and hold conferences or forums at least once a month to display co-op programs to the public.
2. Specific publications, like cooperative education journals or newsletters should be published centrally by the Ministry of Education with the cooperation of all post-secondary vocational and technical institutes. This is necessary to show the importance and recent trends and variations in co-op programs in the country. Such publications shall be sent to all employers to keep them in touch with program updates. Possibly advertising could cover the costs of more expensive publications.
3. All communication efforts should be directed and organized to attain established goals and objectives. The best ways to identify the goals are to determine employers needs or interests and stress these points. As was found in the study, employers favored co-op programs to obtain better employees and expand sources of personnel. Any publication for employers should consider these selling points in appealing to employers.

4. For the cooperative education program to grow, it must concentrate on developing more employment opportunities for students in areas of demand. Employers indicated that they don't receive qualified students for their job openings. This problem needs to be resolved by opening up training programs for new fields and careers to satisfy the demands of a wide variety of students and employers.
5. Some weaknesses of the program may be attributed to poor coordination between schools and employers. This is partially due to lack of time for personal contact between school officials and employers and due in part to the large number of students assigned to each coordinator. This point should be examined, so that lower numbers of students are assigned to each program coordinator and the coordinator is required to make a certain number of visits to each student and employer at the job site, especially early in the placement. Students should also be screened more carefully for appropriate skills.
6. To obtain knowledgeable coordinators in all career fields would be impossible, but since some teachers are involved in coordinating co-op students, it is recommended that:
 - a. teacher-coordinators be chosen from various career fields and be charged with areas of coordination that they are familiar with.
 - b. coordinators should be given orientation about the goals and objectives of the program and their duty toward employers and co-op students to improve their knowledge.
7. Both employers and students showed interest in different types of cooperative education programs. As the findings revealed, some employers desired part-time workers, some full-time workers, some preferred alternating full-time work with full-time study and some wanted students to stay on the job at least two terms (6 months). The same variety of programs was desired by students. Thus, for the co-op program to function successfully, it must be flexible and consider all work study patterns, particularly the parallel plans for two-year post-secondary institutes in Kuwait.

8. Some employers found they were not receiving qualified students. Currently any student enrolled in the co-op program regardless of the number of courses completed and his grade. One of the main objectives of the co-op program is to integrate theory with practice, thus, students should first complete some specific pre-requisites before becoming eligible for the program. Sophomores should not be allowed to participate.
9. Some students were discouraged from participating in the co-op program because they lost subsidized salary from Ministry of Education (which is discontinued during the Summer Term) and employers offered no pay or less than outside. It is recommended that to raise the morale of co-op students, they should receive their stipends from the Ministry of Education for all terms of enrollment. Some arrangement should be made with employers to furnish equal or fair payment.
10. It is strongly recommended that employers participate in curriculum planning for institutes in general and for co-op programs specifically. Therefore, a council of employees and educators should be constituted to plan for the co-op program and select appropriate courses and materials.
11. Many co-op programs take place in the Summer Term when inevitably month of Ramadan occurs. In this month, Muslim people fast from dawn to dusk. Also, during the summer most personnel are on leave to escape the hot weather, so employers lack personnel to train students or tempers are strained due to heat and fasting. It is suggested co-op programs have the flexibility to avoid this month as much as possible.
12. The educational institutes are located on separate campuses. Therefore, coordination between them is recommended to meet students' and employers' needs and to exchange knowledge and experience.
13. The University of Kuwait has a great number of professors and experienced faculty members, also a summer co-op program, it is recommended that Kuwait University establish further relations with the institutes to provide consultant services in course planning and selecting materials.

Suggestions for Further Research

This study was undertaken to determine why employers are not participating to a greater extent in the cooperative education program at two-year post-secondary institutions in Kuwait. Within the scope of this investigation the following recommendations for further study are presented:

1. In this study the employer population was selected from all employer categories: private, public and mixed. Similar study should be undertaken to discover the different perceptions and attitudes of each category and to determine if the category or size of firm makes any differences in co-op program development.
2. The employer-coordinator roles in co-op program relations are also recommended for further attention. Study should be done regarding employers and coordinators to analyze their actual and ideal perceptions relating to administrative procedures and student attainments, in order to determine how the cooperative education program is being administered and what type of student attainment is being achieved through the student co-op education experiences.
3. In this study questionnaires were developed for use with all managers of different nationalities; over 90 percent were non-Kuwaitis. A similar study might be undertaken to compare Kuwaiti and non-Kuwaiti employer attitudes toward the program and to discover if this factor has a significant effect in developing the co-op programs.
4. This research was essentially a case study of two-year post-secondary vocational and technical institutes and suggested a number of ideas regarding procedures and questionnaires. Similar study should be done on a national scale for comparison on how other programs are operating in the country.

