

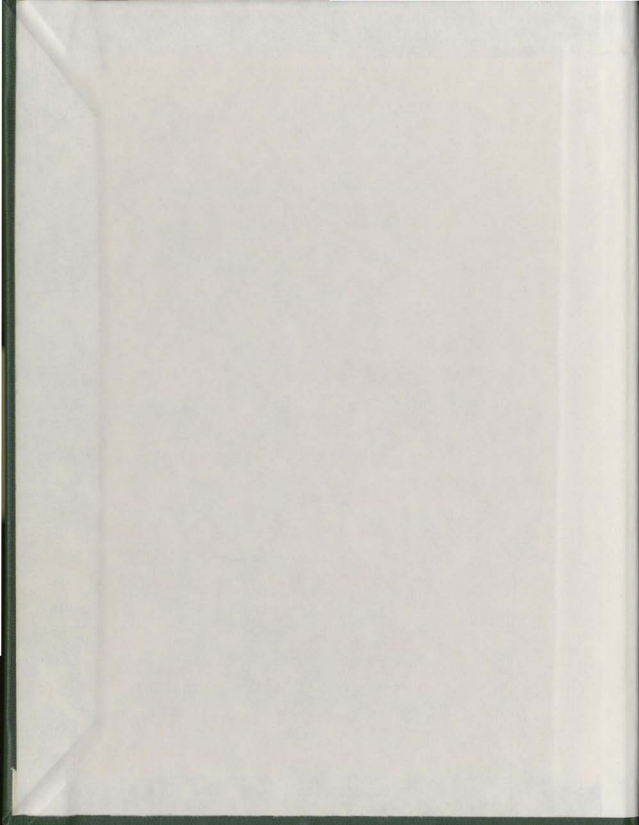
IMPLEMENTATION AND EVALUATION OF A CAREER  
EDUCATION PROGRAM FOR GRADE XI CREDIT IN A  
RURAL NEWFOUNDLAND REGIONAL HIGH SCHOOL

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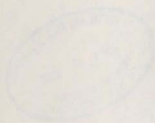
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IMPLEMENTATION AND EVALUATION OF A CAREER EDUCATION PROGRAM  
FOR GRADE XI CREDIT IN A RURAL NEWFOUNDLAND  
REGIONAL HIGH SCHOOL



by  
John F. Hennebury

A Thesis presented to  
The Department of Educational Psychology  
Memorial University of Newfoundland

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of the requirements for the degree

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#### ABSTRACT

The purpose of this study was to implement and evaluate a career education program, "Creating a Career", at the grade eleven level in a rural Newfoundland Regional High School in which students who successfully completed the program received credit towards the Newfoundland Department of Education high school graduation certificate.

The program was carried out with a group of "academic" grade eleven students. The objectives of the program were to increase the students' knowledge of themselves, the world of work, decision-making and job search skills.

Four different instruments were used in the evaluation of program processes and three different instruments were utilized in the evaluation of learner outcomes. A control group from the same community was used for comparative purposes. Both the control and experimental groups received pretest and posttest administrations of a career knowledge instrument and a self-rating questionnaire that were devised from the instructional objectives of the career education course. An F-test was carried out on the data related to the questions of the study.

The results showed that the experimental group had quite high and significant increases in the mean scores

from pretest to the posttest administrations of both the career knowledge instrument and the self-rating questionnaire whereas the control group increases in mean scores were marginal.

Based on the results obtained from the different evaluation instruments, it was concluded that the experimental program, the career education course, achieved the overall goal of increasing the career knowledge of students.

Finally, recommendations were made for future consideration. Some of them were that career education courses be made available to all high school students and that emphasis be placed on individual counselling as well as on practical, down to earth, "hands on" kinds of career education activities. Recommendations for further research were also made.

#### ACKNOWLEDGEMENTS

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## SECTION I

### PURPOSE OF THE STUDY

The purpose of this study was to implement and evaluate a career education program at the grade eleven level in a rural Newfoundland Regional High School. Implementation was at Elwood Regional High School in Deer Lake, Newfoundland during the school year 1978-79. Students who completed the program successfully were to receive credit towards the Department of Education high school graduation certificate.

### SIGNIFICANCE OF THE STUDY

Grade eleven students in Newfoundland are experiencing difficulty in their transition from school to the world of work and or further education. Approximately one-third leave high school after twelve years of public school and have no career goals; other students graduate with career goals of which they are unsure and still others with inappropriate and unrealistic career plans (Breton and McDonald, 1972).

The Task Force on Education (1979) was cognizant of the difficulty experienced by grade eleven students in arriving at a career decision and recommended that an

integrated career guidance program be taught throughout the Province.

#### REVIEW OF LITERATURE

##### The Need for Career Education Canada - U.S.A.

Choosing a career was not always a complicated task. A hundred years ago the graduation from youth to adulthood, from dependency to responsibilities, followed a fairly simple pattern. Very few people extended their schooling beyond the first few grades and education's chief aim was to impart elementary knowledge and basic skills in the hope that students would become more useful, contributing and productive members of that basically rural society. Vocational preparation was largely a matter of learning by doing, whether acquiring the knowledge and capability to operate a farm under a father's tutelage or through the more formal apprenticeship training required to qualify for the skill crafts (Breton and McDonald, 1967). Work still plays a very important part in the life of most Canadians. It provides the means of subsistence, a way of regulating activities and a supply of persons to associate with as well as a source of personal identity and meaningful experiences (Card, 1968).

Many changes have taken place in Canada over the past one hundred years resulting in a dramatic transformation in the structure and functioning of our society.

... the development of science and technology, accompanied by progressive urbanization and industrialization, has transformed Canada from an essentially agricultural community into a complex, interdependent society. The application of this explosion of knowledge has resulted in an elaborate division of labour and an unprecedented range of occupational specialization. One of the consequences is that contemporary young people are confronted with an almost bewilderingly wide choice of vocational opportunities. (Breton and McDonald, 1967, p. 3.)

Parents, teachers, and students themselves are expressing concern about the occupational future of Canadian young people in this age of accelerated social and economic change.

There is a general consensus in the community that a smooth and efficient transfer of young people between school and work is of crucial importance to Canadian society. This objective is of equal importance whether looked at from the point of view of ensuring opportunities for youth to build constructive and satisfying lives or from the point of view of meeting the requirements of a complex economy for skilled manpower. (Breton and McDonald, 1967, p. 3.)

Society expects our schools to prepare young people for successful entry into the world of work. Evidence which supports this conclusion was obtained in a 1973 Gallup survey of the attitudes of American adults toward the public schools. Gallup education polls are established as a major source of information concerning the status and trends of opinion about significant school questions. The following question showed a "remarkable consensus".

Should public schools give more emphasis to a study of trades, professions and businesses to help students decide on their careers?

Yes, more emphasis	90%
No	7%
No opinion	3%

Dr. Gallup notes that few proposals ever receive such overwhelming approval.

The Gallup poll surveyed adults. However, young people are concerned as well about their career needs. Marland (1974) reported a student survey conducted in late 1973 which clearly indicated that students are very receptive towards receiving help with their career plans. Breton and McDonald (1967) conducted a study on the career decisions of Canadian youth and found that when students visited the school counselor, their job plans were second on the list of the most frequently discussed topics.

Most students experience difficulty in resolving the problem of occupational choice. Faced with the complexity of the situation at a stage in their lives when students should make important career decisions, some ignore the problem so that when they are ready to leave school they are without definite career plans. Shertzer (1971) reviewed a number of studies that reported sizable percentages of seniors (33--35%) with no definite career plans after graduation.

Raymond Breton, in his report, Social and Academic Factors in the Career Decisions of Canadian Youth, discovered that 30% of Canadian high school students had no career goals. He went on to say that failure to express

an occupational preference is not a random phenomenon. Rather, it reflects the difficulties experienced in the vocational decision-making process.

Students receive very little, if any, help with the difficulties involved in making a career decision. The Purdue Opinion Poll (1968) reported that only 21% of their national sample of high school students in the United States believed they were receiving adequate help in vocational decision-making. The education system in Canada gives a student eleven or twelve years of schooling. He is expected to know at the end of the twelfth year what direction his life should take. With 30% of Canadian high school students having no career goals and indications that others have unsatisfactory goals, one can only conclude that students are not getting the kind of preparation they need in order to make an occupational choice. Breton and McDonald (1967) support this conclusion by reporting in their survey of Canadian secondary school pupils that only 50% of the students surveyed felt well enough informed about the different kinds of jobs available to make a wise choice about their future plans.

John Cameron (1971) cited research conducted by the Centre for Research in Careers, Harvard University, which showed that most people spend more time and effort in deciding on the purchase of a car than they do in choosing a career. Cameron felt that students were unaware of what goes into a sound career choice and that most



educational institutions were not giving the future career plans of their students the importance that they deserve. Marland (1974) supported this idea and felt that students' abilities and interests were typically unexamined and that there had been little or no attempt to integrate these abilities and interests with vocational choice and decision-making. Marland (1974) points out that until career education becomes an integral part of the educational system, we will continue to shortchange both our students and our society.

#### Newfoundland Scene

Newfoundland recognized, at least on paper, the importance of students' future career plans as far back as 1959, when one of the aims of public education in Newfoundland was stated as, "to give pupils guidance in the choice of a career and to provide opportunities to begin preparation for occupational life"(p. 4). Evidence to date would seem to indicate that this "aim of public education in Newfoundland" has not received the attention it deserves.

Breton and McDonald (1967) surveyed secondary school students in Newfoundland in both large and small schools situated in rural and urban communities. Their survey showed that 33.7 percent of the boys and 19.7 percent of the girls in grade eleven did not express a preference for any type of work or occupation and that 34.7 percent of the boys and 27 percent of the girls did not know what type

of work they expected to have as a career.

Best et al. (1976), in their report "Career Decisions of Newfoundland Youth", concluded that Newfoundland students in general do not have sufficient information to decide on future post-secondary plans. The report recommended that accurate information on post-secondary fields of study be made available to teachers and students and that more emphasis be placed on informative career counselling.

Evidence to substantiate the claim that Newfoundland students are not receiving adequate preparation in order to make career decisions may be obtained from the Committee of 1973 Enrollment, Memorial University of Newfoundland. They describe the situation at that time.

Many students prematurely discontinue their education and fail to proceed to post-secondary educational institutions because of deprivation . . . lack of motivation and encouragement, lack of communication about educational possibilities, lack of knowledge about course offerings at, and entrance requirements to, post-secondary institutions . . . (p. 188)

The Committee also found that the students had unrealistic perceptions of employment opportunities that existed for graduates from the various programs offered by the post-secondary institutions in Newfoundland. The report recommended that school boards in the province develop effective guidance programs so that high school students would be able to intelligently evaluate the different programs offered by the various post-secondary institutions.

Vickers (1972) who investigated the career aspirations and expectations of grade eleven students in St. John's felt that the schools must accept the responsibility of helping young people to become aware of the future occupational demands so that their aspirations and expectations could be translated in such a way that young people could find a meaningful role in society. One of the conclusions of the investigation was that vocational guidance in the schools should be directed towards assisting students in making realistic career decisions and for those students who plan to terminate their education after grade eleven, there should be a program comprehensive enough to provide students with the skills needed to obtain a job after high school.

The Newfoundland Royal Commission on Education and Youth (1967-68) recommended that guidance be accepted as a vital and integral part of the Newfoundland educational system and that vocational guidance programs be established in Newfoundland.

In December, 1970, the Minister of Education appointed a Task Force on the Integration of Academic and Vocational Education; approximately seven months later an interim report was compiled. This report recommended that seven objectives be added to the 1959 authorized Aims of Public Education in Newfoundland. One of these objectives that was recommended to be included as one of the aims of

9  
the total educational process through grade eleven was as follows:

to provide an introduction to the multiplicity of career opportunities, and promote occupational guidance by helping the student assess his occupational potential, interests, and capabilities. (p. 4)

Despite the numerous recommendations by authors of reports and investigations, vocational guidance and other kinds of career orientated programs are few and far between on the island of Newfoundland. Spain (1976) brings out this point in his evaluation of the prevocational program in Newfoundland:

Unlike the remainder of Canada and the United States, the Province of Newfoundland and Labrador does not have a history of career education-type programmes. Guidance, Industrial Arts, Home Education are all relatively new, and none of them are widespread across the island. In an interview, Mr. Art Van Kestern, Director of Vocational Education, has estimated that approximately 6,000 of a possible 29,000 high school students have access to the Prevocational Programme. Organized career guidance, industrial arts and home economics programmes are similarly limited. (p. 6)

Spain recommended that a number of studies be conducted to investigate alternatives to the Prevocational Program so that the advantages of this kind of program could be given to the 80 percent of students not in the vicinity of a vocational school.

#### The Local Situation

In Deer Lake, like many other communities in the Province, students in their final year tend to be undecided about their future. The economic situation, together with

the cultural background and geographic location of the community frequently leads to a feeling of helplessness. During the 1977-78 school year, of 100 students entering grade eleven, 18 dropped out before the end of the year. While a variety of reasons may be given for this, one which seems important is the feeling of these students that the successful completion of their program will not significantly improve their post-graduation prospects.

Even in the best of economic times, students in Deer Lake are confronted with cultural and geographic factors which tend to limit their perception of the options available to them. It can be plausibly argued that students in many other areas of the Province find these factors even more limiting. People in these areas have traditionally found employment locally in resource-based industry or in occupations designed specifically to service these industries. The sweeping changes in technology and depletion of the resources of the past few years have closed these occupations, and in many areas students quite simply lack career models, exposure and experience which can be taken for granted in larger population centers. Breton and McDonald (1972) established that persons in smaller communities tend to be less likely to set career goals than those in larger centers. He also showed that indecision about careers is more likely in the economically less prosperous provinces, even when socio-economic status is

controlled.

Another factor which appears to be involved is the physical accessibility of post-secondary educational opportunity. The decision to leave home to go to school is a difficult one for many students to make, and requires antecedent knowledge of the programs which are available. The expense seems great and the difficulty of travel, and apprehension about the conditions which will be encountered all combine with the natural desire of the young people to remain in the community, resulting in greater indecision.

#### Theories of Vocational Choice and Career Development

The need for career education to help students realize their full potential and to provide assistance in making appropriate career plans has been well documented. The literature suggests that career education should permeate the entire school system, taking its major form in a developmental, sequentially integrated curriculum from kindergarten to grade twelve (Marland, 1971; Hoyt et al., 1972; Slocum, 1967). Career education provides the means by which schools can concentrate on career development, thereby increasing students' knowledge in the areas of self, world of work, decision-making skills and job search skills. Slocum (1967) suggested the following:

Much of the floundering of young men and women in occupational decision-making is unnecessary. We have the necessary agency - the public school system - and the knowledge - from social and technical

research - to introduce a much greater degree of rationality into occupational choice and preparation. (p. 754)

Considering the complexity and importance of career selection it is necessary to examine a number of theories of vocational choice which attempt to further our understanding of how and why people make vocational choices. Four theories will be explained and discussed.

#### Hoppock's Need Theory of Occupational Choice

Hoppock felt that we may never have enough research evidence to confirm or contradict each of the many theories of occupational choice and career development. He suggests that there may be some truth in all of them. One theory may explain the behavior of some persons, but another theory may be needed to explain the behavior of others. Hoppock proposed a composite theory and drew freely from several different theories of occupational choice and career development.

1. Occupations are chosen to meet needs.
2. The occupation that we choose is the one that we believe will best meet the needs that most concern us.
3. Needs may be intellectually perceived, or they may be only vaguely felt as attractions which draw us in certain directions - in either case, they may influence choices.
4. Vocational development begins when we first become aware that an occupation can help to meet our needs.
5. Vocational development progresses and occupational choice improves as we become better able to anticipate how well a

prospective occupation will meet our needs. Our capacity thus to anticipate depends upon our knowledge of ourselves, our knowledge of occupations, and our ability to think clearly.

6. Information about ourselves affects occupational choice by helping us to recognize what we want and by helping us to anticipate whether or not we will be successful in collecting what the contemplated occupation offers to us.
7. Information about occupations affects occupational choice by helping us to discover the occupations that may meet our needs and by helping us to anticipate how well satisfied we may hope to be in one occupation as compared with another.
8. Job satisfaction depends upon the extent to which the job that we hold meets the needs that we feel it should meet. The degree of satisfaction is determined by the ratio between what we have and what we want.
9. Satisfaction can result from a job which meets our needs today or from a job which promises to meet them in the future.
10. Occupational choice is always subject to change when we believe that a change will better meet our needs.

(pp. 91-92)

Hoppock's postulates focused upon occupational choice as a means for satisfying needs. His theory stems from the assumption that occupational activities are related to basic needs and that occupational choice improves as people are better able to identify their own needs and the potential need satisfaction that may be available from a specific occupation.

Osipow (1973) concludes that the research concerning the needs satisfaction hypothesis of career choice generally substantiates the hypothesis that different kinds of needs satisfaction potential are perceived in occupations. He



goes on to qualify his conclusion, however, by stating that:

the research leans very heavily on paper-and-pencil personality and interest inventories, which introduce some serious limitations in the degree of confidence with which the hypothesis can be viewed. In order truly to function as a theory, relationships between needs and career decisions, behavior, and satisfaction must be identified. (p. 178)

A practitioner who chose to use Hoppock's need theory of occupational choice would emphasize the role of work in satisfying the individual's needs as he/she attempted to help that person to choose a job. There would be an emphasis upon helping the individual know his/her interests, abilities and needs and how occupations can satisfy those needs. Hoppock, more than any other need theorist, has stressed the need to use occupational information to increase the probability that a person would make a satisfactory vocational decision (Zaccaria, 1970).

#### Holland's Theory of Vocational Behavior

Holland (1973) developed a theory of vocational behavior which focused on the personality of the individual and his/her interaction with his particular environment. He summarized his theory into four assumptions:

1. In our culture, most persons can be categorized as one of six types: realistic, investigative, artistic, social, enterprising or conventional. The description of each type is both a summary of what we know about people in a given occupational group and a special way of comprehending this information. It is a theoretical or ideal type. A type is a model against which we can measure the real person.
2. There are six kinds of environments: realistic, investigative, artistic, social, enterprising

and conventional. Each environment is dominated by a given type of personality, and each environment is typified by physical settings posing special problems and stresses. For example, realistic environments are "dominated" by realistic types of people - that is, the largest percentage of the population in the realistic environment resembles the realistic type.

