

THE TRANSITION FROM SCHOOL TO THE  
WORKPLACE: A STUDY OF STUDENT  
PERCEPTION OF POST-SECONDARY EDUCATION  
AND THE NEWFOUNDLAND EDUCATION SYSTEM

CENTRE FOR NEWFOUNDLAND STUDIES

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ROBERT C. W. HALLIDAY









THE TRANSITION FROM SCHOOL TO THE WORKPLACE:

A STUDY OF STUDENT PERCEPTION OF,  
POST-SECONDARY EDUCATION AND THE  
NEWFOUNDLAND EDUCATION SYSTEM

by

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## ABSTRACT

In modern society the educational system has become an integral part of the social order and has formed into a structure which is constantly changing to meet the needs of society. In the process of education, there is great expectation placed upon the system by the community, by the labour market, and by the individual.

This thesis is designed with several purposes in mind. These are to show: (1) that many students in Newfoundland are entering post-secondary educational institutions only to earn credentials without being aware of the requirements of the work place; (2) that educational institutions have historically adapted to the requirements of the labour market needs; (3) that educational institutions can be molded to meet the demands for human resource requirements of the labour market and society; and (4) that there is need to change the post-secondary education system in the Newfoundland to overcome existing problems.

The objectives of the study are to collect data to investigate the ideas: (1) that students in the province may be entering post-secondary institutions without having prior exposure to the labour market in their field of study, and (2) that the implementation of the existing Career Education course programme at the high school level may have had little appreciable effect on student's

perception of post-secondary education.

This thesis proposes that the school system in Newfoundland consider changes in its structure in order to place less emphasis on credentials and greater emphasis on movement into the labour market. It is also suggested that the labour market should take greater responsibility for employee training and human resource management.

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## CHAPTER 1

### INTRODUCTION

It appears from general observation that students are having difficulty moving from post-secondary training institutions to the work place. Recent economic difficulties have presented a high degree of unemployment, but unemployment itself is not the key issue. High levels of unemployment have shed light on difficulties presently being experienced by people attempting to use post-secondary education as a pathway to an occupation. Students are investing large amounts of time, work and money to gain academic qualifications to place them in a career field, but they often find that the investment does not fulfill their career expectations.

Many students who find employment after completing post-secondary education enter jobs which do not utilize this training obtained. Statistics Canada reports figures which demonstrate that significant numbers of post-secondary school graduates enter occupations unrelated to their training. There seems to be widespread concern among young people entering into job competition that post-secondary training without related work experience is a definite disadvantage.

### The Problem and Purpose

This thesis has several purposes. These are to show: (1) that many students in Newfoundland are entering post-secondary educational institutions only to earn credentials without being aware of the requirements of the work place; (2) that educational institutions have historically adapted to the requirements of the labour market needs; (3) that educational institutions can be molded to meet the demands for human resource requirements of the labour market and society; and (4) that there is need to change the post-secondary education-system in the province.

These problems have broad social ramifications. Firstly, a significant amount of government funding is invested in implementing post-secondary training programmes, and inefficient use of this training would mean a waste of tax dollars. Secondly, the creation of large amount of unused highly trained labour is a waste of this country's human resources. These sentiments have been expressed as a concern by past Prime Minister Trudeau.<sup>2</sup>

The theoretical significance of these problems is drawn from the structure and purpose of schooling as developed by such authors as Katz (1968), Crowley (1964), and Mann (1967); the concept of a national human resource as outlined by such authors as Hertzberg (1966), Ginzberg

(1958), Berg (1970), and Thurow (1972); the structure of the labour market as viewed by such authors as Staley (1971), and Walker (1980); and the study of the role of learning in today's society by such authors as Thomas (1983), Rebenson (1983), and Adams (1983). Their's and other scholars' research will be reviewed later in Chapter Two.

### Objectives

The objectives of the study are to collect data to investigate the ideas: (1) that students in the province enter post-secondary institutions primarily to attain credentials rather than necessary skills required in the work place; and (2) that the implementation of Career Education in the Newfoundland secondary school system has created an appreciable change in student's perception of post-secondary education. An interpretation of this data is made to evaluate the effectiveness of post-secondary educational institutions in Newfoundland to produce trained personnel compatible with the requirements of the labour market.

In order to achieve these objectives, data is collected and analyzed. The data is collected through the circulation of a questionnaire within selected populations of post-secondary students at Memorial

University, the Cabot Institute, the Marine Institute, and the District Vocational Schools. The study also draws upon secondary documentation of studies conducted on post-secondary graduates in Canada to show how students' perceptions and choice of post-secondary educational programmes fit into the general scheme of the Nation's labour market.

### Organization

The introductory chapter outlines the problem to be studied and its theoretical significance have been discussed. A brief discussion of methodology to be used for the developing data and the procedures used for collecting data are presented.

Chapter Two reviews existing literature and documentation necessary to establish the theoretical basis from which the study evolves. The chapter deals with four structural areas and is therefore organized accordingly into four sections.

The first section examines the actual structure of schooling as developed from an historical perspective. This expounds the idea that school is a fairly amorphous structure and thus a system which can be remodelled, redesigned, and remolded to better serve the society which supports it. This leads to the idea that the

educational system changes to meet demands placed on it by society to produce a required product..

The second section examines the development of the concept of a nation's manpower being a resource, which has significant economic implications for the labour market, and the country. The historical approach to the development of the concept of the labour force as a human resource lends itself to further consideration of the importance of matching the product of education with the demands of the work place.

The third section views labour and manpower from the perspective of the employer. There is documented support for the fact that the concept of the worker and employee worth has undergone and is undergoing a significant change in terms of the value of a trained labour supply. The value of a trained labour supply to the work place, is an important ingredient in allowing a comprehensive understanding of the problems relating to the interaction between the labour market and the post-secondary educational institution.