5. Similar study to this one should take place to discover employer, faculty and student attitude about cooperative education programs to be established at distributive secondary schools.

The above are a few recommendations that the researcher feels are needed to further improve and develop cooperative education programs in Kuwait to meet the needs of current employers and attract more employers in the program in the future.

APPENDICES

APPENDIX A

EMPLOYER QUESTIONNAIRE

Please circle the response that is most accurate for you or your organization. Where there is space to write a response, it is your alternative to do so. Write your responses on this paper. If the question does not apply, please skip to the next one. It is extremely important that you respond to all statements according to your own understanding or feelings and not the way you think it should be answered.

1. My Sex
 1. Male
 2. Female
2. Nationality
 1. Kuwaiti
 2. Arabic
 3. Other Nationalities
3. My Age
 1. 21 to 30 years
 2. 31 to 40 "
 3. 41 to 50 "
 4. over 50 "
4. Years In Present Position
 1. Less than (1) year
 2. (1) to (4) years
 3. (5) to (8) years
 4. Over (8) years
5. Write your title and circle the best description of it below.
_____ (Title)
 1. Personnel Director
 2. Administrator Assistant
 3. President or Vice-President
 4. Supervisor within a department or division
 5. Department or Division Head
6. What type of firm are you in?
 1. Private
 2. Public or Government
 3. Both (Private and Public or Government)

7. As an employer, how many employees does your organization now have?

1. 1 to 50
2. 51 to 100
3. 101 to 500
4. over 500

8. What kind of industry or organization are you?

1. Petrochemical and Oil Industry
2. Financial Companies and Commercial Banks
3. Service (Transportation, Fire, Police or Utility)
4. Productive and Manufacturing Firm
5. Education
6. Other (Write in here) _____

9. What is the annual budget for your organization?

1. Less than 100,000 K.D. (Kuwaiti Dinar)
2. 100,001 to 500,000 K.D.
3. 500,001 to 1,000,000 K.D.
4. 1,000,001 to 5,000,000 K.D.
5. Over 5,000,000 K.D.
6. Don't know

10. Do you know what Cooperative Education is?

1. Yes
2. No
3. Unsure

11. How would you describe a Co-op program? (You may circle more than one)

1. Part-time work for students which should be career-related.
2. Full-time work for students which must be career-related.
3. A volunteer or intern plan for students in school to find out about their career fields.
4. A plan of alternating full-time work with full-time study in a students career field for which credit may be given.
5. Unsure

12. If you have heard of the cooperative education plan, how did you?

1. From a fellow employer
2. From my family or my own school experience
3. From a college or university mailing or representation
4. From the newspaper or another organization
5. Other _____

13. Are you or your organization currently involved in a cooperative education program with a vocational institute or Kuwait University?
1. Yes
 2. No
 3. Don't know
14. If you have ever been involved in cooperative education, what kind of institution did you work with?
1. Kuwait University
 2. Vocational and Technical Institutes
 3. Both
 4. Don't know
 5. Other _____
15. If you are now involved in a cooperative education program with an institute or Kuwait University, how long have you been?
1. Less than 1 year
 2. 1 to 2 years
 3. 3 to 5 "
 4. Over 5 years
16. If you are involved in a two year vocational and technical institutions or Kuwait University Cooperative Program, how many students are involved?
1. Less than 5
 2. 6 to 10
 3. 11 to 20
 4. Over 20
17. Do you favor the concept of cooperative education?
1. Yes
 2. No
 3. Undecided or no opinion
18. If yes to 17 above, why do you favor the plan? (You may circle more than one)
1. To obtain better employees who are more educated
 2. To save money and efforts
 3. To cut personnel turnover
 4. As a community service ☒
 5. To expand the sources of personnel
 6. Other _____
19. If you or your organization don't favor cooperative education, why not? (You may circle more than one)
1. Did not know about it or know how it operates.
 2. It takes too much time to train students who may not stay.
 3. Students are not qualified for our jobs.
 4. There is no budget for co-operatives or any openings.
 5. Supervisor or employee resistance
 6. Poor administration or coordination by the education institution
 7. Other _____