3. People search for environments that will let them exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles. Realistic types seek realistic environments, social types seek social environments and so forth.
4. A person's behavior is determined by an interaction between his personality and the characteristics of his environment. If we know a person's personality pattern and the pattern of his environment, we can, in principle, use our knowledge of personality types and environmental models to forecast some of the outcomes of such a pairing. Such outcomes include choice of vocation, job changes, vocational achievement, personal competence and educational and social behavior.

(pp. 2-5)

In order for someone to have a satisfying career he/she must choose the kind of environment that corresponds with his/her personality pattern, if not, the individual will be dissatisfied with his/her work and will attempt to change his/her job. Holland claims that the adequacy of occupational choice is largely a function of self-knowledge and occupational knowledge. The greater the amount and accuracy of information the individual has about each, the more adequate is his/her choice (Osipow, 1973).

Holland (1973) summarizes the evidence for the usefulness of his theory and its classification scheme; his review includes all relevant information from the period

1959 through 1972. In contrast to the earlier reports on his theory, this review focuses on direct evidence (experimental tests of hypotheses) rather than indirect evidence. The review of the evidence is extensive and typically positive and supports the main hypotheses of the theory:

The types appear to grow up, perceive occupations, search for occupations, move among occupations, and behave according to theoretical expectations. The environmental models appear useful to characterize educational and occupational environments. . . . Finally, the classification receives strong support: (1) It has been extended to all occupations in the D.O.T.; (2) it has substantial long term validity for representative and unrepresentative samples of adolescents and adults; and (3) the hexagonal arrangement of the classification has been found to be a useful model for structuring interest inventories, self-ratings, competencies, and activities. (p. 82)

A similar conclusion was arrived at by Osipow (1973) after a review of the research related to Holland's theory of vocational behavior.

Holland's theory of vocational development views the goal of vocational guidance to be one of matching men/women and jobs. Our methods and techniques may be more comprehensive than in the days of Parsons (1909), the founder of vocational guidance, but the goal is still one of helping people find jobs that they can do well and that are fulfilling. A radical shift in point of view, however, is the belief that it is important to see the processes of vocational decision-making in the context of a person's development. This view has resulted in practitioners getting more involved in activities planned to improve the

quality of a person's decision-making and knowledge of self and the occupational world (Holland, 1973).

#### Ginzberg's Theory of Occupational Choice

Ginzberg (1951) surveyed existing theories of occupational choice, found them inadequate, and then formulated his own theory of occupational choice, which he reviewed and reformulated in 1972. Ginzberg's theory was the first one that was explicitly developmental. Vocational choice was seen as a process which was systematic and predictable, and that "an individual reaches his ultimate decision, not at any single moment in time, but through a series of decisions over a period of many years; the cumulative impact is the determining factor" (p. 107).

Career development proceeds through several stages, from a fantasy period, when career plans are based on preference only, to a reality period, when plans are based on ability, potential, preference, and reality factors.

Many of the educational and occupational decisions that a person makes between childhood and his 25th year have a cumulative effect on his/her occupational prospects; however, it would be wrong to see these decisions as having an irreversible impact on a career. Careers may be redirected in major ways, though there are costs involved (Ginzberg, 1972).

Ginzberg (1972) summarizes his reformulated theory by stating "that occupational choice is a life long process

of decision making in which the individual seeks to find the optimal fit between his career preparation and goals and the realities of the world of work" (p. 172).

Osipow (1973) made a review of the research that was pertinent to Ginzberg's theory of occupational choice. He found that the empirical evidence in support of the theory was mixed.

A thread of data consistent with the major tenets of the theory has been found by several investigators. There does seem to be evidence suggesting that boys emphasize different kinds of experiences in their vocational development at various levels. There also appears to be reason to believe that boys must compromise their career preferences in deference to the reality of the world they observe. The evidence is mixed, however, with respect to specifically what the stages are, when they occur, and the order in which they occur. (p. 98)

A similar conclusion was arrived at by Mihalka (1974).

Osipow (1973) in discussing the implications of Ginzberg's theory for practitioners felt the theory was too vague to suggest specific techniques for practitioners; however, he felt that benefit could be gained from the general notion that experiences should be arranged for young people which would facilitate their progress through the stage they happen to be in. He also felt that the theory might be useful in helping a counselor to anticipate problems that might be encountered by students at different stages of development.

#### Super's Theory of Vocational Development

Donald Super has been one of the most prolific

writers in the area of vocational development theory. His theory of vocational development is perhaps the broadest and most widely accepted of all the theories related to occupational choice (Zaccaria, 1970; Mihalka, 1974; Osipow, 1973).

Super (1973), after surveying the diverse elements of theories of vocational development, organized these elements into a summary statement of a comprehensive theory. Super stated his theory in the following ten propositions:

1. People differ in their abilities, interest, and personalities.
2. They are qualified, by virtue of these characteristics, each for a number of occupations.
3. Each of these occupations requires a characteristic pattern of abilities, interests, and personality traits, with tolerances wide enough, however, to allow both some variety of occupations for each individual and some variety of individuals in each occupation.
4. Vocational preferences and competencies, the situations in which people live and work, and hence their self concepts, change with time and experience (although self concepts are generally fairly stable from late adolescence until late maturity), making choice and adjustment a continuous process.
5. This process may be summed up in a series of life stages characterized as those of growth, exploration, establishment, maintenance, and decline, and these stages may in turn be sub-divided into (a) the fantasy, tentative, and realistic phases of the exploratory stage, and (b) the trial and stable phases of the establishment stage.
6. The nature of the career pattern (that is, the occupational level attained and the sequence, frequency, and duration of trial and stable jobs) is determined by the individual's parental socio-economic level, mental ability, and personality characteristics, and by the opportunities to which he is exposed.

7. Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing and in the development of the self concept.
8. The process of vocational development is essentially that of developing and implementing a self concept: it is a compromise process in which the self concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows.
9. The process of compromise between individual and social factors, between self concept and reality, is one of role playing, whether the role is played in fantasy, in the counseling interview, or in real life activities such as school classes, clubs, part-time work, and entry jobs.
10. Work satisfactions and life satisfactions depend upon the extent to which the individual finds adequate outlets for his abilities, interests, personality traits, and values; they depend upon his establishment in a type of work, a work situation, and a way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate. (p. 190)

Super specified further the process of vocational development by extending his analysis of life stages with reference to vocational behavior. The Exploration Stage was of particular importance to this author in his work with school students. Super (1957) outlines the characteristics of this vocational life stage:

2. Exploration Stage (Age 15-24). Self-examination role tryouts, and occupational exploration take place in school, leisure activities, and part-time work. Substages of the exploration stage are:

- A. Tentative (15-17). Needs, interests,

capacities, values and opportunities are all considered. Tentative choices are made and tried out in fantasy, discussion, courses, work, etc.

- B. Transition (18-21). Reality considerations are given more weight as the youth enters labor market or professional training and attempts to implement a self-concept.
- C. Trial (22-24). A seemingly appropriate field having been located, a beginning job in it is found and is tried out as a life work. (p. 146)

During the tentative phase (15-17) of the Exploratory Stage of vocational development, an individual is faced with the task of crystallizing a vocational preference which requires an individual to formulate ideas about himself/herself in relation to occupations.

The attitudes and behaviors relevant to the crystallization stage identified by Super (1963) are as follows:

- a - awareness of the need to crystallize
- b - use of resources
- c - awareness of factors to consider
- d - awareness of contingencies which may affect goals
- e - differentiation of interests and values
- f - awareness of present-future relationships
- g - formulation of a generalized preference
- h - consistency of preference
- i - possession of information concerning the preferred occupation
- j - planning for the preferred occupation
- k - wisdom of the vocational preference. (p. 84)

While the crystallization task can occur at any age, as can all the vocational developmental tasks, it most typically occurs during the 14- to 18-year age range. During each of the phases of vocational development, certain behaviors are



more apt to result in growth than others.

Super's theory of vocational behavior implies some guidelines for the practice of counselling. A counselor operating within this framework would attempt to appraise the life stage of his/her client in order to determine relevant counselling goals. He/she would also try to help his/her client to clarify his/her self-concept, and within the context of his/her life stage, expose him/her to events which would permit him/her to move toward the implementation of that concept; exposure to such relevant vocational events is likely to be most effective in shaping the self-concept during early adolescence, since the concept grows more stable during later adolescence and maturity. Counselors are in a very influential position considering their access to young people during the years of greatest development of the self-concept. Counselors must concentrate on the students' understanding of the relevant factors in vocational choice and try to develop an understanding of the occupational field which most interests the student (Osipow, 1973).

Two basic career education principles that are emphasized, on a continuous basis throughout the entire curriculum, are that students need exposure to opportunities that would enable them to explore their self-concepts as well as the world of work. These basic elements of career education are also stressed in Super's theory of career

development and vocational maturation. Career education allows students to gather information on themselves and their educational-vocational world so that they are able to make sound decisions based on accurate information (Osipow, 1973).

Super's theory is the most widely accepted of the contemporary theories of vocational development. It has been systematically derived through the integration of the relevant aspects of existing theories and the unique additional contributions of Super and his associates. Although his theory has been supplemented by research in the form of independent study by isolated investigators, the major continuing vehicle for research has been the twenty-year longitudinal Career Pattern Study (Zaccaria, 1970).

Osipow (1973) after an extensive review of the research related to Super's theory made an evaluation of the theory and concluded:

The research and data relevant to the concept of vocational development seem to indicate a steady and reasonably predictable increase in both the amount of attention and the sophistication of that attention given to vocational choice tasks through the adolescent years. The attention culminates, for well-oriented people, in commitment to a position which is then carried on throughout life, though in varying degrees . . .

Most of the findings of research support the idea that occupational choice represents the implementation of the self-concept. The results of the research provide an impressive amount of empirical support for the general aspects of the theory proposed by Super.

(p. 163)

The theories described in this section are attempts

to find some rational explanation and some basis for understanding what happens when a person chooses an occupation. All of them are based upon some evidence and all of them will require much more evidence before any one of them can be regarded as established.

The theories outlined have their similarities and most of the differences lie in their choice of emphasis. A basic belief shared by all theories is that the choice of a career is one of the most profound decisions in a person's life and the process of arriving at a career choice is one which is affected by a multitude of social, economic and psychological factors interacting in different ways to bring about the resultant decision.

From this author's review of the literature, it is apparent that all the proponents of the different theories agree that individuals need assistance in career decision-making, agree that individuals must be aware of their interests, abilities, values, and limitations and agree that accurate knowledge of the varied aspects of the world of work is vital in making a career decision; where they differ is on their choice of emphasis.

#### Effectiveness of Career Education Programs

Trying to determine the effectiveness of career education is a difficult task because career education is not a singular process leading to a singular result. The term, career education, refers to a wide range of group

activities, processes, and interventions, occurring at different educational levels and in different settings concerned with producing a large and diverse number of possible outcomes. Sometimes it may be even difficult to distinguish career education from other aspects of an on-going educational program (Heir, 1977).

Over a four year period, Ruff (1977) conducted a number of controlled evaluation studies in both rural and urban areas to obtain information related to career education goals in Arizona. These studies involved students in grades three to twelve, who had high exposure to career education activities. For comparison purposes, students who had limited career education exposure were also studied. The results of these studies indicated that career education had significantly increased the student's knowledge in the areas of occupational, and educational opportunities, understanding of the skills and abilities required for success in business and industry, and the economic rewards and life-style advantages and disadvantages of different occupations.

In addition to improving students' knowledge in the above mentioned areas Ruff (1977) also reported that the data from his studies indicated that career education had a significant effect on increasing students' confidence that their career plans were achievable.

Ryan (1976) reports on a comprehensive career

education project conducted in the state of Maine; part of this project consisted of demonstrations of career education concepts, philosophy and practices to public school teachers of grades K-12. A question examined was whether or not teachers who adapt career education concepts and practices make a difference in the lives of their students. The evidence obtained was mixed but a number of positive observations were made:

1. Students in career education infused classes demonstrated greater self-awareness than the control subjects. In 65% of the classes the experimental subjects (2,665) made greater self-concept gains than the control subjects.
  2. Students in career education infused classes scored higher than students in the control classes on tests designed to measure career attitude, career knowledge, career awareness and career planning.
  3. Students in career education infused classes scored higher (although not significantly) than students in the control classes on the Survey of School Attitudes which is designed to measure attitude toward reading, mathematics, social studies, and science in the elementary school curriculum.
- Herr (1977) reported on the implementation of a

multi-component career education program conducted in Concord, New Hampshire. Areas of emphasis were values clarification, self-awareness, and occupational awareness achieved through infusion, field trips, affective and decision-making kits. Evaluation was done by a questionnaire to teachers. From a staff of 400, 78 (20 percent) completed the questionnaire with the following results:

- 75% agreed that career education would help in the all around education of students
- 82% agreed that students needed career education
- 68% agreed that the career education program was extremely effective.

Cutler (1977) developed, implemented, and evaluated a career awareness program at the Sir W. Grenfell Junior College in Corner Brook, Newfoundland. Eleven college students participated in the program which was conducted for ten consecutive weeks with one two-hour class per week. The primary finding was that the career education program resulted in significant improvement in attitudes toward the world of work and increased career awareness of the important components of informed career choice.

McCarthy (1976) developed, implemented and evaluated a career education program as an alternative to a pre-vocational program for the attainment of a career educative objective - "to give students insight into various occupations and into their own abilities so that they will be able to make a wise choice on their future career" (p. 2). The career education program was carried out with a group of

students in grade nine, and consisted of a variety of activities designed to give students insight into occupational opportunities and into their own interests and abilities.' The total time involvement per student was from 17 to 20 hours.

The results of the study showed that there was a significant increase in the mean scores from the pretest to the posttest administration of the career knowledge instrument. The posttest scores were also significantly higher than the posttest scores of a program designed to achieve the same goals through vocational experiences.

Bonnett (1977) developed a synthesis of evaluation results of forty-five federally funded K-12 career education programs in the U.S. This report was organized around the different learner outcome goals for career education released by the U.S. Office of Education. The report concluded that as a result of career education programs, career decision-making skills were strengthened with great consistency. Students were being equipped with a degree of self-understanding and understanding of education-vocational opportunities for making sound career decisions.

Herr (1977) in reviewing, analyzing and synthesizing the research on career education concludes that:

Even though few studies of career education meet experimental standards of rigor, there are a large number of studies which describe career education's impact as a positive one. Indeed, experimental rigor aside, the weight of evidence does favor career education. Given the fact that the bulk of these

studies occur under natural conditions and are conducted by relatively untrained evaluators, the results may be more impressive than is generally acknowledged. (p. 71).

## CREATING A CAREER

### Course Content

"Creating a Career" is a curriculum-based vocational guidance program designed and produced by the Training Research and Development Station of the Department of Manpower and Immigration. As a pre-requisite to the development of this program, theoretical and research literature was reviewed, identifying three factors that hinder vocational decision-making. They were: (1) lack of self-knowledge; (2) lack of knowledge of the world of work; and (3) lack of decision-making skills. "Creating a Career" addresses itself to these areas as well as the application of appropriate skills in obtaining employment (Davison, 1976).

The main objectives of "Creating a Career" are consistent with the activities that are suggested by Super for students who are at the Crystallization Stage of their vocational development; this is additional evidence to support the claim that the "Creating a Career" program is founded on a sound theoretical basis.

"Creating a Career" consists of two major sections - Career Planning and Job Search. The Career Planning section is designed to help high school students explore and evaluate



his/her own capabilities and to develop an awareness of his/her own abilities, interests, aptitudes and temperament and to relate these personal qualities to what is required in an occupation. Davison and Tippet, authors of the program, say that the purpose of this section is "to help young people explore who they are, where they are, what the opportunities are, and what is facing them in the future. It is also designed to help them develop the skills required to act upon their knowledge. Without these skills, everything is left up to chance" (Davison, 1976).

The Job Search Section of "Creating a Career" provides training in specific job search skills; it is "designed to encourage young people to choose their work instead of being chosen by it" (Davison, 1976).

#### Why "Creating a Career"

From the review of the literature related to occupational choice and career development, it became clear that the different theories of career development had a number of similarities and that the main difference in these theories was in their choice of emphasis. This author concluded that the different theorists agreed that:

1. Students need help in making their career decisions.
2. Students need to be aware of themselves, their interests, abilities, values, and limitations.
3. Students need to have accurate knowledge of the varied aspects of the world of work.

"Creating a Career" was specifically designed by its authors

to help high school students in the areas of self-knowledge, career knowledge, decision-making skills and job search skills. This program thus has a sound theoretical basis.

The objectives and scope of "Creating a Career" are similar to most career education programs. The strength of this program is in that it was developed in Canada for Canadian high school students and may readily be related to the not inconsiderable resources available through Canada Employment Centers. The program is well supported by teaching guides, student workbooks and texts; it can be implemented at a very reasonable cost in any size community. The claim is also made that teachers, relatively untrained in career education and guidance techniques, can successfully operate the program.

#### Specific Objectives of the Study

This study was undertaken to evaluate the career education program described in this thesis, aimed at fulfilling the following objectives.

1. Self. To identify and develop students' awareness of their values, interests, abilities and limitations in relation to the world of work.
2. World of Work. To provide students with an opportunity to increase their knowledge of work and to explore careers which are of interest to them.
3. Decision-Making. To help students formulate realistic career goals by providing a framework in which

decision-making skills may be taught and applied in the context of career education.

4. Job Search. To develop skills which students can apply to seeking and getting a job.

#### SURVEY OF OPINION CONCERNING STUDENTS AND CAREER PLANNING

In an attempt to gather information on how various groups viewed career planning and to provide the instructor with a focus necessary for the evaluation of the career education program, a survey of opinion was conducted in June, 1978 on four groups who would be involved in the implementation of "Creating a Career" at Elwood High School, Deer Lake.

1. A group of 116 grade ten students
2. A group of 89 grade eleven students
3. A group of 64 parents of grade ten students
4. A group of 17 teachers.

The survey of opinion concentrated on the four general objectives of the career education program as well as fifteen specific objectives as stated in the two workbooks which accompany the texts that make up the career education program. The questionnaire used in the survey appears in Appendix I.