The fourth section of chapter two reviews several contemporary views on trends and developments in post-secondary education. These trends and developments are reviewed in terms of a life-long approach which the educational system might take to overcoming inherent problems with the relationship between schooling and work.



Chapter Three provides an overview of the approach taken towards career development and training in Newfoundland. This information is separated into two sections. The first outlines the public secondary educational programmes and examines the role of career education courses and career counselling programmes. Specific reference is made to high school students making career decisions and choosing between post-secondary education alternatives. The second section outlines public post-secondary education alternatives provided in the province, and thereby establishes a base for discussion of the problems studied.

Chapter Four outlines the methodology of the study conducted to determine student's perceptions of their aims in post-secondary education and to determine the degree to which students establish contact with the labour market by the first year of their post-secondary training programme. A questionnaire is used to gather information from a sample of post-secondary students.

The study surveys two groups of students at Memorial University: the first group represents a sample of first year students surveyed in April 1984 and the second group represents a sample of first year students surveyed in April 1985. The first year students in April 1984 represent graduates of the high school system before implementation of grade twelve, and the first year

students in April 1985 represent graduates of the restructured high school programme which included grade twelve. The study, in November 1985, also surveyed groups of first year students registered in the Cabot Institute, the Marine Institute, and a sample number of Vocational Schools.

Chapter Five outlines the observations made and discusses these findings in terms of the changes found in responses of students who (1) entered Memorial University both before and after the restructuring of the high school programme, and (2) the responses of students in various post-secondary school programmes in 1985. The responses are reviewed in terms of the percentage of students who perceive themselves to be working towards academic qualifications for specific careers and who have established contacts with the labour market.

Chapter Six concludes the study by providing a summation of the findings and discussing these in terms of their implications on the present structure of the educational system in Newfoundland. This chapter clearly states the problems as observed and provides some suggestions on how these problems can be resolved.

The questionnaire, footnotes and bibliography are presented at the end of this thesis.

## CHAPTER 2

## REVIEW OF LITERATURE

This chapter includes the study of literature pertaining to the structure of the school system in North America, the concept of a nation's work force as a human resource, the relationship between the school and the work place, and contemporary trends in the concept of post-secondary education.

The purpose of the review of the historical development in the relationship between the school and the labour market is to identify the interdependency between education and employment; to show how the needs of the labour market can influence the educational system; and to supply the information necessary to view this relationship in terms of what is presently happening in post-secondary education.

The Structure of Schooling

Educationalists, such as Pierre Bourdieu (1973: 72-73), suggest that the educational system is controlled by certain classes who influence policy decisions and policy development. A great deal is learned from an examination of the influence of the class structure on education and an analysis of the reasons for change, and

the results of those changes on the structure of education. From this perspective, it is possible to understand the mechanics of policy-making in education and to postulate how education can be designed to best serve the community and the individual.

Changes in the structure of education inevitably demonstrate the interaction between the school and society. This is seen by highlighting some of the more significant developments in education and analyzing these developments in terms of the factors contributing most significantly to those changes.

For example, before the Industrial Revolution, man's life was controlled predominantly by his need to cultivate the soil and raise animals. This subsistence way of life required young people to learn the skills of planting crops and raising domesticated animals directly through participation. This process of learning is referred to by Katz (1968: 4) as "mass popular education". Learning from the family had few deficiencies in terms of education, however, the process quickly changed as the Industrial Revolution affected the social, cultural and economic life of society in the United States and subsequently in Canada.

As industrial growth spread through North America, several significant changes altered the structure of society: in response to the building of factories, the population began to concentrate in urban centres; rapid

immigration of workers resulted in a multicultural influence on the population; large amounts of wealth began to accumulate; and a more clearly defined class system developed. Katz (1968: 40) indicates that children of upper-class families did not need to work, and as their parents could afford the privilege of education, private schools began to emerge. However, education for working-class children would not begin to gain its place in North America until the mid-nineteenth century.

Katz (1968: 36-40), a strong advocate of understanding the evolution of education through an historical analysis of social goals and social forces, points out that by 1880 American education had acquired the functional structure which exists today. Early American society was characterized by a cultural plurality and had difficulty adapting traditional organizational arrangements which applied to a single cultural society.

Katz (1968: 45) indicates that the development of the high school during the late nineteenth century was seen as a solution to community problems, since promoters claimed that the school would serve as an agent of community civilization by raising cultural and social unity. School reform, especially high school reform, was seen as an innovation directed towards urbanizing and industrializing communities. He states that:

The high school was simultaneously to foster mobility, promote economic growth, contribute to community wealth, and save towns from desintegrating into an immoral and degenerate chaos. (Katz, 1968: 45)

This means that the development of the school is based on the aim of the individual towards upward social mobility and the requirements of society for urbanization and industrialization.

Spring (1972: 3) identifies the growth of urban areas and the development of cities as highly organized social and economic structures as the major factors contributing to the development and organization of the school system. The author points out two main reasons why this occurred: (i) the increased diversity in students' cultural background required schools to prepare them to co-operate with each other; and (ii) education was seen as an institution working with other institutions to prepare students for the work force. Spring sees the evolution of education in relation to what he calls the "development of a factory-like system in the nineteenth century school room" (Spring, 1972: 45), a concept of society where relationships were to center on large-scale organizations. Towards the later part of the nineteenth century and early twentieth century, the population of urban centres grew to the point where municipal governments were in virtual chaos. The tentative solution to this disorder was the

perpetuation of the corporate concept through the emergence of the union and the monopoly as forms of corporate organization. Popularity of the idea of corporate organization placed the interests of the individual subordinate to the interest of the group.

Croly (1964: 101), in his book The Promise of American Life, recognizes that by the twentieth century the corporate organization had altered social relationships in American society. Individualism, according to Croly, was to take a new direction. No longer would individualism mean the pursuit of economic gain by the individual but rather the training of an individual for a specialized task performed for the good of the corporate organization within society. From the perspective of education, members of the society required specialized training for future occupations, and cooperative training in terms of expanded programmes in extra-curricular school activities. The consequence of the ideology of the corporate state on education was the eventual development of the junior high school, the comprehensive high school, and vocational guidance counselling. The structure of society was changing and education was changing to meet new needs.