20. Do you believe that your employees are reluctant to train co-ops for fear of losing their jobs in the future?
 1. Yes, there is a strong indication
 2. Yes, there is but, does not really effect
 3. No
 4. Other _____
21. Do you believe the communication problems are because of ~~non~~⁴-Arab supervisors?
 1. Yes
 2. No
 3. Other _____
22. Do you favor the cooperation between employer and cooperative education programs by...
 1. Direct contact between educational institutes and employers
 2. Contact via the Ministry of Education
 3. Other _____
23. If you favor student pay in co-op work, how should it be?
 1. From employer to create loyalty and enthusiasm
 2. From the Ministry of Education or institutes
 3. Other _____
24. What type of cooperative education program of students working in a career field best fits your needs? (You may circle more than one)
 1. Full-time work on the job for two terms (6 months) or more
 2. Part-time student work
 3. Full-time student work, alternating term of work with study using a pair of students
 4. Student work for pay like other employees
 5. None. Prefer to have a college graduate or a student on a permanent basis.
 6. Other _____
25. What would you like to know about co-operative education programs at vocational and technical institutes in Kuwait? (You may circle more than one)
 1. How the programs functions
 2. Who to contact for information
 3. What career fields are involved
 4. How academic credits are involved
 5. Other _____

26. If you have been in a co-op plan, please complete below. If an effort to determine the strengths and weaknesses of the program, circle one or more answers.

Strengths

1. Free recruitment program, students screened by institutes or University.
2. Can obtain employees with lower wages
3. Students already have skills for the job
4. Able to look at employee in a temporary basis to see if they will fit into the organization before hiring permanently.
5. Other _____

Weaknesses

1. Don't always receive well qualified students for openings.
2. Supervisors don't have time to train several students yearly.
3. Need to explain the plan continuously to personnel.
4. The plan is tied to economic factors and/or budgets.
5. Poorly administered or coordinated by the educational institution.
6. Other _____

THANK YOU FOR YOUR TIME! !

FACULTY QUESTIONNAIRE

1. Sex
 1. Male
 2. Female
2. Nationality
 1. Kuwaiti
 2. Non-Kuwaiti
3. I am...
 1. Full-time faculty member in technical and vocational divisions in the institute
 2. Administrative member
 3. Faculty member of student service
 4. Other _____
4. Age
 1. 21 - 30 years
 2. 31 - 40 "
 3. 41 - 50 "
 4. Over 50 "
5. I have been at the institutes (Includes all institutes in Kuwait)
 1. Less than 3 years
 2. 3 to 5 years
 3. 6 to 8 years
 4. Over 8 years
6. Do you know what a cooperative education program is?
 1. Yes
 2. No
 3. Uncertain
7. If you have previously heard of an institutes cooperative education program, how did you? (If not skip to next question)
 1. Institutes directory, news letter, official announcement or memorandum from the institute.
 2. A colleague
 3. A student
 4. Advertising board in the institute or in a public place
 5. Personal involvement
 5. Other _____

8. How would you describe a cooperative education program? (You may circle more than one)

1. Part-time work which should be career-related for students
2. Full-time work which must be career-related for students
3. A volunteer or intern plan for students to find out a career field
4. A plan of alternative full-time work with full-time study in a student's career field for which credit may be given
5. Unsure

9. Do you favor the concept of cooperative education?

1. Yes
2. No
3. Undecided or no opinion

10. If yes to 9, why do you favor the plan? (You may circle more than one)

1. To assist students in finding out about a career
2. To assist students in finding permanent employment
3. To intergrate theory and study with experience in a career type job
4. To provide work experience
5. Other _____

11. If you don't favor the co-operative education concept, why not? (You may circle more than one)

1. Did not know about it or how it operates
2. Think it interferes with course work or educational plans, and progress of students through college
3. Believe there are no jobs in students career field
4. I am too busy to get involved in it
5. No monetary incentives.
6. Don't see any educational benifit for students
7. Other _____

12. Are you willing to allow for a co-op students problems, such as;
(Place an X by each response under Yes or No)

Yes	No	
_____	_____	1. Missing some classes or coming in late due to job?
_____	_____	2. Slowing down their graduation time?
_____	_____	3. Taking classes out of sequence?
_____	_____	4. Taking course change suggestions to meet employer needs?
_____	_____	5. Rescheduling an exam?
_____	_____	6. Needing to add or drop a course after it began?