The results of this survey, Table 1, showed that when individuals were asked to rank the four general objectives of the career education program, all four groups

ranked the objectives in the same order. All groups felt that the most important objective was for students to be able to know themselves, their own values, interests, talents, abilities and limitations when it comes to the world of work.

Table 1  
Median Ranking of General Objectives

Groups	Self-Knowledge Objective	Knowledge of work Objective	Decision-Making Objective	Job Search Objective
Grade X Students	1.71	2.33	2.86	3.26
Grade XI Students	1.71	2.52	2.70	3.20
Parents	1.62	2.17	2.64	3.92
Teachers	1.58	2.33	2.94	3.12
Mean Rankings	1.65	2.34	2.78	3.37

The next objective considered most important by all groups was that students needed to be given opportunity to increase their knowledge of the world of work and to explore careers which were of interest to them.

The objective ranked third by all groups was that students needed to be taught how to make a good decision about the kind of work they would like to do. The objective considered to be least important of the four was that students needed to know how to go about looking for

work and how to apply for job openings once they were located.

The results of the survey suggest that most people felt that students should get to know themselves first, then find out about the different careers available to them followed by learning how to make a good decision about the kind of work they wanted to do and then to learn how to go about looking for work.

The second part of the survey questionnaire, Appendix I, asked individuals to rank fifteen specific objectives concerning students and career planning. The specific objectives were ranked based on their median values and the results appear in Table 2.

The specific objective that ranked the highest was that students needed to be able to set realistic goals for themselves and should be able to make plans to achieve them. The next objective seen as being most important was that students needed to know what their abilities were in planning for their future career and should be aware of all the different factors which have an effect on making a career decision.

Each general objective had a number of specific objectives that corresponded to it. Self-knowledge objective corresponded with specific objectives A, F and N; knowledge of work objective corresponded with specific objectives I, J, and K; decision-making objective

Table 2  
Median Ranking of Specific Objectives

Specific Objectives	Grade X Students	Grade XI Students	Parents	Teachers	Total Group Mean	Ranking
B	1.88	1.94	1.87	1.68	1.84	1
L	2.14	2.04	2.58	1.857	2.15	2
G	2.42	2.41	2.46	1.86	2.29	3
C	2.22	1.86	2.62	2.57	2.32	4
O	2.30	2.52	2.50	2.56	2.47	5
I	2.83	2.86	2.85	2.08	2.65	6
K	3.15	3.17	2.96	3.29	3.14	7
M	3.11	3.2449	3.18	3.08	3.15	8
H	3.31	3.2444	3.12	3.20	3.22	9
F	3.34	3.39	3.24	3.43	3.35	10
N	3.72	3.41	3.73	3.22	3.52	11
A	3.50	3.27	4.04	3.42	3.56	12
D	3.47	3.72	3.55	3.92	3.66	13
J	3.43	3.79	3.06	4.42	3.67	14
E	3.50	3.78	3.54	3.92	3.68	15

corresponded with specific objectives C, H, M, and O and the job search objective corresponded with specific objectives B, D, E, G, and L.

The results (Table 3) indicate that when the mean of the rankings of the specific objectives that corresponded to the general objectives was calculated, individuals continued to rank the general objective of job search as fourth and the general objective of decision-making as third, however, the general objective of knowledge of work was ranked first whereas the self-knowledge objective ranked second.

Table 3  
Rankings of General Objectives Based  
on the Mean of the Rankings  
of Specific Objectives

Groups	Knowledge of work Objective	Self- Knowledge Objective	Decision- Making Objective	Job Search Objective
Grade X Students	5.75	6.80	8.33	12.67
Grade XI Students	5.75	7.20	9.33	11.0
Parents	6.75	6.40	7.0	13.83
Teachers	6.50	6.60	9.67	10.67
Mean Rankings	6.10	6.84	8.58	11.92

The results of this survey of opinion concerning-

students and career planning provided the instructor with an indication of how these four groups viewed some of the different objectives that made up the career education course as well as helped in providing the instructor with an overall perspective for the evaluation of the program in addition to providing direction as to what areas might be emphasized throughout the implementation of "Creating a Career".

#### LIMITATIONS

There are a number of factors that must be considered when generalizing the results of this study to Newfoundland as a whole:

1. The career education program was conducted in a rural community.
2. The career education program was conducted with a relatively small group of students.
3. Students who participated in the career education program were all "academic students".



## SECTION II

### METHODOLOGY

The purpose of this section is to describe the procedures which were followed in the study.

#### GENERAL DESIGN OF THE PROJECT

In May 1978, a written proposal for a career education program at the grade eleven level for credit was presented to the administration and all department heads at Elwood High School, Deer Lake, Newfoundland. After receiving support from the school level, the proposal was then presented to the Superintendent and the Deer Lake Integrated School Board for their approval. Once their approval was given, application was made to the Department of Education to have "Creating a Career" as an alternative course at the grade eleven level. Upon receiving approval from the Department of Education, students in the academic grade ten classes Elwood High School were informed about the course and its objectives as well as where it would fit into the school timetable. In September, grade eleven students chose one of Chemistry, Economics or Career Planning and Job Search Techniques. Those choosing Career Planning and Job Search Techniques

comprised the experimental group for this study.

A meeting was held during the first week of school for the parents of those students who had chosen to take the new course. This was an orientation session for parents as well as an opportunity for them to voice any concerns that they might have had concerning the course.

A Career Knowledge Questionnaire (Appendix II) and the Student Questionnaire - Self-Rating (Appendix III) were administered to the experimental group and a control group from another high school in the area.

In April 1979, some of the questions that made up the career knowledge instrument were given to grade eleven students at Elwood as part of their mid-year examination. The remaining questions that made up the career knowledge instrument were included on their final examination in June. These two administrations made up the posttest. In June 1979, the career knowledge instrument was administered as a posttest to grade eleven students at another high school in Deer Lake who served as the control group in this study. Both the control and experimental group were given the complete Student Questionnaire - Self-Ratings in June of 1979.

#### EVALUATION PROCEDURES

##### Curriculum Plan

The four main objectives of the program were

evaluated in terms of the learner outcomes of the "Creating a Career" program. A number of specific learner outcomes were related to each main objective (Appendix IV). Students had to achieve well in the specific areas in order to demonstrate that the main objectives were accomplished.

Before the program began, the following information was determined for each learner outcome.

Content Area - the section of "Creating a Career" that was intended to achieve a particular learner outcome.

Process - the steps involved in achieving the learner outcome.

Evaluation Procedure - the procedure used to evaluate a particular outcome; that is, to determine if "Creating a Career" was effective for attaining the outcome. Appendix V outlines this information which provided the basis for the development of evaluation instruments.

#### Evaluation of Program Processes

In addition to learner outcomes it was desired to evaluate the program processes to determine if the conduct of the program could be improved. Several different types of information were obtained.

Instructor Anecdotal Records. Anecdotal records kept throughout the course gave the instructor's immediate impressions of student reaction to various aspects of their course, problems or difficulties which arose, and the

reaction of the staff of the school to the program.

Student Evaluation. On three occasions during the year, students completed a Program Evaluation Questionnaire (see Appendix VI). Students were asked to rate several aspects of the course, including their interest, level of improvement, and the teacher. They were asked to indicate their likes and dislikes and make suggestions for improvement.

Program Diary. A diary was completed approximately five times each month by the instructor describing exactly what took place during the class periods. The purpose of the class and methods were described. This differed from the anecdotal records in that a specific format (Appendix VII) was used. Thus the instructor made a periodic rating of the conduct of the course, the adequacy of "Creating a Career", student attitude and student interest.

Student End of Course Evaluation. At the end of the school year, students completed the Course Evaluation Questionnaire (Appendix VIII). They reflected on the entire course and assessed the benefits, and gave their impression of the overall effectiveness of the various program elements.

#### Evaluation of Learner Outcomes

Two instruments were developed to measure learner

outcomes; the Career Knowledge Questionnaire (Appendix II) and the Student Questionnaire - Self-Rating (Appendix III).

Student Questionnaire - Self-Rating. This questionnaire was designed to measure the perception that students had of their knowledge of the four main objectives of the program. This author found the evaluation project of Harvey (1975) useful in drafting this questionnaire.

Part I of this questionnaire consists of six questions which were derived from the four main objectives of this study. Students rated themselves on how well-informed they were on the four overall objectives. Questionnaire items numbered one (1) and two (2) related to major objective four (4) - job search; questionnaire item numbered three (3) related to major objective three (3) - decision-making; questionnaire items numbered four (4) and five (5) related to major objective two (2) - career knowledge; and questionnaire item six (6) related to major objective one (1) - self-knowledge.

The remaining eighteen (18) items (Part II of the questionnaire) were also related to the four major objectives but were more specific in nature and were devised from fifteen (15) learner outcomes taken from the list which appears in Appendix IV. These learner outcomes related to the four main objectives in the following way - five (5) learner outcomes (5 questionnaire items) were

related to self-knowledge; five (5) learner outcomes (6 questionnaire items) were related to career knowledge; three (3) learner outcomes (4 questionnaire items) were related to decision making; and two (2) learner outcomes (3 questionnaire items) were related to job search.

( Scoring of the Student Questionnaire-- Self-Ratings.

The first twenty items on this questionnaire had the same five possible responses to a question. If a student rated himself on a given question as being "very well informed" then he got the highest rating of 1 point, being "well informed" he got two points, being "informed" he received three points, "poorly informed" four points, and the lowest self-rating, "very poorly informed", received five points. The higher the self-rating the lower the points that were assigned and vice versa. The remaining items were scored in a similar fashion except for item #24 in which case no points were assigned.

Career Knowledge Questionnaire. Two measures,

The Career Maturity Inventory (Crites, 1973), and the ACT Assessment of Career Development (Prediger, 1973) were considered for the assessment of learner outcomes in this study before it was decided to develop an instrument locally. While each instrument has been reviewed favorably, and would measure many of the "Creating a Career" outcomes, each required over two hours for its administration. This

was unacceptable due to the demands made on the time of graduating students, particularly as a final examination was also required in the course. It was decided, finally, to develop an examination based on the specific objectives of "Creating a Career" which would serve as both course evaluation and final examination.

There are one hundred and eighteen (118) specific objectives or learner outcomes that were listed for the "Creating a Career" program that were related to the four main objectives of this study. From this total, fifty-three (53) learner outcomes were chosen (Appendix IV) as a measure of the effectiveness of the program.

From the list of fifty-three (53) learner outcomes this author chose eighteen (18) learner outcomes from which he devised the thirty-two questions that comprised the Career Knowledge Questionnaire (Appendix II): The eighteen (18) learner outcomes selected to be included on the questionnaire related to the four main objectives in the following way as shown in Table 4.

Scoring of the Career Knowledge Questionnaire. In the development of the Career Knowledge Questionnaire, desirable correct responses were formulated for the questions. A scoring key was then designed by using all correct responses to all items as a basis. The scoring key designed for this study can be found in Appendix IX.

Table 4  
Relationship of Learner Outcomes to Items  
on the Career Knowledge Questionnaire

Main Objective	*Learner Outcomes	Career Knowledge Item Number
1. Knowledge of self	1-11	1
	1-16	20
	1- 4	28
	1-16	21
	1-16	22
	1-19	3
2. Knowledge of the World of Work	2- 2	4
	2- 3	6
	2- 7	5
	2-12	8
	2- 1	26
	2-13	27
3. Decision-making	3- 1	7
	3- 4	10
	3- 4	11
	3- 4	12
	3- 4	13
	3- 4	14
	3- 4	15
	3- 4	16
	3- 4	18
	3- 4	19
	3- 7	17
	3- 5	9
4. Job Search	4- 4	23
	4- 4	24
	4- 4	25
	4- 2	29
	4-11	30
	4-11	31
	4-11	32

\* Refer to Appendix IV for complete description of outcome.



A maximum score was found for each of the four subscales as well as for the total instrument.

#### Sample

The sample consisted of two groups of grade eleven students. The control group consisted of seventeen (17) students who attended another high school in Deer Lake and the experimental group was made up of eleven (11) students attending Elwood High School in Deer Lake who chose to do "Career Planning and Job Search Techniques" as part of their grade eleven program of studies.

Description of Deer Lake. Deer Lake is a small rural community of approximately 5,000 people situated on the west coast of Newfoundland forty-five kilometres from the city of Corner Brook. The main industry in the area is paper making with a good percentage of residents being employed either directly or indirectly with the Bowater Paper Company.

Control High School. The high school which supplied the control group for this study had approximately 325 students in grades seven, eight, nine, ten and eleven. It had a staff of fourteen teachers. There were two classes of grade eleven students with approximately fifteen students in each class. Both classes followed the same program of studies with the exception of seven students who were

required to do the Basic Mathematics course. Those students who were doing the Basic Mathematics course were not included in this study. The students who did the Matriculation Mathematics and who will be referred to as "academic" students were used in the study. Although twenty-four academic grade eleven students completed the career knowledge instrument in September, only the seventeen grade eleven students who completed both the pretest and posttest career knowledge instrument will be used for comparative purposes.

The control high school did not have the services of a guidance counselor but did attempt through the school administration and the efforts of individual teachers to help students adjust to the world of work and/or some post-secondary educational institutions. Some of the career guidance services offered to these students were participation in a Career's Day, availability of career information, presentations by people from post-secondary educational institutions and registration by Canada Manpower officials for summer employment and tours of various educational institutions.

Elwood Regional High School. Elwood High School is operated by the Deer Lake Integrated School Board and had approximately 370 students in grades nine, ten and eleven. It had a staff of 18 teachers. There were four classes of

grade eleven students. Two of these classes did the Basic Mathematics and were not offered the career education program. The remaining two classes did the Matriculation Mathematics and were considered "academic" students. These students had a choice between three subjects; they could take Chemistry, Economics or Career Planning and Job Search Techniques. Thirteen students chose Career Planning and Job Search Techniques; during the first month of school two of these students decided to discontinue their education. The eleven students who remained for the entire school year are the ones used in this study as the experimental group. These students met for approximately thirty-five minutes per day on five days of the six day cycle.

### Analysis

Career Knowledge Questionnaire. The analysis of the Career Knowledge Questionnaire provided information on the attainment of the four major goals of the program. Several statistical questions were of importance. First, the logic of the design suggested that the students from Elwood High School and the control school would have relatively similar scores on the pretest. This was tested with an F-test. The gains of the two schools over the year were then compared, again using an F-test. A comparison of the mean posttest score in Elwood High School with the maximum score was of some interest, but a valid F-test could not be done because of the obvious violation of the

normality requirement. A subjective comparison was therefore made.

Main objective scores were found by summing the scores of all questions relating to the four main questions. A total score was found by summing the four main objective scores. Questions were thus weighted in the total score in relation to their maximum possible scores.

Student Questionnaire - Self-Rating. The self-rating questionnaire was analyzed in a manner similar to the Career Knowledge Questionnaire. The various items were first considered separately, comparing the pretest scores and change scores by means of an F-test. Questions relating to the four main objectives were summed and analyzed in a similar fashion.

### SECTION III

#### ANALYSIS OF DATA

##### DEMONSTRABLE LEARNER OUTCOMES

Students who participated in the career education course were evaluated on the various learner outcomes that are outlined in Appendix IV. All students were successful in meeting these minimum requirements at some point throughout the duration of the course. Most students were successful on their first attempt, however, some students required a second evaluation before meeting the requirement.

##### CAREER KNOWLEDGE QUESTIONNAIRE

In this section the results of the Career Knowledge Questionnaire will be examined in relationship to the four main objectives of the program and the specific sub-objectives that relate to each.

##### Self-awareness

The first objective of the program had to do with increasing the self-knowledge of the students. Four of the specific objectives were related to this major aim, with six questions on the questionnaire devoted to their evaluation. The results of both the pre and posttesting are shown in Table 5. The specific objective associated with

TABLE 5  
CAREER KNOWLEDGE OUTCOMES FOR OBJECTIVE ONE

Specific Objective	Question	Max. Score	Statistic	Pre Test		Post Test		Gain	
				Elwood	Control	Elwood	Control	Elwood	Control
1 - 11	1. ... give an example of a realistic goal that you would like to achieve in the future that you would go about doing it.	4	MEAN	1.27	1.41	3.44	1.37	2.36	-0.06
			S.D.	0.67	0.61	0.67	0.60	0.67	0.64
			F	11	0.53	11	16	11	16
1 - 16	20. ... What are some other aptitudes that may be required in different occupations?	10	MEAN	0.18	0.27	0.91	0.94	0.73	0.67
			S.D.	0.40	0.62	1.58	0.85	1.42	0.91
			F	15	16	11	16	11	15
1 - 4	28. What are the different ways that you could gather information on yourself to be used in making a career decision?	3	MEAN	0.27	0.25	2.64	0.71	2.36	0.44
			S.D.	0.47	0.58	0.92	0.69	0.92	0.81
			F	11	16	11	17	11	16
1 - 16	31. List as many of your aptitudes or abilities as you can.	5	MEAN	0.54	1.19	4.73	1.62	4.38	0.47
			S.D.	0.69	1.38	0.47	1.67	0.75	1.06
			F	11	2.03	11	16	11	16
1 - 16	22. Give examples of jobs that are related to your abilities and interests.	5	MEAN	1.82	2.19	4.54	2.53	2.73	0.31
			S.D.	1.16	1.18	0.82	1.55	1.06	1.16
			F	11	16	11	17	11	16
1 - 19	3. If you have career plans, please state why you feel they are the right ones for you.	4	MEAN	0.54	1.00	2.54	1.06	2.00	0.06
			S.D.	0.52	0.35	0.93	0.75	1.18	0.83
			F	11	17	11	17	11	17

\* significant at the .05 level.

each question is referred to in column one, and may be found in Appendix IV. Also shown is the maximum possible score on the question.

There were no significant differences between the schools on five of the six questions on the pretest. On question (3), the students from the control school scored significantly higher than those in Elwood. As can be seen by inspection, the average pretest scores were extremely low compared to the maximum possible score.

Students from Elwood gained significantly more on all items than did the students from the control school and, as can be seen, the average scores, with the exception of question three (3), were quite high, close to the maximum. By inspection, it can be seen that the gains in the control school were marginal.