Croly (1964: 399-405) states that by the latter half of the nineteenth century the inter-relationship between education and community prosperity and social mobility was well-recognized. It is indicated that the demand for

educated workers was becoming so great by the late 1800's that many boys were offered jobs before they had finished school. Education was regarded as a necessity for social mobility, particularly among the lower-class parents who felt they lacked the capital or influence which could be used in place of schooling. Furthermore, the acceptance of the idea that schooling was a public responsibility meant that the financial burden of educating children fell with society and not with the individual.

Green (1972: 19) cautions against thinking of the school in the legacy which he terms "The Great American Legend". He states that:

Throughout the nineteenth century there was a fight for, and eventual acceptance of, the establishment of a public school system which stressed professionalism and credentialism--and there is a danger in conceiving the structure of the developing educational system in terms of all citizens being democratically equal. (Green, 1972: 19)

Contrary to the legend of equality, Green takes the point of view that by the end of the 19th century, society was going through a quiet revolution. A social middle-class was forming and the education system was shaped to reinforce this class distinction. Green points out that the public school reflected the values and attitudes of a dominant white middle-class which had emerged as a result of urban industrial enterprise. The exclusive attitudes of this class fostered racial, ethnic and cultural discrimination.



As the twentieth century progressed, the education system, that had been developed within the developing capitalistic system, grew at an astounding rate. Figures presented by Trow (1975: 119) indicate that the number of students attending public schools increased substantially between 1910 and 1970. The author demonstrates that in the United States the school attainment level of four years of high school or more increased from less than 15% in 1910 to over 55% in 1970. Also the attainment of four years of college or more increased from 2.5% in 1910 to approximately 12% in 1970.

Green (1972: 55) states that it was not until the early 1940's that the demand for secondary school graduates began to lower and college enrollment started to increase significantly. When college enrollment began to rise, the trend closely followed the increased enrollment in high schools from 1880 to 1930. He points out that the reason for this is two-fold: firstly, the labour market was now being swamped with a supply of high school graduates and completion of high school did not offer the job promises that it had previously; and secondly, during the Great Depression of the 1930's unskilled labour was the first to be unemployed and remain unemployed. According to Green, the whole labour force had been upgraded, particularly among middle-class youth whose ambition was to strive for upward career mobility through higher placement in the corporate

hierarchy.

Karier (1973: 24-25) observes that by the late 1900's the economic community was creating a demand for workers with higher educational achievement, and more and more people were choosing to further their education with the aim of winning job competitions. He further points out that schools changed from the goal of educating for personal growth to becoming holding institutions for the economic community. He states:

Education requirements are usually grossly inflated. They are concocted more in the interest of controlling labour supply than in satisfying job requirements. (Karier, 1973: 24)

The involvement of the United States in World War II resulted in dramatic changes in the social and economic structure of the nation, and this process consequently affected education. Levitan (1972: 92) observes that recruiting procedures during war time brought to light the fact that a significant number of the American work force was functionally illiterate. This was an astounding realization because there was no demand for unskilled labour and skilled and semi-skilled labour was in great demand. It was clear that there was an imbalance between the product of education and the demands of the labour market. Because of the high rate of unemployment, national manpower policies were implemented to limit the number of immigrants, encourage

the growth of education, and improve social welfare.

During the post-World War II period there was still a need for stringent national controls in the training of manpower. Ginzberg (1971: 27/40) indicates that the demand for labour was again on the increase because of a decline in the birth rate during the depression and because of the casualty losses sustained during the war. Technology had advanced significantly during the war period at a time when the number of students entering and graduating from college declined. This led to a serious shortage of professionally trained personnel such as engineers and scientists. The strong demand for qualified people at a time when the American Federal Government was emphasizing education programmes to increase the level of literacy in the country, resulted in education becoming even more significant as an agent of upward social mobility. Education during the post-war period, transformed from a minor to a major credential for employment.

To summarize, education is too often thought of in terms of a fixed structure which provides a standardized service to society, whether the structure of society is static or not. Selected review of the literature pertaining to the development of the structure of schooling shows that the education system takes a form which is never constant, but which is constantly being shaped and reshaped by the demands of society. It is

because education changes in this way, that society's demands for specific human resources are established and met.

Now that it has been established that the educational system responds to society's labour and other needs, the following section continues by outlining the relationship between the school and the labour market through several major historical periods, including: The Industrial Revolution, The Great Depression, World War II, and the post World War II era. Changes in the economy and technology of these periods demonstrate how society's needs for new human resource requirements translate into demands being placed on the education system to produce the desired product.

#### National Manpower as a Resource

The study of the selected literature pertaining to national manpower reveals that after the 1930's the American society took a serious look at the value of the nation's working force, and new importance was given to national policy for ensuring proper maintenance and control of this resource. Specific attention is given here to how the relationship between the product of the school and the demand of the labour market has economic effects on the country. The purpose of this exercise is

to introduce the importance of maintaining a balance between the product of education and the demands of the labour market, and this should exemplify the seriousness of the situation where an imbalance is identified.

One of the major factors contributing to the change in approach taken towards the worker by economists was the mass developments made in the field of psychology (Herzberg, 1964: 3-7). The amalgamation existing between economics and psychology influenced the economist's thinking concerning views on potentialities of education and training, and consequently the acquisition of skills, talent and competence. Modern thinking viewed the worker as an individual with the ability to learn, adjust, and cope with changing conditions and requirements. The new theory recognized man's competence as resting with the opportunities encountered to become educated and trained, rather than with his genetic potential. With this change in perspective, economists began to view labour as having a potential which translates into the ability to influence the output of capital investment and production.