Comments _____

13. What would you like to know about technical and vocational institute's cooperative education programs? (You may circle more than one)

1. How the program functions
2. Who to contact for information or referral of students
3. What career fields are involved
4. What jobs are open
5. How academic credits are awarded
6. Other _____

14. If you have been involved or are familiar with a co-op plan, please complete the item(s) below. (You may circle more than one)

Strengths of Co-op plan?

1. Greater maturity of students is developed
2. Learning of human relation skills while at work
3. Credits toward graduation for career-related work experience
4. Exploration of a career
5. Feedback to teachers on the relevance of their teaching
6. Feedback to students in class, making class more interesting, relevant
7. Finding permanent employment for students in their career fields
8. Involvement of students in job informational seminars
9. Coordination between the employer and the appropriate institut official.
10. Other _____

Weaknesses of Co-op plan?

1. Courses and college dropped to take a job.
2. Mostly temporary jobs
3. No job opening in student career field
4. Poor job supervision by employer
5. Lack of encouragement and enthusiasm from employers
6. Students concerned about gaining more credits than learning
7. Lack og information about programs; communication gap.
8. Coordinator(s) of program are not knowledgeable in all career field
9. Coordination between the employer and the appropriate institute official
10. Other _____

15. Do you favor the cooperation between employer and co-op program by...

1. Direct contact between the institute and employer
2. Contact via the Ministry of Education
3. Other _____

16. If you favor student pay in co-op work, how should it be done?

1. From employer to create loyalty and student enthusiasm
2. From the Ministry of Education
3. Other _____

THANK YOU FOR YOUR COOPERATION

STUDENT QUESTIONNAIRE

PART 1

PERSONAL DESCRIPTION

1. My status is
 1. Student not enrolled in the co-op program
 2. Student enrolled in the co-op program
2. Sex
 1. Male
 2. Female
3. Age
 1. Less than 19 years
 2. 19-20 "
 3. 21-22 "
 4. 23-24 "
 5. 24-25 "
 6. Over 25 "
4. Students present overall grade point average or approximation
 1. Less than 1.5
 2. 1.5 - 1.9
 3. 2 - 2.4
 4. 2.5 - 2.9
 5. 3 (B) or more
5. Have you identified a potential career?
 1. Yes
 2. No
6. If yes to 5 above, what is your choice?
 1. Accounting
 2. Management and Secretarial
 3. Finance (Insurance and Banks)
 4. Computers
 5. Material Management
 6. Medical Secretary
 7. Mechanics Technology Dept.
 8. Electric Technology Dept.
 9. Electronic Technology Dept.
 10. Construction Technology Dept.
 11. Industrial Chemical Technology Dept.
 12. Literature
 13. Science
 14. Librarian
 15. Arts (Fine Arts)
 16. Other _____

7. Do you work now for pay?
1. Yes
 2. No
8. If you work now for pay, how many hours a day?
1. 6 hours daily (routine government official work)
 2. Less than 6 hours
 3. More than 6 "
 4. Other_____
9. If you are working now, is your current job related to your career choice?
1. Yes
 2. No
10. How many credit hours (Not Classes) are you taking now?
1. 3 to 6 credits
 2. 7 to 9 "
 3. 10 to 12 credits
 4. 13 or more credits
11. How do you estimate your monthly income from your parents if you are not living with them. What is your monthly income in Kuwait Dinar?
1. Less than 150 K.D. monthly
 2. 150 - 250 K.D.
 3. 250 - 350 K.D.
 4. More than 350 K.D.
 5. Don't know or unsure
12. Are you planning to go on to a senior institution or university in Kuwait or abroad after leaving the institute?
1. Yes
 2. No
 3. Undecided

OPINION

13. Do you know what cooperative education is?
1. Yes
 2. No
 3. Unsure
14. If yes in 13, how did you know? (If not skip to next question.)
1. Institute's directory or Ministry of Education brochure.
 2. Another student
 3. A faculty member (Teacher or administrator or others)
 4. Institute's local advertisements and publications
 5. Other_____

15. How would you describe a cooperative education program? (You may circle more than one).

1. Part-time work which should be career -related for students.
2. Full-time work which must be career-related for students.
3. A volunteer or intern plan for students to find out about a career field.
4. A plan of alternating terms of full-time study with full-time work in a students career field for which credit may be given.
5. Unsure.