#### World of Work

The second major objective related to student knowledge of the world of work. The results of the analysis are shown in Table 6. Six sub-objectives, and six questions were devoted to this major objective. The pretest differences were not significant on all questions. Elwood students gained significantly more than the students from the control school; the average scores again were quite high and close to the maximum with the exception of question six (6). The gains in the control school tended to be very small.

TABLE 6

CAREER KNOWLEDGE OUTCOMES FOR OBJECTIVE TWO

Specific objective	Question	Max. Score	Statistic	Pre Test		Post Test		Gain	
				Elwood	Control	Elwood	Control	Elwood	Control
2 - 2	4. List the different jobs that you feel may be available for you upon completion of your schooling.	5	MEAN	1.37	2.06	4.09	1.82	2.82	-0.23
			S.D.	1.74	1.22	0.94	1.51	1.78	2.11
			N	11	17	11	17	11	17
2 - 3	6. ... tell all you can about available for you upon completion of your schooling.	38	MEAN	0.27	1.47	22.09	2.40	24.70	1.87
			S.D.	0.43	0.89	1.11	1.15	1.10	1.15
			N	11	17	11	15	11	15
2 - 7	5. List the different kinds of information that you need to know when seeking the kind of job you would like to do.	20	MEAN	1.99	1.51	19.00	3.28	17.00	1.88
			S.D.	2.00	1.10	2.00	1.62	2.93	1.83
			N	11	17	11	17	11	17
3 - 12	8. Explain the difference between a job, a career and an occupation.	3	MEAN	0.0	0.66	2.91	0.00	2.91	-0.06
			S.D.	0.0	0.24	0.30	0.50	0.30	0.24
			N	11	17	11	17	11	17
2 - 1	17. What are some of the different reasons why people work?	7	MEAN	0.0	0.12	5.23	1.17	4.64	0.37
			S.D.	0.0	0.10	1.23	0.42	1.44	0.81
			N	11	16	11	17	11	16
2 - 13	27. What factors contribute to worker satisfaction?	5	MEAN	0.36	0.62	4.45	1.87	4.09	1.13
			S.D.	0.57	0.81	0.82	1.02	1.22	1.30
			N	11	16	11	16	11	15

\* significant at the .05 level



### Decision-Making

The third major objective of the program dealt with increasing the decision-making skills of the student. The results of the analysis are shown in Table 7. Four of the specific objectives were related to this major aim, with twelve questions on the questionnaire devoted to their evaluation. There were no significant differences between the schools on all twelve questions on the pretest.

Elwood students gained significantly more than the students from the control school on ten of the twelve posttest questions. Questions fourteen (14) and eighteen (18) showed no significant gains. Elwood's mean posttest scores tended to be lower than the maximum possible scores. The gains in the control school tended to be very small.

#### Career Knowledge Question Two. Question two (2)

on the Career Knowledge Questionnaire reads as follows:

2. What do you plan to do after completing high school?

Four plans were indicated and the student had to choose one. This question was not assigned a point value; the author felt that question two (2) was different from the other knowledge questions in that it was more an indicator of action and one couldn't assess on what basis these decisions were made. The results of this question appear in Table 8.

TABLE 7  
CAREER KNOWLEDGE OUTCOMES FOR OBJECTIVE THREE.

Specific Objective	Question	Max. Score	Statistic	Pre Test Elementary	Post Test Elementary	Elementary Control	Elementary Gain
3 - 1	7. What steps are involved in making a good decision about the type of career you like to do upon completing your schooling?	5	MEAN S.D. N	0.27 0.47 11	0.65 0.70 2.42	4.36 0.92 11	1.23 0.75 *26.53
3 - 4	10. Name the different degree programs available at N.U.N.Y.	11	MEAN S.D. N	0.18 0.11 11	0.82 1.17 1.49	9.09 3.15 *30.01	2.23 2.27 *31.79
3 - 4	11. What are the educational requirements a person must have before he can be accepted to N.U.N.Y.	1	MEAN S.D. N	0.16 0.50 11	0.35 0.49 0.003	0.91 0.30 11	0.41 0.51 *8.54
3 - 4	12. At least how many years must a person study at N.U.N. before he obtains a degree?	1	MEAN S.D. N	0.27 0.47 11	0.12 0.33 1.06	0.91 0.30 11	0.29 0.47 *14.80
3 - 4	13. Name the technology courses offered at the College of St. John's?	9	MEAN S.D. N	0.09 0.30 11	0.18 0.39 0.003	2.82 2.92 11	0.50 0.73 *15.07
3 - 4	14. At least how many years must a person study a technology course at the College of Trades & Technology in St. John's?	1	MEAN S.D. N	0.09 0.06 11	0.32 0.24 0.10	0.54 0.52 11	0.29 0.49 1.53
3 - 4	15. Name the trade courses offered at the District Vocational School in Corner Brook?	20	MEAN S.D. N	2.18 2.22 11	3.23 2.55 1.60	8.87 4.87 11	5.55 2.78 *4.85

\* Significant at the .05 level

Table 7 (Continued)

Specific objective	Question	Max. Score	Statistic	Pre Test		Post Test		Gain	
				Blood	Control	Blood	Control	Blood	Control
3 - 4	16. For three of the trades you named in #15 above state the length of time a person must train in order to become a qualified tradesman?	3	MEAN	0.14	0.18	1.31	0.31	1.26	0.12
			S.D.	0.12	0.73	1.14	0.79	0.92	0.34
			N	11	17	11	16	11	16
3 - 4	18. Name the technology program offered at the College of Fisheries in St. John's?	8	MEAN	0.09	0.12	1.83	0.33	1.55	0.28
			S.D.	0.10	0.33	2.96	1.05	3.06	1.15
			N	11	17	11	15	11	15
3 - 4	19. What is the minimum number of years a person must study a fishery science at the College of Fisheries in St. John's?	1	MEAN	0.18	0.12	0.73	0.12	0.55	0.00
			S.D.	0.10	0.17	0.82	0.35	0.62	0.33
			N	11	17	11	15	11	15
3 - 7	17. Explain what is meant by the apprenticeship program?	6	MEAN	0.09	0.47	2.91	0.41	2.82	-0.06
			S.D.	0.10	0.80	1.55	0.62	1.52	0.75
			N	11	23	11	17	11	17
3 - 5	9. Why is career planning important in determining what your future will be like?	6	MEAN	0.09	0.06	4.09	0.23	4.00	0.18
			S.D.	0.10	0.24	2.26	0.44	2.45	0.53
			N	11	17	11	17	11	17

\* significant at the .05 level

Table 8.  
Results of Career Knowledge Question Two

Responses	Pretest		Posttest	
	Elwood	Control	Elwood	Control
Further my education	6	12	5	15
Get a job	2	-	4	1
Undecided	3	2	-	1
Other	-	3	2	-

#### Job Search

The fourth major objective related to increasing the job search skills of the students. The results of the analysis are shown in Table 9. Three sub-objectives, and seven questions were related to this major objective. The pretest differences were not significant on all questions.

Elwood students scored significantly higher than those in the control school on six of the seven posttest questions. Question thirty (30) showed no significant gains. Elwood's mean posttest scores tended to be high and close to the maximum with the exception of question thirty-two (32). By inspection, it can be seen that the gains in the control school were marginal.

#### Summary

There were no significant differences between the

TABLE 3  
CAREER KNOWLEDGE OUTCOMES FOR OBJECTIVE FOUR

Specific Objective	Question	Max Score	Statistic	Pre Test		Post Test		Gain	
				Blood	Control	Blood	Control	Blood	Control
4 - 4	23. What is a personal resume?	1	MEAN S.D. F	0.00 0.00 11	0.13 0.35 15	1.00 0.47 24.51	0.23 0.47 11	1.00 0.00 *40.63	0.20 0.41 15
4 - 4	24. Outline the different kinds of resumes that should be included in the construction of a personal resume?	7	MEAN S.D. F	0.73 1.17 11	1.12 1.15 16	5.81 2.41 *34.80	2.41 1.17 11	5.18 1.25 *35.66	1.25 1.16 11
4 - 4	25. Why is it a good idea to prepare a personal resume for an employer?	4	MEAN S.D. F	0.18 0.40 11	0.19 0.40 16	2.82 1.08 *53.55	0.47 0.62 17	2.64 1.21 11	0.31 0.48 *46.94
4 - 2	29. What are the different ways you could locate a job today?	5	MEAN S.D. F	1.82 0.60 11	1.81 0.15 16	4.45 1.84 *42.11	2.06 0.90 11	2.64 1.29 11	0.25 1.00 *29.42
4 - 11	30. Have you had the opportunity to explore the possibility of creating your own job?	1	MEAN S.D. F	0.27 0.47 11	0.20 0.41 15	1.00 0.80 11	0.53 0.80 17	0.73 0.47 11	0.40 0.99 15
4 - 11	31. Describe the Young Canada Works Program?	4	MEAN S.D. F	0.18 0.40 11	0.07 0.26 15	3.60 0.82 *22.55	1.41 1.01 17	2.82 1.33 11	0.67 1.05 *21.38
4 - 11	32. Give examples of how you might create your own job?	5	MEAN S.D. F	0.54 1.11 11	0.80 0.84 15	2.45 1.81 *48.34	0.94 0.87 17	1.91 1.32 11	0.20 1.15 *9.10

\* significant at the .05 level

two groups of students at the beginning of the school year on thirty of the thirty-one questionnaire items related to the four main program objectives. On question three (3) where the difference was significant, it was in favor of the control group; these students showed only a small gain over the year whereas Elwood's improvement was quite dramatic. It is interesting to note that at the beginning of the year, the students from the control school scored higher on twenty-one of the thirty-one pretest items whereas at the end of the year these students scored lower on all thirty-one items.

Elwood students showed a significant improvement at the .05 level of significance on twenty-eight of the thirty-one gain scores. On items 14, 18, and 30 Elwood students gained more than the control group but it was not significant at the .05 level.

Table 10 provides data on the four overall program objectives and their mean total scores. At the beginning of the year both groups had similar total scores. At the end of the year Elwood students received a mean score of 148.94, 72 percent, whereas the students from the control school received a mean score of 41.20, 20 percent.

Table 10

Four Main Program Objectives and Their  
Mean Total Scores on the Career  
Knowledge Questionnaire

Main Objective	Max. Score	Mean Total Pretest Score		Mean Total Posttest Score		Mean Total Gain Score	
		Elwood	Control	Elwood	Control	Elwood	Control
Self- Knowledge	31	4.62	6.41	27.0	8.87	22.38	2.46
Knowledge of Work	78	4.99	7.04	61.18	12.15	56.19	5.11
Decision- Making Skills	72	4.43	6.60	40.13	12.07	35.70	5.47
Job Search Skills	27	3.72	4.32	20.63	8.11	16.91	3.79
Total	208	17.76	24.37	148.94	41.20	131.18	16.83

#### STUDENT QUESTIONNAIRE - SELF-RATINGS

The Student Questionnaire, Appendix III, was administered to students at Elwood High School and the control school both at the beginning and end of the school year. The purpose of this questionnaire was to discover how students would rate themselves in relation to the adequacy of career knowledge at their disposal.

#### Self-awareness

Table 11 shows the outcome of the student self-ratings in the area of self-awareness. At the beginning of

TABLE 11  
STUDENT QUESTIONNAIRE - SELF-RATING FOR OBJECTIVE ONE

Specific Objective	Question	Statistic	Pre Test		Post Test		Gain	
			Elwood	Control	Elwood	Control	Elwood	Control
1 - 17	6. Do you feel well enough informed about your values, your interests, your abilities and limitations, when it comes to the world of work?	MEAN	3.09	2.51	1.90	2.29	-1.30	-0.33
		S.D.	1.12	1.15	0.74	1.05	1.07	1.11
		N	11	15	10	17	10	15
		F	1.29			1.09		3.64
1 - 19	22. How sure are you about what you will do as a career?	MEAN	2.45	1.93	3.20	2.12	0.60	0.07
		S.D.	0.82	0.70	0.89	1.17	0.42	1.03
		N	11	15	10	17	10	15
		F	3.03		44.25		0.22	
1 - 4	18. Do you feel well enough informed about the different ways that you can gather information on yourself that may be helpful in making a career decision?	MEAN	2.36	2.73	1.85	3.06	-1.50	0.20
		S.D.	1.12	1.03	0.92	0.75	1.84	1.01
		N	11	15	10	17	10	15
		F	2.20		15.08		9.88	
1 - 11	7. Do you feel well enough informed about how to set a realistic goal for yourself and how to make plans to achieve it?	MEAN	3.00	2.60	1.80	2.39	-1.20	-0.07
		S.D.	0.88	0.91	0.79	0.94	1.06	0.70
		N	11	15	10	17	10	15
		F	1.24		44.96		11.22	
1 - 16	8. Do you feel well enough informed about what your abilities are?	MEAN	3.00	2.27	2.10	2.41	-1.10	0.07
		S.D.	1.00	1.10	0.74	1.00	0.88	0.80
		N	11	15	10	17	10	15
		F	3.04		40.73		11.86	

\* significant at the .05 level



the year there were no significant differences between the career education students and those in the control group. Students in the career education program showed a positive change on three of the five items that was significantly greater than the change in the control school. On question six (6), the change in students at Elwood was also positive, and greater than the control school, although not significant. On question twenty-two (22), which asked students how sure they were about what they would do as a career, Elwood students showed a significant difference on the posttest mean score in the negative direction, however, after correcting for the mean scores of both groups on the posttest administration of this item there was no significant difference. The changes in the control school tended to be very small, suggesting that these students rated themselves much the same at the end of the school year as they did at the beginning.

#### World of Work

Table 12 shows the outcomes of the student self-ratings in the area of knowledge concerning the world of work. There were no significant differences between the two groups of students at the beginning of the year on seven of the eight questionnaire items related to the major objective of increased knowledge of the world of work. Question eleven (11) showed a significant difference in a positive direction in favor of the control group.

TABLE 12  
STUDENT QUESTIONNAIRE - SELF-RATING FOR OBJECTIVE TWO

Specific Objective	Question	Statistic	Pre Test		Post Test		Gain	
			Elwood	Control	Elwood	Control	Elwood	Control
2 - 2	21. Would you say that you have well informed about the kinds of jobs you could get than you were a year ago?	MEAN	2.45	2.47	2.20	2.17	-0.30	-0.33
		S.D.	0.82	0.91	0.82	0.79	0.06	0.15
		N	11	15	10	17	10	15
		F	0.00		0.06			0.01
2 - 1	16. Do you feel you are well enough informed about the world of work?	MEAN	2.45	2.40	1.20	2.53	-1.30	0.13
		S.D.	0.82	0.91	0.42	1.07	1.06	0.99
		N	11	15	10	14	10	15
		F	0.02		14.02		11.90	
2 - 3	4. Do you feel you are well enough informed about the world of work?	MEAN	3.18	3.13	2.30	3.41	-1.00	0.27
		S.D.	0.82	0.91	0.79	1.00	1.06	1.13
		N	11	15	10	17	10	15
		F	0.02		9.62		98.22	
2 - 3	5. Do you feel you are well enough informed about the careers which are of interest to you?	MEAN	3.18	2.80	1.70	2.47	-1.50	-0.33
		S.D.	0.75	1.26	0.67	0.80	1.08	0.90
		N	11	15	10	17	10	15
		F	0.79		46.32		88.60	
2 - 3	12. Do you feel you are well enough informed about the kind of work you would like to do for when studying an occupation?	MEAN	3.36	3.06	1.40	3.12	-2.00	0.07
		S.D.	0.81	0.96	0.52	0.70	1.05	1.03
		N	11	15	10	17	10	15
		F	0.69		45.49		33.64	
2 - 8	10. Do you feel well enough informed about the different jobs that may be available for you so that you are able to figure out what kind of job you would like to be satisfied with that kind of work?	MEAN	3.24	3.07	2.30	2.09	-1.30	-0.13
		S.D.	0.82	0.91	0.79	0.87	0.84	1.41
		N	11	15	10	17	10	15
		F	1.61		5.14		46.49	

\* significant at the .05 level

Table 12 (Continued)

Specific Objective	Question	Statistic	Pre Test		Post Test		Gain	
			Blood	Control	Blood	Control	Blood	Control
2 - 8	11. Do you feel well enough informed about the different jobs that may be available for you so that you can decide whether you have a good chance of entering and succeeding within these occupations?	MEAN	3.54	3.67	2.69	2.88	-1.00	0.27
		S.D.	0.82	0.98	0.70	1.05	1.05	0.96
		N	11	15	10	17	10	15
		T	*5.86			0.37		*9.65
2 - 13	17. Do you feel well enough informed about the different kinds of satisfactions that people obtain from work?	MEAN	2.91	2.67	1.50	2.88	-1.40	0.13
		S.D.	0.94	0.72	0.71	0.76	1.07	0.94
		N	11	15	10	17	10	15
		T		0.55		*13.49		*17.89

\* significant at the .05 level.

Elwood students gained significantly more than the students from the control school on seven of the eight posttest items. On question twenty-one (21), the change in students at Elwood was positive and greater than the control school although not significant. By inspection, it can be seen that the gains in the control school were marginal.

#### Decision-Making

Table 13 shows the outcomes of the student self-ratings in the area of decision making. The pretest differences were not significant on all five questions.

Students in the career education program showed a positive change on all five items related to decision-making that was significantly greater than the change in the control school. The changes in the control school tended to be very small, suggesting that students' ratings changed very little over the course of the school year.

Student Question Twenty-four. Question twenty-four (24) was included on the student questionnaire but because of its nature received no point value. The question read as follows:

24. Who has helped you most so far in planning your occupational career?

The results of this question appear in Table 14.