While the view on the labour potential was changing, so was industry. Factories grew larger and work became increasingly diversified and specialized. The automobile industry was leading with new trends in labour, such as the production line, and the movement was underway for workers to become organized. As industry required large

numbers of technically skilled workers, there was an increasing need for schools and specialized training institutions to provide the necessary training. As Ginzberg points out:

How far a man can go in society will increasingly be determined by his education and training. This is largely determined before he starts to work. But this initial preparation need not be the sole determinant (1966: 234).

It is this change in perspective which contributed most to viewing the work force as a human resource and consequently to the rise of human resource management as a functional discipline within the work place.

Ginzberg (1958: 13) points out that World War II was perhaps the key factor involved with the United States recognizing the need to develop a national manpower policy. During war time the demand for large numbers of effective soldiers awakened the country to the danger of neglecting its human resources. This led to the startling discovery that a large number of the American work force was illiterate, and this illiteracy resulted in the loss of a significant human resource potential. The Great Depression of the 1930's also had an effect on the demand for soldiers: during the depression it was increasingly difficult to support a family; this caused a decrease in the number and size of families leading to an overall decline in population. From an analytical viewpoint, the nation would no longer consider manpower

resources as unlimited. It was decided that a country's manpower must be considered a national responsibility, so the United States was forced to implement national policy which was designed to enhance the nation's human resource potential.

Ginzberg (1958: 25) states that because of high unemployment rates, a policy was developed to limit the number of immigrants allowed to enter from most countries. There were strong encouragements for education from government and volunteer groups, since both Federal and State governments in the United States were directing large amounts of funds to the construction and extension of schools. Canada, according to Martin (1978: 24), was doing the same. Significant advancements were being made in establishing social welfare programmes, such as pension and welfare programmes, medical care programmes, and working population injury and exploitation programmes.

Government began to place an emphasis through national policy on manpower rather than capital. This perspective was useful in planning manpower requirements for the military during World War II, since it was important at the time to maintain a proper balance between manpower used for military, and civilian manpower retained for production. It was not until 1943 that the nation realized manpower resources were not unlimited and care had to be taken in how the resource was utilized

(Ginzberg 1958: 28). Because they had to maintain production during the war years, many companies were alerted to the importance of planning ahead to cover skilled manpower requirements. This emphasized the importance of proper personnel planning, since training sub-professional employees lessened the demand for professional personnel, and it was important to be able to maintain production while using fewer professionally trained workers.

Developments in the labour market clearly showed the effect of public administration on modern economics. As programmes were developed it became clear that it was important to avoid making decisions which created mismatches between manpower demand and supply. Long term manpower supply and demand forecasts were required by government departments for decision making, and this resulted in welfare and education programmes requiring assessment of demographic manpower requirements, in order to ensure a supply of trained personnel when and where they were needed. This ensured a proper balance over an extended period between the service provided by workers and the manpower needed to give these services.

The American Federal Government led the way by conducting significant studies during the 1950's which were influential in changing the concept of the nation's manpower resources. The new concept of the labour force emphasized that manpower was a limited resource and



proper utilization of human resources was essential for the well-being of the country. The impact of Adam Smith's book, The Wealth of Nations, was felt after almost two hundred years.<sup>3</sup> The concept of a nation's manpower resources was changing, and education was playing an increasing role in maximizing human resources potential.

Also significant to the change in approach taken by economists towards workers, was a development in the structure of organized labour during the 1950's (Ginzberg 1958: 45-58). As a direct result of the labour movement of the 1930's, post World War II labour was more union controlled, and this resulted in the evolution of labour-relations systems. As employee-management relations took a strong hold on salary negotiations, the capitalists began to lose direct control of salary rates and compensation rates, and this increased the cost of labour. With labour costs increasing, the profit margins were largely controlled by competitiveness in the markets, thus there was no alternative but to decrease production costs. Industry worked towards lowering production costs by implementing technical innovation, which were geared towards decreasing labour manpower requirements. The education system responded to the rapid change occurring in the labour market by emphasizing education as a form of investment. The underlying assumption was that the investment of time,

money and effort in learning would reap high financial rewards for the individual and an increased Gross National Product for the country. These assumptions led to what Blaug (1967: 57) terms the concept of education as a human capital formation.

The immediate response to this trend of thought was an enormous increase in participation in post-secondary education in both the United States and Canada. Canada was affected as directly by the Depression and the World Wars as the United States, so educational trends applied in Canada as to the United States. A study, conducted by Zsigmond and Wenaces (1970: 41) on school enrollment, found that the enrollment for all forms of post-secondary education in Canada increased from 10,000 in 1951-52 to 372,000 in 1967-68. Statistics Canada states that full-time enrollment in Canadian universities increased during the 1960's from 114,000 to over 350,000. The increase, in part, was certainly due to the increase in the number of children reaching secondary school age; however, Martin (1978: 166) suggests that the increase in population contributed only partially. Martin reports that in the early 1950's only 46 percent of those in relevant age groups attended secondary school, whereas fifteen years later there was a 40 percent increase in this enrolment ratio to 86 percent.

Another response to the view that human resources were capital resources was an increased effort by

governments to build new facilities. Statistics Canada reported a total of twenty-nine Canadian institutions of technology with an overall population of 9,000 students in 1960-61, increased to a total of one hundred and thirty community colleges and related institutions with a total population of 134,000 students in 1970.<sup>5</sup>

Governments further encouraged people to attend post-secondary education, not only by increasing accessibility, but also by encouraging people to attend by providing financial incentives. Through such programmes as the Technical and Vocational Training Assistance Act, students were paid a bonus for attending training centres. In some Canadian universities such as Memorial University of Newfoundland, students were offered free tuition and given a monthly payment to cover housing and related costs.<sup>6</sup>

One of the strong advocates in support of such investment in human capital was Theodore Schultz (1961). Schultz (1961: 2-3) points out that the countries, which have demonstrated production superiority and have advanced technology, have done so because of their investment in education. This stems from the fact that the development of human resources through the acquisition of knowledge and skill has resulted in an increase in the economic worth of the country. Another argument presented is that the observed decrease in capital income ratio can only be due to the human

capital. Schultz states:

If we accept the not implausible assumption that the motives and performances of people, the technical opportunities open to them, and the uncertainty associated with economic growth during particular periods were leading people to maintain roughly a constant ratio between all capital and income, the decline in the estimated capital-income ratio is simply a signal that human capital has been increasing relatively not only to conventional capital but also to income (1961: 15).