16. Do you favor the concept of cooperative education?

1. Yes
2. No
3. Undecided or no opinion

17. If yes to 16, why do you favor the plan? (You may circle more than one)

1. To help find the right career field for me.
2. To earn more credits for graduation.
3. To find permanent employment in my career field.
4. To gain experience.
5. It is sort of a change in academic routine.
6. Other _____

18. If you don't favor the co-op education concept, why not? (You may circle more than one)

1. I don't know about it.
2. I feel it will delay the time I will graduate.
3. There are not any job openings for me in my career field
4. Lack of financial support or encouragement from employer or the institute.
5. Jobs available are located too far away or not near easy transportation.
6. Other _____

19. What type pf cooperative education program of students working in their career field best fits your needs?

1. Full-time work on the job; at least two terms.
2. Part-time work.
3. Full-time work, alternating terms of work with study.
4. Full-time work at least one term (3-4 months).
5. Other _____

20. Why are you going to college? (You may circle more than one)

1. To gain a better education
2. To obtain a better paying job
3. To discover the right career field for me
4. For personal reasins (to please the parents or obtain VA money).
5. Failure in meeting Kuwait University requirements.
6. Other _____

21. Do you favor....
1. Volunteer work in co-op programs (No pay).
 2. Salary from the employer.
22. Do you believe that the Co-operative Education Program should be....
1. Voluntary according to students desire
 2. Compulsory for all students
 3. Compulsory for some career fields and voluntary in others.
 4. Other _____
23. Do you favor a co-op program based on more work terms with credits than are currently available. (3 or 5 presently).
1. Yes
 2. No
 3. Don't know
24. What would you like to know about co-operative education programs at technical and vocational institutes in Kuwait? (You may circle more than one).
1. How the program functions.
 2. Who to contact for information, or where to go for it.
 3. What career fields are involved.
 4. How academic credit is involved.
 5. Other _____
25. If you have been enrolled in or are familiar with a co-op plan, please complete the items below. (You may circle more than one)

Strengths of Co-op plan?

1. Greater maturity of students is developed
2. Learning of human relation skills while at work
3. Credit towards graduation for career related work experience
4. Exploration of career
5. Feedback to teachers on the relivance of their teaching
6. Feedback to students in class, making class more interesting, relivant.
7. Finding permanant employment for students in their career fields.
8. Coordination between the employer and the appropriate institute administrator or faculty person.
9. Other _____

Weaknesses of the Co-op plan?

1. Mostly temporary jobs.
2. No job opening in career field
3. Poor job supervision by employer
4. Employers, supervisors lack enthusiasm to train the students
5. Lack of monetary incentives.

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6. Students are concerned more about gaining credits than learning.
7. Lack of information about the program, communication gap. 2
8. Coordinator(s) of program not knowledgeable in all career fields
9. Coordination between school and employers weak
10. Other _____

THANK YOU FOR YOUR TIME AND COOPERATION ! ! !

APPENDIX B

TO: SELECTED EMPLOYERS

This is a questionnaire about perceptions and attitudes of employers, faculty and students toward cooperative education (field training) programs at the two-year post-secondary technical and vocational institutes in Kuwait. The results of this research may lead to developments or adjustments in the programs in order to supply you with more experienced personnel in the future.

All questionnaires are coded to facilitate follow-up procedures for non-returned questionnaires. I like to assure you in advance that all information you provide will be treated with utmost confidence. No individuals will be identified in any way.

Thank You,

Ali Taqi
Ph.D. Candidate
Michigan State University

MEMORANDUM

FROM: Director of Department of Technical and Vocational
Education

To: Deans of Technical and Vocational Institutes.

Please do whatever possible to facilitate Mr. Ali Taqi's endeavors in obtaining required information for his doctoral dissertation which is being prepared for Michigan State University at the United States of America. Enclosed with this memo is a copy of the Undersecretary of the Ministry of Education's signature indicating his approval for collection of the necessary datum.