TABLE 13  
STUDENT QUESTIONNAIRE - SELF-RATINGS FOR OBJECTIVE THREE

Specific Objective	Question	Statistic	Pre Test		Post Test		Gain	
			Elwood	Control	Elwood	Control	Elwood	Control
3 - 0	9. Do you feel well enough informed about the different factors which have an effect on making a career decision?	MEAN	3.54	3.20	2.40	2.88	-1.20	-0.41
		S.D.	0.82	0.77	0.84	0.86	1.25	0.31
		N	11	15	10	2.02	10	15
3 - 1	14. Do you feel well enough informed about the different factors which have an effect on making a good career decision?	MEAN	3.54	3.00	2.00	3.06	-1.50	0.97
		S.D.	0.82	1.00	0.67	0.90	1.27	0.88
		N	11	15	10	*10.42	10	15
3 - 2	19. Do you feel well enough informed about the different factors which have an effect on making a good career decision?	MEAN	3.27	2.67	2.20	2.53	-1.10	-0.13
		S.D.	1.19	1.05	0.82	1.12	1.39	0.83
		N	11	15	10	0.61	10	*5.23
3 - 2	21. Do you feel you are well enough informed about how to make a good decision about the kind of work you would like to do?	MEAN	2.64	2.40	2.00	2.71	-0.70	0.31
		S.D.	0.81	1.18	0.67	1.05	0.95	0.78
		N	11	15	10	17	10	15
3 - 4	23. Do you feel you are well enough informed about the different career courses offered at our school? Do you feel you are well informed about the different career opportunities in #14?	MEAN	4.27	3.73	2.60	3.41	-1.70	-0.27
		S.D.	0.78	1.01	1.07	0.94	1.42	1.03
		N	11	15	10	*4.23	10	*4.58
3	24. Who has helped you most in making your occupational career?	MEAN	Not applicable.					
		S.D.						
		N						

\* significant at the .05 level

Table 14  
Results of Student Questionnaire - Self-Rating  
Item Number Twenty-Four

Student Responses	Pretest		Posttest	
	Elwood	Control	Elwood	Control
My parents	2	6	3	8
Other relative or adults	1	-	-	1
Teacher	-	2	-	3
Guidance Counselor	-	-	2	-
Friends	2	1	-	2
Course in career planning	-	-	4	-
No one helped me	5	4	1	2
I have not thought about it	-	1	-	1
Other				

#### Job Search

Table 15 shows the outcome of the student self-ratings in the area of job search skills. There were no significant differences between the two groups at the beginning of the year on two of the five questionnaire items related to this area. Students from the control school rated themselves significantly higher in a positive direction on pretest items two (2), fifteen (15) and

TABLE 15  
STUDENT QUESTIONNAIRE - HELP-BAZING FOR OBJECTIVE FOUR

Specific Objective	Opinion	Statistic	Fire Test		Post Test		Gain	
			Blood	Control	Blood	Control	Blood	Control
4 - 6	12. Where do you think you stand in regard to getting a good job compared with the other students in your school?	MEAN	2.91	2.21	1.56	2.35	0.30	0.14
		S.D.	0.11	0.14	0.18	0.17	0.06	0.07
		N	11	14	10	17	10	14
4 - 2	1. Do you feel you are well enough informed about how to look for work?	F	*7.38		*5.18		0.05	
		MEAN	3.27	3.00	1.60	2.88	-1.50	-0.13
		S.D.	0.90	0.84	0.42	1.17	1.18	0.91
4 - 4	2. Do you feel you are well enough informed to prepare a resume?	N	11	0.62	10	17	10	*10.44
		MEAN	3.54	2.60	1.40	2.65	-2.20	0.00
		S.D.	0.15	0.15	0.10	0.10	0.10	0.10
4 - 5	13. Do you feel you are well enough informed to prepare a resume acceptable to an employer?	F	*6.70		*12.07		*37.95	
		MEAN	3.64	2.53	1.60	2.59	-2.10	-0.07
		S.D.	1.12	1.30	0.70	0.87	1.37	1.31
4 - 11	10. Do you feel you are well enough informed to prepare a resume acceptable to an employer?	N	11	*5.11	15	10	*9.31	*13.44
		MEAN	4.18	2.60	3.10	3.82	-1.10	0.13
		S.D.	0.15	0.15	0.10	0.10	0.10	0.10
	11. Do you feel you are well enough informed to prepare a resume acceptable to an employer?	F	2.99		3.01		*7.33	
		MEAN	4.18	2.60	3.10	3.82	-1.10	0.13
		S.D.	0.15	0.15	0.10	0.10	0.10	0.10

\* significant at the .05 level

twenty-three (23).

Elwood students showed a positive change on four of the five posttest items that was significantly greater than the change in the control school. On question twenty-three (23) Elwood students showed a significant posttest mean in the negative direction, however, after correcting for the mean scores of both groups on the pretest administration of this item there was no significant difference between the control and experimental group. The changes in the control tended to be very small and in both positive and negative directions.

#### Summary

There were no significant differences between the two groups of students at the beginning of the year on nineteen of the twenty-three student questionnaire items related to the four main program objectives. Students at the control school rated themselves higher on all pretest items with the exception being question twenty-one (21). Four of these items, questions 11, 2, 15 and 23, were rated significantly higher at the .05 level of significance.

Elwood students showed a significant positive change on nineteen of the twenty-three posttest items.

Table 16 provides data on the four overall program objectives and their mean total scores on the "Student Questionnaire (Self-Ratings)". Elwood students rated themselves higher at the end of the year on all four areas



of career development whereas the control students rated themselves lower on the areas of self-knowledge, knowledge of the world of work, and job search skills. In the area of decision-making skills, the control students at the end of the year had a positive mean gain of .41 whereas Elwood students had a mean gain of 6.06.

Table 16

Four Main Program Objectives and Their  
Mean Total Scores on the Student  
Questionnaire (Self-Ratings)

Main Objective	Max. Score	Mean Total Pretest Score		Mean Total Posttest Score		Mean Total Gain Score	
		Elwood	Control	Elwood	Control	Elwood	Control
Self-Knowledge	5	14.90	12.06	10.60	12.47	+4.3	- .41
Knowledge of Work	8	24.61	22.27	14.90	22.46	+9.71	- .19
Decision-Making	5	17.26	15.00	11.20	14.59	+6.06	+ .41
Job Search	5	17.54	13.94	11.08	14.29	+6.46	- .35
Total	23	74.31	63.27	47.78	63.81	+26.53	- .54

## PROGRAM EVALUATION QUESTIONNAIRE

The instructor could not assume that the actual implementation of "Creating a Career" in the classroom would be unproblematic and that it would correspond to its planned or intended use.

In an attempt to examine the process involved in conducting this career education program the instructor administered a program evaluation questionnaire, Appendix VI, during November, March and May of the school year which was designed to elicit feedback from the participants on the actual implementation of the program. Table 17 provides some of the results of this questionnaire.

The statement that received the highest rating was number two. Students considered class discussions to be a very productive use of class time.

Elwood students also gave an above average rating to number one and number eight, indicating that throughout the year they were more than satisfied that classes were clearly and logically developed and that the information they were learning in these classes was of a very useful nature.

The average standard deviation for the eleven students was .87 which suggests that the ratings of Elwood students were clustering together and that most students were rating these statements in a similar positive fashion.

Table 17

## Program Evaluation Results - Part I

Statement							Mean	S.D.		
1.	The classes were clearly and logically developed	- Always	1	2	3	4	5	Never	2.0	.93
2.	Class discussions were a waste of time	- Always	1	2	3	4	5	Never	4.3	.97
3.	Individual projects are	-Very Helpful	1	2	3	4	5	Not helpful at all	2.3	1.01
4.	The teacher is covering the material	- Too quickly	1	2	3	4	5	Too slowly	2.7	.67
5.	Classes are	- Interesting	1	2	3	4	5	Boring	2.7	1.08
6.	Classes are	- Too teacher dominated	1	2	3	4	5	Too student dominated	2.7	.47
7.	I learn from these classes	- Very much	1	2	3	4	5	Very little	2.4	1.06
8.	The subject matter or skills learned will be	- Very useful	1	2	3	4	5	Useless	2.0	.83
9.	The amount of effort I put into these classes is	- A lot	1	2	3	4	5	Very little	2.6	.72
10.	I really find it hard to do all the work for this course	- Always	1	2	3	4	5	Never	2.6	.88
11.	If I were teaching this course I would	-Change a lot	1	2	3	4	5	Change nothing	3.3	.91

throughout the duration of the program.

Students were also asked during the year to indicate what they disliked about the course. A majority of students indicated they disliked doing their "Research Bibliographies". Research Bibliography was a way of encouraging students to seek out and record information on the world of work that was of interest to them. They were allowed to read any article they desired as long as it related to the objectives of the course. Having read the article they were asked to summarize the article and to provide a very brief evaluation of it. This information was collected periodically throughout the year and evaluated both for quality and quantity of substance. Students did not see the usefulness of this exercise and also felt that too much of a demand was being made upon them.

Some students did not like the idea of having to know a minimum amount of information on the different quizzes that were given throughout the year. If students did not achieve that minimum, they would have to retake that quiz until the minimum score was achieved. Other students claimed they liked this approach because it prepared them for later, more comprehensive examinations.

Some of the activities that students indicated they liked were group discussions, group projects, guest speakers, self-awareness exercises, the aptitude test, job market information, tours, developing Young Canada Works proposals, films, researching occupations, and job search exercises.

Students made several suggestions during the year for improving the course. They wanted more group discussions and group projects, less homework, and reduction or elimination of the Research Bibliographies. Some would have liked to have done more work placements and more interviews with people in various occupations. They wanted demonstrations that material learned was useful and requested more detailed information on the evaluation procedure to be used in the course.

Student reaction to the course throughout the year was positive. Most students in the class viewed the course as a good opportunity to discover more about themselves and the world of work. They found the information learned to be of interest and useful in the attempt to make plans for the future.

#### DIARY RECORDS AND ANECDOTAL RECORDS

In an attempt to continuously examine the process involved in the actual implementation of the career education program the instructor kept a program diary, Appendix VII, which was completed an average of five times per month. Anecdotal records were also written when the occasion presented itself. These instruments provided information on what actually took place in the classroom.

The classes that were perceived by students and teacher alike as being the most productive were those in which students actively involved themselves in discussion.

Some students were not used to doing this, so it was a continuous struggle throughout the year to draw these students into contributing to the class. An anecdotal record dated November 3, 1979 provides an example:

I was introducing a class on planning a career when I asked Joan to offer some suggestions as to the kind of advice she would give to a student planning a career. Joan did not respond. I rephrased the question two different ways and tried to make light of the situation so as not to put too much pressure on her but she simply sat there with a bit of a grin on her face and did not say anything.

Most students viewed the individual and group projects as being useful and insightful into their own selves as well as the world of work. Some students, however, felt there was too much emphasis on the work books and would have liked to see less time being spent on paper and pencil exercises.

Students were extremely interested in finding out about other people's careers; this was evident in the career interviews that they completed as well as their responses to guest speakers. Students were able to pick out individual characteristics that they felt were important and could identify with.

The instructor for this course made the mistake of trying to present all the material that comprised the "Creating a Career" program. This resulted in less time for students to express themselves and to exchange different points of view.

The instructor assessed students' interest and perception of the usefulness of material presented to be above

average throughout the duration of the course. The level of participation by students was also considered by the instructor to be above average for most students throughout the year; however, as with any group there were a number of individual differences on these three variables.

The career education program, "Creating a Career", was for the most part explicit enough in detail so as to avoid error confusion; however, there were a number of areas that were deserving of comment:

a) In the "Career Planning Guide", Chapter Three is entitled: "Decision Making: A Complex Personal Process". The instructor felt that this chapter needed more detailed information presented in a more clarified and easier to understand way. The topic, "Conflicts in decision-making", is covered in two small paragraphs with no concrete examples or hypothetical situations provided. Some should have been provided to explain the difficulties that are encountered by decision-makers.

b) In the Career Planning Workbook, Unit 4, individual projects 2, 3, 4, 5 and 6 are designed to have students develop their own personal inventories. It is imperative that a thorough examination of these projects be completed as it forms the basis for future projects. Students found these individual projects difficult to complete. They were asked to examine themselves using a variety of categories. One difficulty seemed to be that students were unsure that

they were completing these projects correctly. These projects were also time consuming and made more difficult by not having the pages of the workbook numbered. Students had to determine if they had the correct format and if they were on the right track. These difficulties could very easily have been overcome by providing students with examples of completed inventories; they would then have known the kind of information that was expected of them and would have had a concrete outline to follow.

c) Career Planning Workbook, Unit 6, Project 1. Individual Projects 1 and 2 had instructions that were explicit in detail; however, students still felt uneasy completing these projects because they were unsure of the route they were following. Examples of completed projects would have given students more confidence in completing their own projects and have reduced the amount of time spent on these projects.

d) Career Planning Workbook, Unit 9, Individual Project 1 is designed to get students to evaluate their occupational alternatives. The directions are vague and inadequate for the proper completion of the project. Here again, an example of a completed project would have proved most beneficial.

The instructor did not find the course a difficult one to implement with the exception of the above mentioned items. Canada Manpower officials were very helpful throughout



and provided support when it was needed.

#### COURSE EVALUATION QUESTIONNAIRE

In June 1979, students of Elwood High School completed a "Course Evaluation Questionnaire", Appendix VIII. Students were asked to reflect back over the entire course and assess the benefits they had received. They also gave their impressions on the overall effectiveness of the different elements that made up the career education program.

The first part of the course questionnaire was a list of fifteen statements concerning the different benefits that may have been derived as a result of taking the career education course. The average score for the fifteen statements was 1.9 and the average standard deviation for these statements was .69 (Table 18). This suggests that students who took the course felt that it was beneficial and viewed it very positively, with little variability in their ratings.

The students felt strongest about their being able to explore careers which were of interest to them (item 6). They also felt that the course had improved their knowledge of occupational possibilities open to them (item 7) as well as their knowledge of the qualifications required for various jobs (item 8). Students also agreed that the course had helped them to formulate a realistic career goal.

Table 18  
Results of Course Evaluation Questionnaire  
Part I

Question Number	Mean	S.D.
1	1.9	.57
2	1.8	.79
3	1.9	.99
4	2.5	.71
5	2.0	.67
6	1.3	.48
7	1.7	.48
8	1.5	.53
9	2.0	.67
10	2.5	.53
11	1.9	.57
12	1.6	.52
13	2.2	.79
14	1.6	.84
15	2.1	1.29

Part II of the "Course Evaluation Questionnaire" consisted of twenty-one statements concerning different elements that made up the career education course. Students were asked to rate these various elements on a scale of one to five. The results of Part II appear in Table 19.

Group discussions (item 28) were seen as being a very productive use of time. Most students felt they had learned a substantial amount from the course (item 19) and they also viewed the newly acquired knowledge as being useful to them in their future lives (item 20). Most students felt they put an above average amount of work into the course (item 16).

Students were asked to describe in their own words any kind of benefit they received from the course. The majority of students claimed that the course was beneficial in helping them to decide what they wanted to do upon completion of high school. Some students felt they were more informed about themselves and the world of work.

Students were asked to offer suggestions to improve the course. All students felt that more practical kinds of experiences were needed, for example, more tours of different industries, educational institutions, and so forth. Students wanted more resource people to visit the class to discuss their particular careers.

One student recommended that the course be given to grade ten students so that they would have more time to plan

Table 19  
Results of Course Evaluation Questionnaire  
Part II

Question Number	Mean	S.D.
16	2.2	.79
17	2.6	.70
18	2.7	.67
19	1.8	1.03
20	1.8	1.03
21	1.5	1.08
22	1.9	.74
23	2.7	.48
24	2.5	.97
25	2.2	.79
26	2.8	.92
27	2.1	.74
28	4.5	.85
29	2.5	.85
30	2.7	.67
31	2.9	.32
32	2.5	.71
33	2.1	.57
34	2.8	.42
35	3.0	.47
36	1.9	1.10

for their future.

Some students wanted more discussions and wanted "all" students to be involved; not just the same students doing the talking throughout the course.

One student suggested that the instructor give less homework and slow down the pace whereas another student suggested setting a time limit on how long to stay at a certain topic to ensure covering more material.

Students were asked to indicate whether they felt there was enough time provided to cover the course adequately. Six students replied no, two yes, and two did not answer the question. Most students felt more time was necessary to adequately cover the entire course.

All students felt there were enough materials and perhaps even too much to cover the course adequately. Students also felt that the classroom space was adequate for the conduct of the course.

Students were asked to estimate their level of satisfaction and their level of participation for the entire course. The average estimate of satisfaction was 73%. The average estimate of participation for the entire course was 68%. It is interesting to note that the final evaluation results, which took into account all the work the student did during the year, had a mean of 68% for this same group of students.

Students were asked to indicate whether or not the

course should be required of all grade eleven students; six students replied yes, and commented that the course could help students to learn more about themselves and the world of work and could help them to plan their future career. Three students said no, and one commented that the course should be optional.

#### Summary

The "Course Evaluation Questionnaire" has provided substantial evidence to support the claim that the career education course was viewed by students as a success. Students felt that the course helped them to learn more about themselves and about the world of work. The benefit most cited was that the course helped students to formulate career plans upon the completion of high school.

## SECTION IV

### CONCLUSIONS, OBSERVATIONS AND RECOMMENDATIONS

#### Was the Career Education Program Effective?

The basic purpose of this project was to implement and evaluate a career education course at the grade eleven level in Elwood Regional High School. Seven different evaluation instruments were utilized, however, only two of these instruments were used for comparative purposes. They were the Career Knowledge Questionnaire, Appendix II, and the Student Questionnaire - Self-Rating, Appendix III. Students at Elwood High School and the control high school were given pretest and posttest administrations of these instruments.

Based on the analysis of data presented in Section III, the grade eleven Elwood students' career knowledge in the areas of self, world of work, decision-making skills and job search skills, as measured by the career knowledge instrument, increased significantly compared to the control school. The increases which were observed were so large that it seems unlikely that over the course of the school year any factors, conditions, or variables other than the career education course, could have caused this increase. Therefore, the career education course was effective in

that it produced a significant and desirable gain in career knowledge for all the Elwood students.

Based on the results of the data obtained from the administration of the Student Questionnaire - (Self-Ratings), Elwood students' self-perceived knowledge in the areas of self, world of work, decision-making and job search improved significantly compared to the control school. Therefore, the career education course, in addition to increasing actual knowledge, also produced a significant gain in students' self-perception of that knowledge.

This conclusion is further substantiated by the results of questions that appear in Part I of the Course Evaluation Questionnaire. Items 1, 2, 3, 4 which related to the area of self-awareness received a mean score of 2.0; items 5, 6, 7, 8 which related to knowledge of the world of work received a mean score of 1.62; items 9, 10, 11, 13 which related to decision-making received a mean score of 1.6 and item 12 which related to job search received a mean score of 1.6. Students felt that the career education course had enabled them to improve their knowledge in the areas of self, career knowledge, decision-making, and job search.