More clearly stated, the author seems to be suggesting that non-human capital alone cannot account for the rate of economic growth and that the only alternative factor is human capital. Perhaps the stronger argument presented by Schultz is associated with the rapid increase in real earnings during recent times. This, he contends, can only result from an increasing emphasis being placed on human capital.

Massimo Paci (1973: 10), who takes a different view, is quick to point out that a developing economy does not necessarily require an increase in skilled personnel. This is illustrated by the effective use of semi-skilled and unskilled personnel to maintain high production during World War II, when most of the skilled manpower was overseas. The author also pointed out that the labour market cannot absorb highly educated manpower indefinitely without an eventual overflow in the labour market. The school, he contends, is more responsible for balancing the demand for skilled labour through selective

schooling than for responding to pressure for mass schooling of the working class.

There are those who contend that the increasing demand for skilled labour is purely a fabrication of the labour market to select personnel from a queue of trained workers. For example, Berg (1970: 37-40) feels that the education system has supplied a population of graduates whose qualifications generally reach beyond those required by industry. Furthermore, the author contends that there is no clear correlation between education attainment and job productivity. The general view presented by Berg is that education has a legitimate need to respond to technical innovation during the 1960's; however, the response of education to technical innovation continued after the immediate need was fulfilled. The labour market, according to such authors as Thurow (1972: 67), took advantage of the eagerness of education systems to train people in preparation for the labour market to lower their own training costs.

It is clear that a number of things happened collectively in the labour market during the 1960's: there were more people to enter post-secondary schools; government policies encouraged more people to attend post-secondary schools by lowering the cost and increasing the availability and accessibility of schools; and finally, the labour market quickly moved to hire the new breed of employee, the secondary-school graduate.

The following decade drew even more aspiring young people to secondary schools; however, the labour market demand for secondary school graduates dropped and there were many highly educated graduates left unemployed (Thurow 1972: 76).

The theory of human capital made a false promise to those who made high investments in education with the aim of reaping great economic returns immediately upon graduation (Thurow 1972: 67). It was evident by the 1970's that there was an over-supply of educated manpower, that the education requirements for the same job had increased over a decade, and that secondary school graduates were generally fitting into the labour market at a lower level than they had expected. What seems clear from looking at the education system as a producer of human resources, is that human resources can only be a form of capital if that product is properly geared to the needs of the labour market. It cannot be disputed that education is intrinsically valuable to the individual; however, what is clear is that there can be an incompatibility between the career training that is offered by the education system and the skills needed in the work place, and this difference can have a significant impact on the country economically. Thurow states:

While education has many non-economic benefits, its strictly economic benefits may be of three

types: First, education directly increases the productivity of a country's labour force and indirectly increases the productivity of its physical capital. Second, by altering the distribution of earned income between rich and poor it can help the poor catch up to the rich. Third, education can lead to economic mobility (1972: 78).

Theoretically, there should be a balance between the labour force available and the demand of the labour market for qualified personnel. This balance (Thurow, 1972: 73) may never be achieved in practice. However, it is important that a close relationship be maintained. When the gap widens between the labour force and the labour market, an imbalance exists within the society which characteristically results in an economic inefficiency.

It appears that there is a continuous process in the labour market of jobs becoming obsolete and new jobs being created. The present technological age is of significance here as modern advances in automation have eliminated a significant number of new jobs. This is one of the factors contributing to the job creation slowdown, characterizing the labour market of the early 1980's. The overall effect of the job creation slowdown is further increased, since the era is coupled with a labour force growth. Figures presented by Statistics Canada indicate that the total labour force of Canada has increased due to increased population and increased participation from 8.4 millions in 1970 to 11.4 millions

in 1980. It is further projected that the total labour force will reach 13.6 millions by 1990.

The report further points out that there is a discrepancy in growth of managerial, professional, and technical occupations and the number of post-secondary education graduate job seekers, and indicates that future prospects do not look good for future post-secondary graduates. This means that in addition to an increase in the labour force, relative to the number of workers required, a large proportion of the potential labour supply is becoming qualified for a relatively narrow occupational grouping. Attracted by the incentive of higher salaries, the exceedingly large population of post-secondary graduates are investing their own time and money, as well as a significant tax dollar, in obtaining training for which there is no demand. This situation not only lends itself to impossible job competition odds, but, also results in individual jobs which do not utilize the training already obtained.

Data on the number of working population who hold jobs which do not utilize their academic qualifications can conceivably be difficult to obtain because the information collected is based on how the employee perceives his work in relation to his academic training. The general format of data collection involves asking university graduates if they feel an academic degree is necessary to be able to do the work they are now



performing. In addition to the obvious subjectivity of this information, it is difficult to determine if the incumbent would perform the function differently if he did not have academic training.

The result of the process of hiring people with qualifications which exceed the minimum requirements for the job leads to "underemployment" and this produces a situation where the educational level requirement for the job is increased without the work itself being changed. A report produced by Statistics Canada suggests that there is some evidence of underemployment because:

- (i) During the first half of 1977, 30% of all applicants for clerical work in the Federal Government had a university degree, college diploma or certificate. These positions formally require Grade 10.
- (ii) A 1973 survey of university degree-holders indicated that 10% had jobs requiring less than two years of post-secondary education; 21% of the graduates with general degrees were in such positions.
- (iii) In September 1975 roughly one quarter of the 1975 Ontario bachelor's degree graduates earned less than the minimum starting salary for Federal Public Service trainees in positions requiring that level of education. Among college graduates the proportion was higher.