Cordially yours,

Abdul Muti Yousif
Director of Technical and
Vocational Education

Dear Student:

Enclosed is a questionnaire to discover perceptions and attitudes of students about the cooperative education (field training) program at technical and vocational education institutes in Kuwait. With your help to the researcher we will be able to design a better educational program to meet your needs.

Please spend 10 minutes of your valuable time to fill out the enclosed questionnaire. All information will be treated in confidence. Student names will not be identified.

Please read the instructions carefully and return the questionnaire to your teacher in class within two weeks.

Sincerely,

Ali Taqi

APPENDIX C

TABLE 1: COOPERATIVE AND NON-COOPERATIVE EMPLOYERS BY SEX
AND NATIONALITY

Sex	Co-op Percent	Non Co-op Percent	Nationality	Co-op Percent	Non Co-op Percent
Male	81.5	94.0	Kuwaiti	47.7	35.4
Female	18.5	6.0	Non-Kuwaiti	49.2	58.3
			Other	3.1	6.3

TABLE 2: YEARS IN PRESENT POSITION AND TITLE OF CO-OP AND NON CO-OP EMPLOYER

Years in Present Position	Co-Op Percent	Non Co-Op Percent	Title	Co-Op Percent	Non Co-Op Percent
Less than 1 year	6.2	1.9	Personnel Director	34.4	28.0
1 to 4 years	16.9	40.4	Administrator Assistant	6.3	10.0
5 to 8 years	29.2	21.2	President or Vice-President	15.6	20.0
over 8 years	47.7	36.5	Supervisor Within A Department or Division	14.1	16.0
			Department or Division Head	29.7	22.0
			Other	--	4.0

TABLE 3: CO-OP AND NON CO-OP EMPLOYERS. KIND OF INDUSTRY OR ORGANIZATION AND
NUMBER OF EMPLOYEES ILLUSTRATED IN PERCENTAGES

Number of Employees	Co-Op Percent	Non Co-Op Percent	Kind of Industry or Organization	Co-Op Percent	Non Co-Op Percent
1 to 50	15.6	13.5	Petrochemical or Oil Industry	10.9	4.3
51 to 100	10.9	17.3	Financial Companies and Banks	17.2	4.3
101 to 500	23.4	40.4	Service	28.1	38.3
Over 500	50.0	28.8	Productive and Mfg.	18.8	29.8
			Education	12.5	--
			Other	12.5	23.4
				100.0	100.0

TABLE 4: FACULTY MEMBERS, BY SEX, NATIONALITY, AGE AND TIME SPENT AT THE INSTITUTION

Sex	Percent	Nationality	Percent	Age	Years In	
					Percent	Institute
Male	57.1	Kuwaiti	8.9	21-30 yr.	7.1	Less than 3 years
						17.1
Female	42.9	Non-Kuwaiti	91.1	31-40 yr.	52.9	3-5 years
						25.7
				41-50 yr.	32.9	6-8 years
						30.0
				Over 50	7.1	Over 8 years
						27.1

TABLE 5: WHY FACULTY FAVOR CO-OP PROGRAMS

Reasons	Frequency	Percentage
1. To assist students in finding a career	31	21.1
2. To assist students in finding permanent employment	15	10.2
3. To integrate theory and study	65	44.2
4. To provide work experience	36	24.5
5. Other	0	0
	<hr/> 147	<hr/> 100.0

TABLE 6: HOW FACULTY MEMBERS ARE WILLING TO ALLOW FOR A
CO-OP STUDENTS PROBLEMS

Problems	Yes	No
1. Missing some classes or coming late due to job	52.9	47.1
2. Slowing down their graduation time	34.3	65.7
3. Taking classes out of sequence	48.8	51.2
4. Course change to meet employee's needs	95.5	4.5
5. Rescheduling an exam	45.2	54.8
6. Adding or dropping course after it began	78.3	21.7

TABLE 7: STRENGTH OF CO-OP PROGRAM AS DETERMINED BY FACULTY MEMBERS

Sources	Frequency	Percentage
1. Great maturity of students is developed	49	21.8
2. Learning of human relation skills while at work	34	15.1
3. Credits toward graduation for career-related work experience	12	5.3
4. Exploration of a career	33	14.7
5. Feedback to teachers on the relevance of their teaching	29	12.9
6. Feedback to students in class	23	10.2
7. Finding permanent employment for students	26	11.6
8. Involvement of students in job seminars	7	3.1
9. Coordination between the employer and educational institutions	12	5.3
10. Other	0	--