The question of effectiveness can be posed in another way. How effective was the career education course for Elwood students in achieving the desirable level or criterion of career development set forth for grade eleven students?



The results of the Career Knowledge Questionnaire showed that the mean score on the posttest administration of this instrument was 149 for Elwood students and 41 for students from the control school. A perfect score was 208. Basing this theoretically perfect score on 100 percent, Elwood students achieved 72 percent of this theoretically perfect score and the control students achieved 20 percent. Elwood students' mean gain over the school year was 131.18 (63%) whereas the control students' mean gain was 16.83 (8%).

The problem of setting standards for measures of achievement is well known (Glass, 1978). No attempt was made in this study to provide an estimate of the desired level of achievement in the course except as was implied in the procedures used to select questions for the questionnaire, and the procedures used to score the questions. The problem of assigning appropriate weightings to the various questions was ignored. Nonetheless, on a question by question, or on a total score basis, based on the judgement of the instructor, student performance on the Career Knowledge Questionnaire suggested a high, and acceptable level of achievement.

#### Specific Data Results and Their Implications

While the results of the various evaluation instruments were quite favorable, there are some that warrant

closer examination and discussion.

Question three on the Career Knowledge Questionnaire asked students to state why they felt that their career plans were the right ones for them. Elwood students gained significantly more on this item than did students from the control school. However, the average posttest mean score (2.54/63%) was not close to the maximum score (4/100%). This indicates that students had difficulty substantiating the reasons for their career plans. A possible explanation for this may be that students did not receive enough individual help with their career plans throughout the year. Students were required to meet individually with the instructor once during the year. For some, this may have been adequate whereas for others it was not. Classroom work and other related experiences are a part of any career education program but individual counselling provides the student with an opportunity to pull things together, and to integrate the information obtained, and must be viewed as an integral part of this program. Lack of this kind of experience may have resulted in the poor results on question three.

A question similar in nature to question three on the Career Knowledge Questionnaire was question twenty-two on the Student Questionnaire - Self-Rating. This question asked students to indicate how sure they were about what they wanted to do as a career. Elwood students showed a significant difference on the posttest mean score in the

negative direction and showed no significant difference on the mean gain score. Elwood students at the beginning of the year felt "fairly sure" about what they would do as a career whereas at the end of the year they felt "not too sure". This seems to suggest that some students were undecided about their career plans. However, in the Course Evaluation Questionnaire the benefit most cited by students that they received from doing the career education course was that it helped them to decide on what they wanted to do upon completing high school. With this information then it seems more likely to speculate that these students were not undecided but were not willing at this point in time to make a definite choice from a number of possible alternatives. A number of students may have been waiting for the results of their public examinations before making a final decision. Students in the course were continually encouraged to leave open as many alternatives as they could for as long as they could in order to increase the likelihood of making a good decision. This may be reflected in the self-rating item twenty-two, however, it does point to the need to give students more individual attention throughout the course to ensure they are not being overwhelmed with their increase in career knowledge.

Question six on the Career Knowledge Questionnaire asked students to tell all that they could about two jobs which may be available for them upon completion of their

schooling. Elwood students' gain over the year was significant and quite dramatic compared with the gain in the control students - the average Elwood posttest score was high (25/66%), however, it was not close to the maximum possible score (38/100%). Although Elwood's knowledge was below the maximum, the average posttest score on item five of the Student Questionnaire was 1.7, indicating that Elwood students felt well informed about the careers which were of interest to them. On the Course Evaluation Questionnaire, students rated thirty-six different statements. Elwood students gave the highest mean rating (1.3) to item six, which indicated that students felt that the course had enabled them to explore careers which were of interest to them. This information obtained from three different instruments suggests to this author the need to review the criteria used in evaluating question six on the Career Knowledge Questionnaire as well as a review of the appropriateness of the instructional methodology.

On the Career Knowledge Questionnaire, Elwood students received low posttest scores on questions thirteen through eighteen, questions fourteen and eighteen showed no significant gains whereas the other questions were significant at the .05 level. All these questions dealt with post-secondary education. Elwood's mean score (1.9) on question eleven of the Course Evaluation Questionnaire indicated that students felt the course had improved their

knowledge of educational possibilities open to them. This feeling is confirmed again with the results from question thirteen on the Student Questionnaire (Self-Rating). Why then do students feel they are informed about educational alternatives when in reality they are not? It may be that students are concentrating on only those educational alternatives that are of immediate interest to them which suggests that more emphasis needs to be placed on raising the awareness of students to all educational opportunities. This need becomes even more important in communities that do not have easy access to post-secondary educational institutions which in Newfoundland's situation would be the majority of communities.

Elwood students received close to the maximum score on all the posttest questions of the Career Knowledge Questionnaire that related to job search except for item thirty-two which asked students to give examples of how they might create their own jobs. The mean posttest score of Elwood students on item twenty of the Student Questionnaire (Self-Rating) which asked students to indicate how well informed they were about the possibility of creating their own job was 3.10 which resulted in no significant difference from Elwood's pretest score. This information suggests that even though during the school year Elwood students prepared and submitted several Young Canada Works proposals, some of which were actually implemented with

federal government funding, it was not sufficient in giving students the confidence or the information that was required for them to adequately explore the alternative of creating their own job. This is an area that the "Creating a Career" program needs to address in a much more detailed fashion.

Question six on the Student Questionnaire (Self-Rating) received high ratings from both the control (2.29) and the experimental (1.90) groups. When one examines the career knowledge questions that relate to this item (career knowledge questions 3, 20, 21, 22 and 28) one may infer that the experimental group had its ratings based on actual knowledge whereas the control appears to have no such basis. The control students believe they were well-informed about themselves when in reality they may not have been.

A similar set of results appears for item twenty-one on this same questionnaire. Both groups indicated that they were better informed about the kinds of jobs they could get than they were a year ago. The career knowledge question that corresponded to this item was question four. The control students' mean posttest score was 1.82 whereas Elwood's mean posttest score was 4.09. However, both groups rated themselves almost identically in their self-perception of this knowledge. This information seems to imply that the control students' self-ratings may be overestimated and not based on actual fact. This finding has obvious

implications for this study, however, more importantly it implies that students without access to some sort of career education may be graduating from high school with unrealistic perception of themselves.

On question twenty-three of the Student Questionnaire (Self-Rating) which asked students what they thought their chances were of getting a good job as compared with other students in their school, Elwood students' posttest mean score (3.50) was significantly higher than the control students' posttest mean score (2.35). The control group thought they had a "better than average" chance of getting a job whereas Elwood students figured their chances had decreased over the year and thought they had an "about average" chance of getting a job. This author speculates that the control group rating was an overestimation and Elwood's rating may have been an underestimation with the latter being the closest to reality. Elwood's performance on career knowledge questions relating to job search was by far greater than the control group's performance. Elwood students on course evaluation question twelve indicated with a mean rating of 1.6 that the career education course had improved their knowledge of how to apply and get a job. This information may also suggest that the career education course may have achieved its goal of increasing a student's job search knowledge but may not have been as successful at imparting confidence to deal with that information. This

suggests the need to build a stronger relationship with the local community and provide students with real life experiences aimed at building their self-confidence.

While the typical performances of Elwood students on the Career Knowledge Questionnaire were quite credible, some students did not do as well as others. Several explanations can be suggested for this variability in student performance. Some students may have taken the course for the wrong reasons. They may have thought of the course as being an "easy credit" and signed up with little intention of applying themselves throughout the year. Another explanation may be that the course was viewed as the lesser of three evils when choice of subjects was made. As in any course, the diligence and application of students to the course work will be a factor in any outcome.

#### RECOMMENDATIONS

This project aimed at implementing and evaluating a career education program in a rural Newfoundland high school. The results of this project suggest the following recommendations.

##### Recommendations for Practice

1. That career education courses be made available to all high school students.
2. That individual counselling be viewed as an integral part of the "Creating a Career" program.



3. That more emphasis be given to the practical, down to earth, "hands on" kinds of career education activities.
4. That the relationship between the "Creating a Career" Program and the workplace be strengthened.
5. That some kind of actual work experience be tied in with this course and that an Industrial Arts/Home Economics/Pre-vocational component be integrated with the "Creating a Career" program.
6. That a comprehensive unit be developed to be included with the "Creating a Career" program dealing with young entrepreneurs.
7. That the items discussed in Section Three be made more explicit and clarified by means of additional information supplemented with completed examples for students to follow.
8. That new formats be examined that would provide an alternative to the multitude of paper and pencil exercises of the "Creating a Career" program.
9. That group discussions be viewed as an essential element of the "Creating a Career" program and that a unit be developed at the beginning of the course to foster this kind of activity.
10. That pages of the student workbooks be numbered.
11. That teachers who plan to do the "Creating a Career" program be given a workshop in which they could

receive help in preparing for the course.

12. That a review be conducted to examine the criteria used in evaluating question six on the Career Knowledge Questionnaire as well as the effectiveness of the instructional methodology used.

#### Recommendations for Further Research

1. A career education program should be implemented at the high school level and evaluated against a control group involved in a prevocational program and/or a control group whose school has the services provided by a full time guidance counselor and/or a control group involved in individual career counselling.
2. "Creating a Career" be implemented and evaluated by teachers who are relatively untrained in career education and guidance techniques.
3. "Creating a Career" be implemented and evaluated with non-academic students.
4. "Creating a Career" be implemented and evaluated with high school students living in an urban area.
5. "Creating a Career" be implemented and evaluated in other grades and with larger groups of students at the high school level.
6. The Career Knowledge Instrument should be studied to determine the dimensions that it actually measures.

7. Follow up studies should be conducted on students involved with career education programs to ascertain any long term benefits.

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APPENDIX I  
QUESTIONNAIRE CONCERNING STUDENTS AND CAREER PLANNING

APPENDIX I

QUESTIONNAIRE CONCERNING STUDENTS AND CAREER PLANNING

Please indicate whether you are a:

1. Student \_\_\_\_\_ What grade are you presently in? \_\_\_\_\_
2. Parent \_\_\_\_\_ What grade is your son or daughter in? \_\_\_\_\_
3. Teacher \_\_\_\_\_

Part I - Directions

Please rank the following four statements about students and career planning in order of importance by placing a #1 by the statement that you feel is most important, #2 by the statement you feel is next important and so forth.

- A. Students need to know how to go about looking for work and how to apply for job openings once they are located.

Rank \_\_\_\_\_

- B. Students need to be taught how to make a good decision about the kind of work they would like to do.

Rank \_\_\_\_\_

- C. Students need to be given an opportunity to increase their knowledge of the world of work and to explore careers which are of interest to them.

Rank \_\_\_\_\_

- D. Students need to know themselves, their own values, interests, talents, abilities and limitations when it comes to the world of work.

Rank \_\_\_\_\_

## Part II - Directions

Attached to this sheet is a list of statements about students and career planning. You are asked to select from these statements those you agree with the most and those you agree with the least.

Please fill in the boxes below by following these directions:

- 1) Decide on the 2 statements that you agree the most with and place their letters in the boxes opposite "Agree with the most" (Now you cannot use these two letters again).
- 2) Decide on the 2 statements that you agree with the least and place their letters in the boxes opposite "Agree with the least" (Now you cannot use these two letters again).
- 3) Decide which three statements you agree with next most, or your third, fourth, and fifth choices and place their letters in the boxes marked "Agree with them next most" (Now you cannot use these three letters again).
- 4) Decide which 3 statements you agree with next least, or your eleventh, twelfth and thirteenth choices and place their letters in the boxes marked "Agree with them next least" (Now you cannot use these three letters again).
- 5) Place the rest of the letters in the boxes marked "Agree with them somewhat".

Agree with the most

☐ ☐

Agree with them next most

☐ ☐ ☐

Agree with them somewhat

☐ ☐ ☐ ☐ ☐

Agree with them next least

☐ ☐ ☐

Agree with the least

☐ ☐

## STATEMENTS ABOUT STUDENTS AND CAREER PLANNING

- A. Students need to explore the possibility of creating their own jobs (i.e. starting their own business, applying for a government grant, etc.).
- B. Students need to be able to set realistic goals for themselves and should be able to make plans to achieve them.
- C. Students need to be able to look at the different jobs that may be available for them and be able to figure out whether or not they would be satisfied with that kind of work.
- D. Students need to look at their feelings about work in general.
- E. Students need to know the different ways that they could gather information on themselves (i.e. tests, talking with people, etc.).
- F. Students need to be able to prepare personal descriptions of themselves (personal résumés) that would be acceptable to an employer.
- G. Students need to look at all the different factors which have an effect on making a career decision.
- H. Students need to look at various jobs based on their personal knowledge that they have gathered on themselves.
- I. Students need to know what steps are involved in making a good decision.
- J. Students need to be able to state what their career plans are after completing high school.
- K. Students need to be able to use properly and understand the information contained in the books that describe courses offered at other educational institutions in Newfoundland (i.e. Vocational School, Memorial University, etc.).
- L. Students need to know what their abilities are.
- M. Students need to know what kinds of information to look for when studying an occupation.
- N. Students need to know how to locate a job vacancy.
- O. Students need to look at the different kinds of jobs that may be available for them to determine whether they have a good chance of entering and succeeding within those occupations.

APPENDIX II  
CAREER KNOWLEDGE QUESTIONNAIRE



## APPENDIX II

### CAREER KNOWLEDGE QUESTIONNAIRE

The purpose of this questionnaire is to gather information on what you actually know about career planning and the world of work. The information obtained will aid us in helping students make a better adjustment to the world of work.

Student's name: \_\_\_\_\_

Grade: \_\_\_\_\_ Academic \_\_\_\_\_ General \_\_\_\_\_

School: \_\_\_\_\_

Date: \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_

1. People rarely get what they want through "wishful thinking". They get what they want by taking active steps in pursuit of their goals. For example, you can learn to control your temper if you really try hard enough. Give an example of a realistic goal that you would like to achieve and say how you would go about doing it.
2. What do you plan to do after completing high school?
  - A. \_\_\_\_\_ Further my education (Please specify what kind of course)  
\_\_\_\_\_
  - B. \_\_\_\_\_ Try and get a job (Please specify what kind of job)  
\_\_\_\_\_
  - C. \_\_\_\_\_ Undecided (Please state why you feel this way)  
\_\_\_\_\_
  - D. \_\_\_\_\_ Other (Please specify what your plans are)  
\_\_\_\_\_
3. If you have career plans, please state why you feel they

are the right ones for you.

4. List the different jobs that you feel may be available for you upon completion of your schooling.
5. List the different kinds of information that you need to know when examining the kind of job you would like to do.
6. Use this list (in #5) and tell all you can about two of the jobs which may be available for you upon completion of your schooling.
7. What steps are involved in making a good decision about the kind of work you would like to do upon completing Grade XI?
8. Explain the difference between a job, a career, and an occupation.
9. Why is career planning (thinking seriously about what you would like to do) important in determining what your future will be like?
10. Name the different degree programs available at Memorial University of Newfoundland.
11. What are the educational requirements (Grade XI subjects) a person must have before he can be accepted to Memorial University?
12. At least how many years (2 semesters = 1 year) must a person study at Memorial University before he obtains a degree?
13. Name the "technology" courses offered at the College of Trades and Technology in St. John's.
14. At least how many years must a person study a "technology" course at the College of Trades and Technology in St. John's?
15. Name the trade courses offered at the District Vocational School in Corner Brook.
16. For three of the trades you named in #15 above, state the length of time a person must train in order to become a qualified tradesman.
17. Explain what is meant by the apprenticeship program.

18. Name the "technology" programs offered at the College of Fisheries in St. John's.
19. What is the minimum number of years a person must study a "technology" program at the College of Fisheries in St. John's?
20. Aptitudes form a very important set of characteristics that you must consider in choosing an occupation. Aptitudes are your abilities to perform skills that are needed in different occupations, for example, a secretary must have a certain amount of finger dexterity or the ability to move the fingers rapidly and accurately. What are some other aptitudes that may be required in different occupations?
21. List as many of "your" aptitudes or abilities as you can.
22. Give examples of jobs that you feel match your abilities and interests.
23. What is a personal résumé?
24. Outline the different kinds of information that need to be included in the construction of a personal résumé.
25. Why is it a good idea to prepare a personal résumé for an employer?
26. What are some of the different reasons why people work?
27. What factors contribute to worker satisfaction?
28. What are the different ways that you could gather information on yourself to be used in making a career decision?
29. What are the different ways you could locate a job vacancy?
30. Have you had the opportunity to explore the possibility of creating your own job? Answer this question with a yes or no in the booklet provided.
31. Describe the Young Canada Works Program.
32. Give examples of how you might create your own job.

APPENDIX III  
STUDENT QUESTIONNAIRE - SELF-RATING

### APPENDIX III

#### STUDENT QUESTIONNAIRE - SELF-RATING

The purpose of this questionnaire is to gather information on high school students so that we will be better able to assist them through their transition from school to the world of work.

Student's Name: \_\_\_\_\_ Date: \_\_\_\_\_

School's Name: \_\_\_\_\_

Grade: \_\_\_\_\_

#### Questionnaire -- Part I

Directions - Please underline the letter that best represents how you feel now.