It appears that changes in the number and education level

of the labour force are affecting the labour market itself. Competition for jobs is high and students are seeking higher levels of education as necessary criteria to enter the labour market. The net result is a work force with a higher general level of education. One cannot find reason to suggest that a higher level of education is not preferred, however, attention is drawn to the amount of training which is not directly applied in the labour market. Interpretation of the study conducted on underemployment <sup>10</sup> suggests that employees who perceive themselves as having a higher level of education than is necessary to perform the job are generally unhappy and discontented with their work. Generally speaking, if an employee does not like the work he does, the result is poor productivity.

Work productivity is another phenomenon which is difficult to define. In industry, where the organization is producing a tangible item for the market, it is most important that the cost of producing that item be less than the selling price; this stands to reason. If productivity is low, the net result might very well be an increase in the price of that product. As long as the company is making a profit it may not be concerned with the degree of productivity. In such work settings as government organizations where the product is a service, low productivity would be even more difficult to define or identify. Given this, can we state productivity is a

problem?

Perhaps the best yardstick for productivity is at the macro level, i.e., the total productivity of the country in terms of the Gross National Product. In a 1982 Speech to the Nation, Prime Minister Trudeau clearly indicated that Canada's poor productivity performance is at the root of the country's economic problem. Mr. Trudeau is quoted as saying:

Even before we take account of our productivity performance, which has lagged behind our competitors, costs are now rising by less than five percent in Japan and Germany, and by seven percent in the United States. And by twelve percent in Canada. There lies the threat to our jobs. Others are adjusting quickly to this tough new world. They are cutting costs so they can cut prices. We must adjust. Faster.

If it can be said that there is a relationship between training and employee productivity, then it can be said that post-secondary education holds an important key to today's economic problems.

In summary, review of the selected literature on the development of a trained labour supply has supplied information relating to the importance of a country viewing its work force as a human resource. It is shown that failure in the past to institute national policy on human resource development has caused difficulties when the work force had to respond to demands for manpower requirement changes due to warfare or technological

change in industry. It is also pointed out that the school's role may not be to respond to the demand for schooling by the population but to ensure that a relationship is maintained between what is required by the nation in terms of trained workers and what is produced by the school in terms of qualified individuals.

Furthermore, it is clear that strong economic consequences result from an imbalance between the demand for and supply of labour.

On this basis, the study now proceeds with a review of the literature in order to determine how the work place perceives the worker and the educational system.

### The Employment System

The state of the labour market must be considered in order to gear the product of education to the demands of society. This is particularly true during a time of significant growth in post-secondary school education and a significant decline in the economy. It is at this time that one can not overemphasize the impact which the labour market has on education.

For the purpose of such a discussion, it is useful to clarify the terms "education", "training", and "experience" as they are used to refer to the

individual's acquisition of competence for occupational roles. Eugene Staley (1971: 10) provides a convenient definition: "education" means the total instruction and learning necessary for an occupation and for a variety of other life-situations; "training" refers to the instruction and learning concerned with the performance of a specific task or set of functions related to a job or occupation; and "experience" relates to the kind of learning process taking place on the job which enables the individuals to perform the functions for which they are hired.

Education, training and experience have surfaced as relevant topics for discussion since World War II, because of the increasing significance given to individual productivity. As previously pointed out, the rapid increase in the cost of labour after the War placed a demand for increased mechanization and automation. As technology developed, industry became more competitive with individual production lines and the manufacturers were found to concentrate on lowering production costs through an increase in production efficiency. The techniques introduced by management to maintain a balance between employee demand and production requirements included the introduction of work-load forecasting, the use of ratio and regression analysis, and the initiation of human relations programmes (Walker, 1980: 38). By the beginning of the 1960's, employers were viewing their

personnel as a "resource" which could be trained, modified and developed to meet projection needs.

Psychology researchers were making significant developments in understanding the relationship between motivation, job satisfaction and increased productivity. A theory developed by A.H. Maslow (1943: 380) is identified as a major milestone in the humanistic approach towards employees. The author proposed that humans are motivated by a desire to aspire or to maintain the various conditions which lead to attainment of a hierarchy of basic needs, including psychological needs, safety needs, love needs, esteem needs and self-actualization needs, and that these needs are arranged in order, so that prepotent needs are emphasized.

These ideas were perpetuated in the early 1960's by Frederick Herzberg (1964: 5). The author presents two conditions that affect attitudes to work: (i) hygiene: those factors which surround the conditions of work and which can lead to negative attitudes; and (ii) motivators: those factors which surround the work itself which can lead to positive attitudes. The significance of this theory is the connection made between job-attitude and productivity and the influence which management can have on the work and working environment, which, in turn, can lead to increased production. By the 1970's, manpower planning, or more broadly termed "human

resource planning" was widely established as a personnel function in major business and government organizations (Walker, 1980: 72). This meant that the personnel requirements were now planned in a broader context than merely that of balancing supply and demand in quantitative forecasting. The process encompassed comprehensive projected staff needs and programme planning. Human resource specialists were incorporated as an integral part of the executive team to weigh factors relating to work force, labour market and job competitiveness, and economic, social and political factors. With this information, an accurate forecast of human resource needs is made from relating projected human resource requirements to projected future human resources available.

Implicit in this forecasting is the ability of an individual to perform a given job based on the education, training and experience which the employee brings to the job or acquires while on the job. Major businesses or government agencies, to a greater or lesser degree, exercise a form of career management which ties the individual to a job. The company has a sense of the job that it requires performed, and strives to fill that position with a person capable of performing the work at a competitive rate of compensation. The balance is a delicate one; on one hand the incumbent must bring ingenuity and competence to the job, and must learn to

perform the required functions effectively; on the other hand the employer must compensate his employee fairly without allowing a competitor to lure his trained employee away and without suffering the burden of excessive personnel costs. This borders on what Lester Thurow (1972: 67) refers to as the theory of wage competition.