TABLE 8: WEAKNESSES OF CO-OP PROGRAM AS DETERMINED BY
FACULTY MEMBERS

Sources	Frequency	Percentage
1. Courses and college dropped to take jobs	94	6.9
2. Mostly temporary jobs	26	19.8
3. No job opening in student career field	2	1.5
4. Poor job supervision by employer	29	22.1
5. Lack of encouragement from employers	23	17.6
6. Students concerned about gaining more credits than learning	24	18.3
7. Lack of information about programs; communication gap	5	3.8
8. Coordinator(s) of program are not knowledgeable in all career field	4	3.1
9. Coordination between the employer and the appropriate institute official	9	6.9
10. Other	-	--
	131	100.0%

TABLE 9: STUDENTS BY STATUS, SEX, AGE AND GRADE POINT

Status	Percent	Sex	Percent	Age	Percent	Grade	Percent
Co-Op	69.6	Male	64.1	Less than 19 years	5.6	Less than 1.5	2.4
Non Co-Op	30.4	Female	35.9	19-20 years	33.3	1.5-1.9	28.2
				21-22 years	30.0	2.0-2.4	10.6
				23-24 years	10.0	2.5-2.9	28.2
				24-25 years	10.0	3(B) or more	30.6
				Over 25 years	11.1		

TABLE 10: STUDENTS PLAN AFTER GRADUATION FROM POST-
SECONDARY TECHNICAL AND VOCATIONAL INSTITUTES
"ARE YOU PLANNING TO GO ON TO A SENIOR INSTITUTION
OR UNIVERSITY IN KUWAIT OR ABROAD AFTER LEAVING
THE INSTITUTE?"

Students Response	Frequency	Percent
Yes	57	62.0
No	10	10.9
Undecided	25	27.0

TABLE 11: WHY STUDENTS FAVOR CO-OP PROGRAM

Reasons	Frequency	Percentage
1. To help find the right career	24	21.2
2. To earn more credits	11	9.7
3. To find permanent employment	4	3.5
4. To gain experience	66	58.4
5. It is sort of change in academic routine	8	7.1
6. Other	0	--
TOTAL	113	100.0%

TABLE 12: STUDENT REACTION TO CO-OP PROGRAM

Strength of Co-Op		Percent Freq.		Weakness of Co-Op		Percent Freq.	
1.	Greater maturity	19.3	41	-Mostly temporary job		2.6	6
2.	Learning of human relation skills	27.4	58	-No job in career field		7.4	17
3.	Credit toward graduation	10.8	23	-Poor supervision by employers		17.0	39
4.	Exploration of career	16.0	34	-Lack of enthusiasm from employers supervisors		11.3	26
5.	Feedback to teacher	2.4	5	-Lack of monetary incentives		18.8	43
6.	Feedback to students	5.7	12	-More concern to gain credits than learning		9.1	21
7.	Finding permanent employment	13.7	29	-Lack of information about the program		12.6	29
8.	Coordination between employer and institute administrator	4.7	10	-Not knowledgeable coordinators		8.7	20
9.	Other	-	0	-Week coordination between employer and school		12.6	29
				-Other		--	0

TABLE 13: HOW STUDENTS HEARD ABOUT COOPERATIVE PROGRAMS
AT TWO-YEAR POST-SECONDARY INSTITUTES OF
TECHNICAL AND VOCATIONAL EDUCATION

Resources of Information	Frequency	Percentage
Institute directory	27	36.0%
Another Student	23	30.7%
Faculty Members	15	20.0%
Institutes Local Advertisements	3	4.0%
Other	<u>7</u>	<u>9.3%</u>
	75	100.0%

TABLE 14: HOW STUDENTS DESCRIBED A COOPERATIVE EDUCATION
PROGRAM

Type of Co-Op Program	Frequency	Percentage
Part-time work, should be career-related	48	44.0%
Full-time work, must be career-related	15	13.8%
Volunteer or intern plan	14	12.9%
Alternating terms of full- time with part-time	30	27.5%
Unsure	<u>2</u>	<u>1.8%</u>
	109	100.0%

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