1. Do you feel you are well enough informed about how to look for work?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
2. Do you feel you are well enough informed about how to apply for job openings once they are located?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
3. Do you feel you are well enough informed about how to make a good decision about the kind of work you would like to do?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed

4. Do you feel you are well enough informed about the world of work?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
5. Do you feel you are well enough informed about the careers which are of interest to you?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
6. Do you feel you are well enough informed about yourself, your values, your interests, your abilities and limitations, when it comes to the world of work?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed

Questionnaire -- Part II

7. Do you feel well enough informed about how to set a realistic goal for yourself and how to make plans to achieve it?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
8. Do you feel well enough informed about what your abilities are?
  - A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed

9. Do you feel well enough informed about all the different factors which have an effect on making a career decision?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
10. Do you feel well enough informed about the different jobs that may be available for you so that you are able to figure out whether or not you would be satisfied with that kind of work?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
11. Do you feel well enough informed about the different jobs that may be available for you so that you are able to determine whether you have a good chance of entering and succeeding within those occupations?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
12. Do you feel you are well enough informed about the kind of information you should look for when studying an occupation?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
13. Do you feel you are well enough informed about the different courses offered at our post-secondary educational institutions in Newfoundland, i.e. Vocational School, College of Fisheries, Memorial University?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed

14. Do you feel you are well enough informed about the different steps that are involved in making a good career decision?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
15. Do you feel you are well enough informed to prepare a written personal description of yourself (personal résumé) so that it would be acceptable to an employer?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
16. Do you feel you are well enough informed about the different reasons why people work?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
17. Do you feel well enough informed about the different kinds of satisfactions that people obtain from work?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
18. Do you feel well enough informed about the different ways that you can gather information on yourself that may be used in making a career decision?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed



19. Do you feel you are well enough informed so that you are able to state what your career plans are after completing high school?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
20. Do you feel you are well enough informed about the possibility of creating your own job (i.e. starting your own business, applying for government grant, etc.)?
- A. Very well informed
  - B. Well informed
  - C. Informed
  - D. Poorly informed
  - E. Very poorly informed
21. Would you say that you are better, as well as, or less well informed about the kinds of jobs you could get than you were a year ago?
- A. Much better informed
  - B. Somewhat better informed
  - C. As well informed
  - D. Somewhat less well informed
  - E. Much less well informed
  - F. I don't know
22. How sure are you about what you will do as a career?
- A. Very sure
  - B. Fairly sure
  - C. Not too sure
  - D. Not sure at all
  - E. I have not thought much about my career yet
23. Where do you think you stand in your chance of getting a good job compared with the other students in your school?
- A. Much better than average
  - B. Better than average
  - C. About average
  - D. Below average
  - E. Much below average

24. Who has helped you most so far in planning your occupational career?
- A. My parents
  - B. Other relatives or adults.
  - C. Teacher
  - D. Guidance Counselor
  - E. Friends
  - F. Course in career planning
  - G. No one helped me
  - H. I have not yet thought about my occupational career
  - I. Other (please specify)

APPENDIX IV  
LEARNER OUTCOMES

8. The student should be able to write what he liked and disliked about three of the major activities he has undertaken.
9. The student should be able to assess his past performance in various activities by writing down three tasks he has done well and three tasks he has not done well.
10. The student should be able to identify five personal character traits from the list of activities he has engaged in.
11. The student should be able to set one realistic personal goal for himself and write up plans to achieve it. The plans should consist of (a) reason for wanting to achieve goal; (b) reasonable time limit; (c) description of what he is going to do to bring about the proposed change.
12. The student should be able to assess his preference for general work activities by properly completing an interest inventory and a work activities interests checklist.
13. The student should be able, by properly completing a checklist, to assess the level of involvement with data, people, and things that he would like to have in his work, as well as the level of involvement that he is capable of handling.
14. The student should be able, by properly completing a checklist, to assess his preferences and capacities for doing certain physical activities associated with work.
15. The student should be able, by properly completing a checklist, to assess his preferences for the environmental conditions found in different occupations and his ability to adjust to them.

## APPENDIX IV

### LEARNER OUTCOMES

#### OBJECTIVE #1

To identify and develop students' awareness of their values, interests, abilities and limitations in relation to the world of work.

Learner Outcomes which will demonstrate the attainment of this objective.

1. The student should be able to identify five personal and environmental factors which influence career decisions.
2. Given a list of statements that people have made about work, the student should be able to explore his feelings about work by indicating whether or not he agrees, disagrees, or is undecided about the expressed feeling.
3. The student should be able to list in order of importance five satisfactions he hopes to obtain from work.
4. The student should be able to identify three strategies that he might use for gathering self-information.
5. The student should be able to list five persons who have influenced his behavior, his thinking and his goals.
6. The student should be able to list three qualities he values highly and one quality he wants to change.
7. The student should be able to prepare a list of all the major activities he has undertaken, using the following headings: work experience, hobbies, sports and recreational activities, club and volunteer activities, home activities, school activities.

16. The student should be able to assess his aptitudes by properly completing the General Aptitude Test Battery.
17. The student should be able to categorize the self-information he has gathered under three headings:  
(1) What I want from work; (2) What I am capable of doing, and (3) What I am willing to do.
18. The student should be able to rank order in which he will manipulate his self-information when he searches for occupational possibilities.
19. The student should be able to state why he feels his career plans are the right ones for him.

#### OBJECTIVE #2

To provide students with an opportunity to increase their knowledge of the world of work and to explore careers which are of interest to them.

#### Learner Outcomes

1. The student should be able to list five reasons why people work.
2. The student through exploration based on his personal descriptors should be able to identify five occupational alternatives.
3. The student should be able to gather detail information, using similar headings as those in the guidance monographs, on three of his most promising occupational alternatives.
4. The student should be able to spend one full work day observing the kind of work that he feels he is interested in.
5. The student should be able to identify seven sources of information on occupations.

6. The student should be able to evaluate two different kinds of published materials on occupations by answering the eight questions outlined in his workbook.
7. The student should be able to prepare an outline of the different kinds of information he needs to gather on occupations before he can make a wise choice.
8. The student, by following the format outlined in his workbook, should be able to evaluate his three occupational alternatives to determine (1) whether it is likely to give him the satisfaction he expects to obtain from work; and (2) whether he has a good chance of successfully entering and progressing within the occupation.
9. The student shall be able to write summaries of the factors used to describe occupational qualifications in the Canadian Classification and Dictionary of Occupations.
10. The student, by completing the personal profile form contained in his workbook, should be able to code his self-information using the numbering and lettering system employed in the Canadian Classification and Dictionary of Occupations.
11. The student should be able to interpret an occupational profile in the Canadian Classification and Dictionary of Occupations. The interpretation will be considered accurate if the student is able to answer correctly seven questions concerning the given profile.
12. The student should be able to explain the difference between a job, a career, and an occupation.
13. The student should be able to state five factors that contribute to worker satisfaction.

OBJECTIVE #3

To help students formulate realistic career goals by providing a framework in which decision-making skills may be taught and applied in the context of career education.

Learner Outcomes

1. The student should be able to list the various steps in the decision-making process.
2. The student should be able to state in writing what his career goal is after completing grade eleven.
3. The student, through the means of an interview with the counselor, should be able to assess the progress he has made towards choosing an occupation.
4. The student should be able to demonstrate that he can use properly and understand the information contained in three calendars of post-secondary institutions in Newfoundland.
5. Students should be able to give at least five reasons why career planning is important in determining what his future will be like.
6. The student should be able to determine the approximate cost involved for a year of study at three of the post-secondary institutions in Newfoundland.
7. The student, by means of a short answer test, should be able to demonstrate that he has an adequate understanding of the apprenticeship program.
8. The student, by means of a short answer test, should be able to demonstrate that he has an adequate understanding of the student aid program.
9. The student should be able to tour two of our post-secondary institutions.



10. The student should be able to complete three application forms for entrance to our post-secondary institutions.

#### OBJECTIVE #4

To develop skills which students can apply to seeking and getting a job.

#### Learner Outcomes

1. The student should be able to list five major causes of job openings in a community.
2. The student should be able to list five major ways of locating a job vacancy.
3. The student should be able to make a list of the names, addresses and telephone numbers of five people who might be able to help him in his job search campaign.
4. The student should be able to prepare a résumé that would be judged acceptable by an employer.
5. The student should be able to write a covering letter to accompany his résumé which also must be judged acceptable by an employer.
6. The student should be able to complete two applications for employment legibly and correctly.
7. The student should be able to register with Canada Manpower.
8. The student should be able to write the answers he would give to five different questions that may appear on employment application forms.
9. The student, by taking part in a role play situation, should be able to practice telephoning an employer about a job opening.

10. The student should be able to practice interviewing techniques with his classmates in a given role play situation.
11. The student, by completing a Young Canada Works application, should be able to explore the possibility of creating his own job.

APPENDIX V  
LEARNER OUTCOMES - EVALUATION CHART

# APPENDIX V

## LEARNER OUTCOMES - EVALUATION CHART

Content Area	Learner Outcome	Process	Evaluation Procedure
**A/1	*1/1	Interview two people concerning their careers, read Ch. 1, 3. Lecture Group Discussion. Listen to presentations on careers by a resource person and ask questions of him.	Satisfactory completion of two "Career Development Interview Guides". Test Ch. 1, Ch. 3 - must be able to list five personal environmental factors that influence career decisions.
A/1	2/12	Read Ch. 1, Individual and Group Activities.	Test question - student must be able to differentiate between a job, an occupation and a career.
A/1	3/1	Read Ch. 3, 4. Individual and Group Activities. Lecture.	Test question - student must be able to list all the steps in decision-making process.
A/1	3/5	Read Ch. 1. Individual and Group Activities.	Test question - student must be able to state 5 reasons why career planning is important.
A/2	1/2	Read Ch. 2. Individual Project #1 & 2. Group discussion. Resource person discussing his reasons for working.	Accurate completion of Individual Project #1.
A/2	1/3	Read Ch. 2. Individual Project #2 and 1. Resource person discussing satisfactions obtained from work.	Test question - student must be able to list in order of importance 5 satisfactions he hopes to obtain from work.

\* Refers to Main Objective #1, Learner Outcome #1

\*\* Refers to Section A, Unit #1 in "Creating a Career"

Content Area	Learner Outcome	Process	Evaluation Procedure
A/2	2/1	Read Ch. 2, Individual Projects #1 & 2. Resource person discussion. Lecture.	Test on which the student must describe five reasons why people work.
A/2	2/13	Read Ch. 2. Individual and Group Activities.	Test question - student must be able to state 5 factors that contribute to worker satisfaction.
A/3	1/4	Read Ch. 4. Individual and Group Activities.	Test question - list three ways you might gather self-information.
A/4	1/5	Read Ch. 5. Individual and Group Activities.	Homework assignment - describe how at least five people have influenced your behavior, your thinking, your goals.
A/4	1/6	Read Ch. 5. Individual and Group Activities.	Examination of workbook assignment #4 - list three qualities that you value highly and one quality you want to change.
A/4,B/1	1/7	Read Ch. 5. Individual and Group Activities.	Examination of individual projects 2-5.
A/4,B/1	1/8	Read Ch. 5. Individual and Group Activities.	Examination of individual project #3.
A/4	1/9	Read Ch. 5. Individual and Group Activities.	Examination of individual project #4.
A/4	1/10	Read Ch. 5. Individual and Group Activities.	Examination of individual project #5.

Content Area	Learner Outcome	Process	Evaluation Procedure
A/4	1/11	Read Ch. 5. Lecture. Discussion.	Homework Assignment in which a student must: 1) state his goal; 2) give reasons for wanting to achieve his goal; 3) indicate "specific" actions he plans to take; and 4) indicate a time limit. Student must receive a minimum mark of 80% to be acceptable.
A/5	1/12	Read Ch. 6. Individual and Group Activities. Administer the I.C.O. and GATB and discuss results.	Accurate completion of the Work Activities Interests Checklist, the Index to Canadian Occupations and General Aptitude Test Battery.
A/5	1/13	Read Ch. 6. Individual and Group Activities. Administer the I.C.O. and GATB and discuss results.	Accurate completion of the Index to Canadian Occupations, the Data-People-Things Checklist, and General Aptitude Test Battery.
A/5	1/14	Read Ch. 6. Individual and Group Activities. Administer the I.C.O. and GATB and discuss results.	Accurate completion of the Index to Canadian Occupations, the General Aptitude Test Battery and the Environmental Conditions Checklist.
A/5	1/15	Read Ch. 6. Individual and Group Activities. Administer the I.C.O. and GATB and discuss results.	Examination of individual project #5.
A/5	1/16	Read Ch. 6. Individual and Group Activities. Administer the I.C.O. and GATB and discuss results.	Accurate completion of the Index to Canadian Occupations and the General Aptitude Test Battery.

Content Area	Learner Outcome	Process	Evaluation Procedure
A/5	2/9	Read Ch. 6. Individual and Group Activities.	Test question on which students will be asked to describe the various factors used in the C.C.D.O.'s.
A/6	1/17	Read Ch. 6. Individual and Group Activities.	Homework Assignment - Examination of students' work to insure proper completion.
A/6	1/18	Read Ch. 6. Individual and Group Activities. Review Units 2, 4, 5 ...	Examination of students' individual projects - "Ordering My Personal Descriptors".
A/6	2/10	Read Ch. 6. Individual and Group Activities. Review Units 2, 4, 5 ...	Examination of individual Project #2.
A/6	2/11	Read Ch. 6. Individual and Group Activities. Review Units 2, 4, 5.	Test on which the student must be able to answer correctly seven questions concerning the given profile.
A/7	2/2	Review Ch. 4. Individual and Group Activities. Completion of the Index to Canadian Occupations and the Kuder Interest Inventory.	Students must be able to list five occupational alternatives.
A/8	2/5	Read Ch. 7, 8. Individual and Group Activities. Tour of Career Information Centre.	Test question - Student must be able to identify seven sources of information on occupations.
A/8	2/6	Read Ch. 7, 8. Individual and Group Activities.	Examination of Group Project #1.

Content Area	Learner Outcome	Process	Evaluation Procedure
A/8	2/7	Read Ch. 7, 8. Individual and Group Activities. Lecture.	Test question - student must be able to list at least 15 different kinds of information that one needs to know when examining an occupation.
A/9	1/19	Read Ch. 9. Individual and Group Activities. Class Assignment - Why are your career plans right for you?	Examination of class assignment.
A/9	2/3	Read Ch. 9. Individual and Group Activities.	Examination of the information collected to see if it is accurate and in sufficient <u>quantity</u> .
A/9	2/4	Review Ch. 7. Full day observing the kind of work the student is interested in and completion of a work placement report.	Examination of student's work placement report.
A/9	2/8	Read Ch. 9. Individual and Group Activities.	Examination of Individual Project #1.
A/9	3/2	Read Ch. 9. Individual and Group Activities.	Examination of the written statement followed by individual interview.
A/9	3/3	Read Ch. 9. Individual and Group Activities.	Interview to assess students' progress in choosing a career.
A/10	3/4	Read Ch. 10. Demonstration of the use of calendars.	Self-rating by the student as to whether or not he knows how to use the post-secondary calendars.



Content Area	Learner Outcome	Process	Evaluation Procedure
A/10	3/6	Group Project - Determine the costs involved for a year of study at three of the post-secondary institutions in Newfoundland. Read Ch. 10 Demonstration of the use of calendars.	Test question - student must be able to state the approximate cost involved for a year of study at three of our post-secondary institutions.
A/10	3/7	Read Ch. 10. Lecture on <u>apprenticeship program</u> . Resource person from Newfoundland Manpower.	Test questions on which a student must receive a minimum mark of 75%.
A/10	3/8	Read literature supplied by the Student Aid Division. Complete Student Aid application form. Lecture.	Test questions on which a student must receive a minimum mark of 75%.
A/10	3/9	Tour of the Junior College at Corner Brook as well as the District Vocational School.	Student's self-estimate of his familiarity with both of the institutions.
A/10	3/10	Demonstration on how to complete <u>application forms</u> .	Examination of completed forms.
B/2	4/1	Read Ch. 2. Resource person from Canada Manpower.	Test question - student must be able to list five causes of job openings in a community.
B/2	4/11	Group Project #1. Lecture on Young Canada Works Program. Complete a Young Canada Works Application Form.	Examination of Young Canada Works Application form to assess its accuracy.
B/3	4/2	Read Ch. 2. Group Discussion.	Test question - student must be able to state at least five ways to locate a job vacancy.

Content Area	Learner Outcome	Process	Evaluation Procedure
B/6	4/3	Review Ch. 2. Individual and Group Activities.	Examination of student's list of at least five names, addresses and telephone numbers of people who might be able to help in a job search campaign.
B/10	4/4	Read Ch. 5, 9. Individual and Group Activities.	Résumé must be judged satisfactory by a local employer.
B/10	4/5	Read Ch. 5, 9. Individual and Group Activities.	The covering letter must be acceptable to a local employer.
B/12	4/6	Read Ch. 7. Individual and Group Activities.	Examination of completed application forms.
B/12	4/7	Read Ch. 7. Resource person from Canada Manpower. Completion of registration forms for summer employment.	Examination of registration forms by Canada Manpower Official.
B/12	4/8	Read Ch. 7. Individual and Group Activities.	Examination of the students' answers.
B/12	4/9	Read Ch. 10. Group Activities.	Instructor's observation of the role playing situation.
B/15	4/10	Read Ch. 12, 8. Group Activities.	Teacher's assessment of student's performance.

APPENDIX VI  
PROGRAM EVALUATION QUESTIONNAIRE

# APPENDIX VI

## PROGRAM EVALUATION QUESTIONNAIRE

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### PART I

- |   |                       |   |   |   |   |   |                       |
|---|-----------------------|---|---|---|---|---|-----------------------|
| 1. The classes are clearly and logically developed.           | Always                | 1 | 2 | 3 | 4 | 5 | Never                 |
| 2. Class discussions are a waste of time.                     | Always                | 1 | 2 | 3 | 4 | 5 | Never                 |
| 3. Individual projects are                                    | Very Helpful          | 1 | 2 | 3 | 4 | 5 | Not helpful at all    |
| 4. The teacher is covering the material                       | Too quickly           | 1 | 2 | 3 | 4 | 5 | Too slowly            |
| 5. The classes are  | Interesting           | 1 | 2 | 3 | 4 | 5 | Boring                |
| 6. The classes are  | Too teacher dominated | 1 | 2 | 3 | 4 | 5 | Too student dominated |
| 7. I learn from these classes                                 | Very much             | 1 | 2 | 3 | 4 | 5 | Very little           |
| 8. The subject matter or skills learned will be               | Very useful           | 1 | 2 | 3 | 4 | 5 | Useless               |
| 9. The amount of effort I put into these classes is           | A lot                 | 1 | 2 | 3 | 4 | 5 | Very little           |
| 10. I really find it hard to do all the work for this course. | Always                | 1 | 2 | 3 | 4 | 5 | Never                 |
| 11. If I were teaching this course I would                    | Change a lot          | 1 | 2 | 3 | 4 | 5 | Change nothing        |

### PART II

DISLIKES -- Things I found boring and not of much use.

LIKES -- Things I found interesting and want more of  
in these classes.

SUGGESTIONS -- for improving the course.