In his article "Education and Economic Equality", Thurow (1972: 71-74) argues that a more accurate explanation of the interaction between the labour market and the education system is the "job competition" model. The basis of this model rests on the fact that a person's income is determined by his relative position in the labour queue and the way job opportunities are distributed in the economy. Accordingly, the skills which the employer seeks are not found in the recruitment market, but are acquired informally through on-the-job training after the worker finds a position within the organization. The crux of the matter is that education can not possibly provide the skills for an employee to perform a specific job, but can only hope to provide the exposure to many of the major concepts, technology, and some directly related functions. The school, for example, can provide exposure only to certain kinds of equipment and perhaps some hypothetical work situations. The processes inherent in a job such as working with co-workers, responding to demands of employers and other



daily work functions can only be learned through actual working experience.

It is precisely for this reason that more and more post-secondary school graduates are being hired for what is commonly called "entry level" positions, i.e., those positions which are at the first level of an occupational class or series which is specifically classified based on the close supervision which is required by an employee of a higher class position.<sup>12</sup> For example, a company requires additional engineers and hires recent college graduates at or below the experienced engineer technician level to work with and learn from experienced personnel. After a period of time, the incumbent will usually gain the necessary expertise to function independently, and this means a reclassification to a higher level. During the 1960's in Canada, engineering students were hired upon graduation to fill positions at the advanced technical and/or management levels.<sup>13</sup> It can not be denied that many essential skills are learned in post-secondary schools, but the question which exists is whether these skills, together with all work related skills such as personal interaction, can be more effectively learned on the job.

The problem is relatively simple in the case where a specific technical education, such as a degree in engineering, is required. However, when one realizes that relatively few job categories require specific

professional training in order to be able to perform the work, then there is the question of establishing minimum education requirements for recruitment purposes. The approach generally accepted in the labour market is to hire the candidate with the most impressive combination of academics and related experience. Consequently, it appears, as Thurow (1972: 78-81) indicates, that the employment system is increasingly using the education system as a screening mechanism for recruitment, rather than a qualifier for work.

It is observed, therefore, that the work place gives significant importance to the concept of its personnel as a human resource. The demand for trained labour, the competitiveness of the marketplace for mass production at less cost, and the pressure of increasing labour costs, has forced the employer to analyze employee performance with the aim of cutting production costs. It is found that the relationship between the labour market and the educational system is competitive because the higher educational qualifications demand higher income returns. It is also found that higher academic qualifications do not necessarily mean higher skilled labour, because work efficiency needs on-the-job experience to supplement technical training.

Improved personnel management techniques have allowed the work place to reconsider the merit of hiring highly trained people at the advanced technical or

management level. Cost effectiveness and supply of highly trained but inexperienced workers have resulted in the employer being able to hire highly trained workers at the basic entry level. This implies that the relationship between the labour market and the educational system is no longer one of the labour market needing a supply of skilled personnel and the educational system responding to that demand. If this is true, an imbalance exists between the product of the school and the demand of the labour market.

Next, the study reviews what is happening today at the post-secondary educational level in Canada in response to shifts in demands for career related education and training.

### Schooling and Work--a Perspective

The social significance which learning can have on society is particularly vivid in our modern day of accelerated technology, heightening demands for education and tightening labour market conditions. Considerable pressure is placed on individuals to learn; consequently, there is a necessity to provide the framework or perspective for understanding how learning does or can function in society. One such perspective is presented in a discussion paper by Professor Alan Thomas (1983)

entitled Learning in Society, a Learning Paper.

Thomas (1983: 3) states that over the last couple of decades there has been a shift in education resulting in enormous and unprecedented investment has been made in education by almost every country in the world since the 1950's. A report presented by the International Commission for Development of Education (The Faare Commission) titled Learning To Be: The World of Education Today and Tomorrow<sup>14</sup> is reviewed by Thomas. The report reaches two major conclusions: firstly, that it was not a mistake to invest heavily and consistently in education as a means of developing society, but rather it was an error to concentrate that investment exclusively on the education of the young; and, secondly, that the significant factor in change and development, for both individual and society, was not the provision of educational resources but the capacity of human beings, of any age, to learn (Thomas, 1983: 4). Therefore, it was thought that it would be worthwhile to focus attention on the social role and function of learning and its management, rather than on the limited role which education plays in society.

Thomas (1983: 24) supports this idea and suggests that for governments to enact on desired directions of change or development, it becomes paramount to consider what is and is not learned by adults. Government policy on education must then be conscious of the "lifelong"

learning or of the "continuing" education interests of individuals in society, because the individual in a total spectrum acts as much for the interest of society as a whole, as for the interest of the self. Thomas states:

The technically advanced societies in particular, but not exclusively, have discovered that even for the maintenance of their societies, they are increasingly dependent upon learning, that is, upon learning undertaken by increasing members and types of individuals in their populations, over longer periods of their lifetime or "lifetime learning" --learning which cannot be accomplished by means of exposure to educational resources in the first twenty years of life (1983: 4).

This is illustrated by the trend in recent years for Canadian managers to up-grade their skills at in-house training programmes, outside seminars, part-time university courses, and personal self-improvement courses.

The underlying assumption of the "nature of learning" considers the process as an individual oriented activity which, by nature, is associated with almost all human characteristics and activities, and which is cumulative in its effects on the individual (Thomas, 1983: 6). At the same time it is not an activity which can be compelled, because individuals cannot be forced to learn. The unavoidable consequence of this is that the dependency placed on learning by the modern state places new power in the hands of the individual and increases

the fragility of the relationship between citizen and state. Consequently, the management of learning has the potentiality of improving human relationships because the potentiality of the individual is maximized.