Students --

Teacher --

GUT REACTION -- how do you feel about the course, i.e.  
"I hate it", "I love it" . . .

APPENDIX VII  
DIARY REPORT

APPENDIX VII

DIARY REPORT

Topic - \_\_\_\_\_ Date - \_\_\_\_\_

1. Methods: Lecture \_\_\_\_\_ Class discussion \_\_\_\_\_  
Individual or group projects \_\_\_\_\_  
Other \_\_\_\_\_

Was the class clearly and logically developed?

Yes, 1 2 3 4 5 No, definitely not

Class discussion was useful.

Yes, 1 2 3 4 5 No, definitely not

Projects were helpful.

Yes, 1 2 3 4 5 No, definitely not

The class was too -

Teacher dominated 1 2 3 4 5 Student dominated

Comments: \_\_\_\_\_  
\_\_\_\_\_

2. Students' Interest:

Students seemed: very interested 1 2 3 4 5 bored

Comments on student interest: \_\_\_\_\_  
\_\_\_\_\_

3. Students' Perception of Usefulness of material presented:

Very useful 1 2 3 4 5 not very useful

Comments on students' perception: \_\_\_\_\_

\_\_\_\_\_

4. Students' Participation:

Students' level of participation was:

Very good    1   2   3   4   5    very poor

Comments: \_\_\_\_\_

\_\_\_\_\_

5. Explicitness of Program:

Very good    1   2   3   4   5    very poor

Comments: \_\_\_\_\_

\_\_\_\_\_

6. Difficulty in using Program:

Not difficult    1   2   3   4   5    very difficult

Comments: \_\_\_\_\_

\_\_\_\_\_

7. General comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



APPENDIX VIII  
COURSE EVALUATION QUESTIONNAIRE

# APPENDIX VIII

## COURSE EVALUATION QUESTIONNAIRE

Please answer the questions honestly and objectively.

NAME: \_\_\_\_\_  
(Optional)

### PART I

Please indicate to what extent you agree with the following statements:

S.A. - Strongly Agree      A. - Agree      Un. - Undecided

D. - Disagree      S.D. - Strongly Disagree

- |  |      |    |     |    |      |
|--|------|----|-----|----|------|
| 1. This course has enabled me to become more aware of my values.                                       | S.A. | A. | Un. | D. | S.D. |
| 2. This course has enabled me to become more aware of my interests.                                    | S.A. | A. | Un. | D. | S.D. |
| 3. This course has enabled me to become more aware of my abilities.                                    | S.A. | A. | Un. | D. | S.D. |
| 4. This course has enabled me to become more aware of my limitations in relation to the world of work. | S.A. | A. | Un. | D. | S.D. |
| 5. This course has enabled me to increase my knowledge of the world of work.                           | S.A. | A. | Un. | D. | S.D. |
| 6. This course has enabled me to explore careers which are of interest to me.                          | S.A. | A. | Un. | D. | S.D. |
| 7. This course has improved my knowledge of the occupational possibilities open to me.                 | S.A. | A. | Un. | D. | S.D. |

- |   |      |    |     |    |      |
|---|------|----|-----|----|------|
| 8. This course has improved my knowledge of the qualifications required for various jobs. | S.A. | A. | Un. | D. | S.D. |
| 9. This course has helped me to formulate a realistic career goal.                        | S.A. | A. | Un. | D. | S.D. |
| 10. This course has improved my decision-making ability.                                  | S.A. | A. | Un. | D. | S.D. |
| 11. This course has improved my knowledge of the educational possibilities open to me.    | S.A. | A. | Un. | D. | S.D. |
| 12. This course has improved my knowledge of how to apply and get a job.                  | S.A. | A. | Un. | D. | S.D. |
| 13. This course has helped me to plan my future.  | S.A. | A. | Un. | D. | S.D. |
| 14. This course should be given credit.   | S.A. | A. | Un. | D. | S.D. |
| 15. This course should be required for all grade eleven students.                         | S.A. | A. | Un. | D. | S.D. |

## PART II

Please rate yourself on the following statements:

- |  |             |   |   |   |   |   |             |
|--|-------------|---|---|---|---|---|-------------|
| 16. The amount of work I did for this course was | Very Great  | 1 | 2 | 3 | 4 | 5 | Quite Small |
| 17. The quality of my work for this course was   | Excellent   | 1 | 2 | 3 | 4 | 5 | Poor        |
| 18. My contribution to the class as a whole was  | Excellent   | 1 | 2 | 3 | 4 | 5 | Poor        |
| 19. I learned from this course                   | Very Much   | 1 | 2 | 3 | 4 | 5 | Very Little |
| 20. The things I learned will be                 | Very Useful | 1 | 2 | 3 | 4 | 5 | Useless     |

- |   |                |   |   |   |   |   |                    |
|---|----------------|---|---|---|---|---|--------------------|
| 21. The instructor's knowledge of the subject was   | Excellent      | 1 | 2 | 3 | 4 | 5 | Poor               |
| 22. The teacher expressed his ideas clearly.  | Always         | 1 | 2 | 3 | 4 | 5 | Never              |
| 23. The teacher was   | Over Confident | 1 | 2 | 3 | 4 | 5 | Too Unsure         |
| 24. Classes were clearly and logically developed  | Always         | 1 | 2 | 3 | 4 | 5 | Never              |
| 26. Classes were  | Stimulating    | 1 | 2 | 3 | 4 | 5 | Boring             |
| 27. Classes were  | Informative    | 1 | 2 | 3 | 4 | 5 | Wasteful           |
| 28. Group discussions were a waste of time  | Always         | 1 | 2 | 3 | 4 | 5 | Never              |
| 29. Individual projects were  | Very Helpful   | 1 | 2 | 3 | 4 | 5 | Not helpful at all |
| 30. The teacher covered the material  | Too quickly    | 1 | 2 | 3 | 4 | 5 | Too slowly         |
| 31. The text was  | Too difficult  | 1 | 2 | 3 | 4 | 5 | Too easy           |
| 32. The assignments were clear.   | Always         | 1 | 2 | 3 | 4 | 5 | Never              |
| 33. The number of assignments was   | Too great      | 1 | 2 | 3 | 4 | 5 | Too small          |
| 34. The assignments were  | Too difficult  | 1 | 2 | 3 | 4 | 5 | Too simple         |
| 35. The assignments were necessary (not busywork)   | Always         | 1 | 2 | 3 | 4 | 5 | Never              |
| 36. This course should be   | Continued      | 1 | 2 | 3 | 4 | 5 | Dropped            |
| 37. Please describe in your own words any kind of benefit you have received from this course. |                |   |   |   |   |   |                    |

38. Please make suggestions about how this course might be improved.

---

39. Do you feel there was enough time provided to cover this adequately? ☐ Yes ☐ No

Comments: 

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40. Do you feel there were enough materials provided to cover this course adequately? ☐ Yes ☐ No

Comments: 

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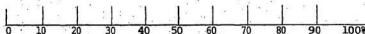
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41. Do you feel there was adequate space provided in order to conduct this course properly? ☐ Yes ☐ No

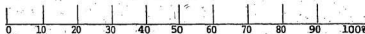
Comments: 

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42. Please estimate your level of satisfaction with the entire course.



43. Please estimate your level of participation for the entire course.



44. This course should be required of all grade eleven students.

YES ☐ NO ☐

Comments: 

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APPENDIX IX  
CAREER KNOWLEDGE QUESTIONNAIRE - SCORING KEY

## APPENDIX IX

### CAREER KNOWLEDGE QUESTIONNAIRE - SCORING KEY

Question: 1. People rarely get what they want through "wishful thinking". They get what they want by taking active steps in pursuit of their goals. For example, you can learn to control your temper if you really try hard enough. Give an example of a realistic goal that you would like to achieve and say how you would go about doing it.

Points: One point will be given for each of the following which is included in a student's answer:

- stating a goal
- reason(s) for wanting to achieve goal
- specific action(s) to achieve the goal
- time limit imposed on when the action(s) will be completed

Maximum score: 4

Question: 2. What do you plan to do after completing high school?

Points: Not applicable

Maximum score: Not applicable

Question: 3. If you have career plans, please state why you feel they are the right ones for you.

Points: One point will be given for each of the following which is included in a student's answer:

- reference to student's values
- reference to student's interests
- reference to student's abilities
- reference to student's limitations

Maximum score: 4

Question: 4. List the different jobs that you feel may be available for you upon completion of your schooling.

Points: One point for each job named up to a maximum of five.

Maximum score: 5

Question: 5. List the different kinds of information that you need to know when examining the kind of job you would like to do.

Points: One point for each of the following that was included in a student's answer:

1. Income
2. Preparation Required
3. Advancement Opportunities
4. Name of Occupation
5. Titles - other
6. Licensing Requirements
7. Organizations or Associations in the field
8. Working Conditions
9. Working Time
10. Duties Performed
11. Qualifications
12. Sex
13. Social Requirements
14. Special Skills
15. Tools - special
16. Age Limits
17. Mental Requirements
18. Moral Requirements
19. Physical Requirements
20. Physical Activities

Maximum score: 20

Note: Question number 5 was scored after question number 6 had been scored. If the student included in number 6 something that was not stated in number 5 then it was counted towards the score in number 5.

Question: 6. Use this list (in #5) and tell all you can about two of the jobs which may be available for you upon completion of your schooling.



**Points:** One point for each of the following kinds of information included in the answer:

1. Income
2. Preparation Required
3. Advancement Opportunities
4. Name of Occupation
5. Titles - Other
6. Licensing Requirements
7. Organizations or Associations in the field
8. Working Conditions
9. Working Time
10. Duties Performed
11. Sex
12. Social Requirements
13. Special Skills
14. Tools - special
15. Age Limits
16. Mental Requirements
17. Moral Requirements
18. Physical Requirements
19. Physical Activities

**Maximum score:** 19 points per job; total - 38 points.

**Question:** 7. What steps are involved in making a good decision about the kind of work you would like to do upon completing grade eleven?

**Points:** One point for each of the following ideas expressed in a student's answer:

1. Self-appraisal
2. Exploring and studying occupations
3. Establishing a timetable for collecting information
4. Anticipating problems that might arise
5. Reviewing plans and progress

**Maximum score:** 5

**Question:** 8. Explain the difference between a job, a career and an occupation.

**Points:** One point for each of the following that is correctly defined:

job - a specific position a person holds in a factory, institution, company or organization.

occupation - a group of similar jobs;  
 career - the course a person takes as  
 he progresses through life.

Maximum score: 3

Question: 9. Why is career planning (thinking seriously about what you would like to do) important in determining what your future will be like?

Points: One point for each of the following ideas that is included in a student's answer:

1. Career planning can help you "prepare to make decisions".
2. Career planning can help you develop more "confidence" in yourself.
3. Career planning can help you find "more meaning" in your present activities.
4. Career planning can make it easier for you to "recognize good opportunities" when they are encountered.
5. Career planning can help you determine "what you must do 'now' in order to later get what you want".
6. Career planning can help you discover what you must prepare for at each new stage in life.

Maximum score: 6

Question: 10. Name the different degree programs available at Memorial University of Newfoundland.

Points: One point for each of the following programs specified.

- |                 |                            |
|-----------------|----------------------------|
| 1. Nursing      | 2. Business Administration |
| 3. Engineering  | 4. Education               |
| 5. Science      | 6. Physical Education      |
| 7. Pre-Forestry | 8. Arts                    |
| 9. Social Work  | 10. Music                  |
| 11. Medicine    |                            |

Maximum Score: 11

Question: 11. What are the educational requirements (Grade XI subjects) a person must have before he

can be accepted at Memorial University?

**Points:** One point if the answer contains the following:

A pass in English, Mathematics, and Science plus two other subjects.

**Maximum Score:** 1

**Question:** 12. At least how many years (2 semesters = 1 year) must a person study at Memorial University before he obtains a degree?

**Points:** One point if the student gives the correct answer - (4 years).

**Maximum score:** 1

**Question:** 13. Name the "technology" courses offered at the College of Trades and Technology in St. John's.

**Points:** One point for each of the following programs specified:

1. Civil Engineering Technology
2. Forest Resources Technology
3. Electrical Technology
4. Electronics Technology
5. Surveying Technology
6. General Laboratory Technology
7. Medical Laboratory Technology
8. Pharmacy
9. X-ray Technology

**Maximum score:** 9

**Question:** 14. At least how many years must a person study a "technology" course at the College of Trades and Technology in St. John's?

**Points:** One point will be given for the correct answer - (2 years).

**Maximum score:** 1

**Question:** 15. Name the trade courses offered at the District Vocational School in Corner Brook.

**Points:**

One point will be given for each of the following courses indicated in the student's answer:

1. Barbering (2)\*
2. Beauty Culture (2)
3. Brick laying (4)
4. Carpentry & Joinery (4)
5. Construction Worker (1)
6. Drafting (Basic) (1)
7. Electrical (Basic) (4)
8. Electronics (Basic) (1)
9. Millwright (4)
10. Motor Vehicle Repair - Body (4)
11. Motor Vehicle Repair - Mechanical (4)
12. Plumbing and Heating (5)
13. Welding (3)
14. Stenographer (dicta-typist) (1)
15. Bookkeeper Clerk (1)
16. Typist (1)
17. Clerk Accountant (1)
18. Stenographer (shorthand-typist) (1)
19. Clerk-typist (1)
20. Secretarial Science (2)

\* refers to training time 1-5 years

Maximum score: 20

Question: 16. For three of the trades you named in #15 above state the length of time a person must train in order to become a "qualified" tradesman.

**Points:** One point for each correct answer.

Maximum score: 3

Question: 17. Explain what is meant by the apprenticeship program.

**Points:** One point for each of the following included in the answer:

- reference to the "pre-employment apprenticeship courses" offered at Vocational Schools
- "on the job training"
- "under the supervision of an experienced tradesman"
- "in school training"

- indication of a number of years before reaching journeyman status
- indication that student may complete his first year of the apprenticeship at a Vocational School

Maximum score: 6

Question: 18. Name the "technology" programs offered at the College of Fisheries in St. John's.

Points: One point for each of the following courses mentioned:

1. Food Technology
2. Mechanical Engineering Technology (Marine Engineering)
3. Mechanical Engineering Technology (Power Engineering)
4. Electrical Engineering Technology
5. Electronics Technology
6. Nautical Science (Merchant Marine)
7. Nautical Science (Fishing Technology)
8. Naval Architecture

Maximum score: 8

Question: 19. What is the minimum number of years a person must study a "technology" program at the College of Fisheries in St. John's?

Points: One point given for correct answer - (3 years)

Maximum score: 1

Question: 20. Aptitudes form a very important set of characteristics that you must consider in choosing an occupation; aptitudes are your abilities to perform skills that are needed in different occupations, for example, a secretary must have a certain amount of finger dexterity or the ability to move the fingers rapidly and accurately. What are some other aptitudes that may be required in different occupations?

Points: One point for each of the following aptitudes mentioned in a student's answer:

1. Heading (name, address, telephone number)
2. Job Objective
3. Education and Training
4. Work Experience
5. Personal Details
6. References
7. Other Relevant Facts

Maximum score: 7

Question: 25. Why is it a good idea to prepare a personal résumé for an employer?

Points: One point for each of the following ideas expressed in a student's answer:

1. It gives a prospective employer the facts about you when you apply for a job.
2. It is the indispensable, number one job-hunting tool.
3. The résumé gives you a chance to emphasize different experiences you have had. You may have certain abilities and interests that would be most beneficial to an employer; the résumé provides you with an opportunity to bring these to his or her attention.
4. By attracting the attention and curiosity of the person considering your application for a job, you will increase your chances of being called for an interview.

Maximum score: 4

Question: 26. What are some of the different reasons why people work?

Points: One point for each of the following ideas expressed in a student's answer:

1. Work "regulates" life's activities.
2. Work provides us with a sense of achievement.
3. Work provides us with an identity.
4. Work provides us with an outlet for our interests and aptitudes.
5. Work provides us with an opportunity to fulfill our social needs.

1. General Learning Ability
2. Verbal Aptitude
3. Numerical Aptitude
4. Spatial Relationships
5. Form Perception
6. Clerical Perception
7. Motor Coordination
8. Manual Dexterity
9. Eye-hand-foot Coordination
10. Colour Discrimination

Maximum score: 10

Question: 21. List as many of "your" aptitudes or abilities as you can.

Points: One point for each aptitude or ability specified up to a maximum of 5.

Maximum score: 5

Question: 22. Give examples of jobs that you feel match your abilities and interests.

Points: One point for each job named up to a maximum of 5.

Maximum score: 5

Question: 23. What is a personal résumé?

Points: One point if the answer conveys the following meaning:

- A concise summary of all the information about you that will interest an employer - education, work experience, personal details and references.

Maximum score: 1

Question: 24. Outline the different kinds of information that need to be included in the construction of a personal résumé.

Points: One point for each of the following items mentioned:

6. Work provides economic benefits that enable us to survive physically.
7. Work provides us with a sense of usefulness.

Maximum score: 7

Question: 27. What factors contribute to worker satisfaction?

Points: One point for each of the following ideas expressed in a student's answer:

1. Job security
2. Good human relations
3. Opportunities for advancement
4. Wages
5. Good working conditions

Maximum score: 5

Question: 28. What are the different ways that you could gather information on yourself to be used in making a career decision?

Points: One point for each of the following ideas expressed in a student's answer:

1. By talking with people who know you well.
2. By taking certain tests and inventories.
3. By surveying your life's activities.

Maximum score: 3

Question: 29. What are the different ways you could locate a job vacancy?

Points: One point for each of the following which are specified in a student's answer:

1. Answering advertisements
2. Public or private employment agencies
3. School Placement Offices
4. Making personal contacts
5. Canvassing employers by telephone, by letter, or by calling on them in person.

Maximum score: 5



Question: 30. Have you had the opportunity to explore the possibility of creating your own job?  
Answer this question with a yes or no in the booklet provided.

Points: One point if student checked "Yes".

Maximum score: 1

Question: 31. Describe the Young Canada Works Program.

Points: One point for each of the following ideas that are underlined:

The Young Canada Works Program is designed to reduce student summer unemployment by enabling established organizations to sponsor employment generating projects in areas of community need.

Maximum score: 4

Question: 32 Give examples of how you might create your own job.

Points: One point for each example given up to a maximum of 5 points.

Maximum score: 5