Notwithstanding this idea, Thomas (1983: 8) concedes that the management of learning in any society is immensely complicated and he appears to stop short of suggesting that the movement from "education" to "learning" provides an almost impossible burden of study.

The prospect of a government policy being structured to affect learning is brought into perspective by Thomas (1983: 10-15) as he identifies major cluster areas of decisions around which the constant negotiation between the individual citizen and the state takes place. The individual, on the one hand, has a set of needs which requires the gaining of some knowledge or understanding in order to achieve. The choice of the individual is clearly one of deciding when to go for help, how much time to spend on the effort, how much money to devote to the pursuit, and when the amount of learning is adequate. If the individual chooses to enter an education system to gain this knowledge, then that individual exchanges freedom of content and extent for expanded resources, formal evaluation and certification of achievement.

The State, on the other hand, has a set of social needs in respect to having to meet the collective demands of its citizens. This lends itself to a set of learning

needs which encompass the requirements of both the members within society who are willing to attain and the citizens who have identified a set of learning needs they wish the State to support. The natural consequence of these needs is to create formal institutions with groups of professional workers associated with them to develop methods of provision of education experience and to establish standards upon which performance and achievement are measured.

Because of the alarmingly high costs of providing such facilities there has been a shift towards non-educational agencies in society having the responsibility for bringing about the desired learning. A specific example of this is the decision of the Canadian Federal Government to delegate the bulk of labour education to the labour movement itself. In 1977 the Canadian Federal Government decided to give resources directly to the labour organizations instead of providing additional resources to the formal educational agencies. It then entered into five-year contracts with four major labour federations and provided individual grants to organizations in addition to federations, bursaries for research grants for individuals and a programme of grants for post-secondary agencies (Thomas, 1983: 21).

Thomas (1983: 13-14) further suggests that these decisions create a number of complex issues such as the relationship of these activities and those of the formal

education system. Although the author avoided discussion on these issues, he successfully develops an interesting framework on how learning does or can function within society.

The idea of "lifelong learning" as discussed by Thomas (1983: 1-5) seems to follow from what Fred Harvey Harrington (1977: 83-102) describes as the adult education revolutions. In his book The Future of Adult Education the author points out that during the last two decades there has been a dramatic swing in the enrollment of universities of the United States towards part-time credit courses. Furthermore, this emphasis towards part-time credit courses is mainly due to an upsurge in adult enrollment (Harrington, 1977: 31-35). He states that:

...adults are the center of today's most interesting innovation in higher education:- as credit for learning through life experiences, credit by examination, drop-out and drop-in arrangements, special degrees for adults and weekend classes (1977: 2).

Although the post-secondary education system has traditionally discouraged adult education, or, at best, allowed it to suffer through limited facilities and tight budgets, these institutions are faced with the prospect that today's society of developing technology requires continuous upgrading (Harrington, 1977: 4-5). Adult students (generally twenty-two years old and older)



cannot devote themselves totally to the traditional post-secondary school schedule because, as an adult, there is usually a commitment towards work and family (Harrington, 1977: 1). The result is a demand for part-time evening and weekend credit programmes.

Harrington (1977: 104-107) is quick to indicate that the increase in enrollment of adults is not only because of work commitment, since there has also been an increase in liberal education for adults in such areas as: non-credit programmes for the aging, vocation workshops for alumni, fine arts and protect-the-environment tours, courses to make constructive use of leisure time, and a variety of lectures, seminars, and discussions designed to improve understanding of world and national issues.

Other areas in which adult education is developing relate to a renewed interest in providing a "second chance" (an adult chance) for the educated disadvantaged. This includes groups of racial and ethnic minorities, low income citizens, prisoners, physically handicapped, women, the elderly, and Americans in remote communities (Harrington, 1977: 156-158). Many adults who are not disadvantaged but who merely want a mid-career change in occupation are also returning to post-secondary institutions for the additional training or certification necessary to make this change. In short, Americans are participating in what is becoming a major movement to promote lifelong learning.

Harrington (1977: 4-7) proposes that lifelong learning is now a necessity and not a luxury, as many university administrators suggest. Consequently, he recommends that American universities and colleges have a responsibility to review and update post-secondary education policy. This would allow and even entice adults to register in a variety of credit and non-credit programmes through full-time, part-time and off-campus courses. There is a demand for these courses and it is necessary for universities and colleges to cater to the most recent movement in education--the "adult education revolution" (Harrington, 1977: 1-9).

Responding to the demand for public recognition of adult education, Kjell Rubenson (1983) presents an interesting paper titled Barriers to Participation in Adult Education in which he analyzes several major factors responsible for lowering the participation rate of adults in college and university programmes.<sup>15</sup> Essential to his approach to the topic is the recognition that adult education reflects changing political, economic and cultural conditions and stems from two different schools of thought--the humanistic philosophy connected with the fundamental right of all individuals to lifelong education and the human capital theory linked to existing labour market conditions (Rubenson, 1983: 1-3).

These ideas cannot be treated separately because any

radical developments which may occur in the area of adult education would be linked to developments in the working life of the labour force and the labour market itself (Rubenson, 1983: 2). This is interpreted as meaning that there is a balance with regard to lifelong education, between the knowledge and skills the individual would like to acquire and would, in fact, have a right to pursue, and the education and training needs of the work place. It is fine for individuals to want continuing education, but if more radical things are to happen in the implementation of lifetime education programmes, this will be by necessity linked to developments in working life and in particular to planned responses dealing with skilled labour shortages.

Rubenson (1983: 2) points out that Canada, in particular, is in a precarious situation because there is a requirement to meet the challenge of a diminishing young labour force at the time of technological acceleration, as being experienced by all industrialized countries; however, Canada does not have a sophisticated and comprehensive educational and training infrastructure to facilitate the training needs. He suggests that the country has relied, to a large extent, on immigration to solve human resource needs, but cannot rely on this method in a time when the unemployment rate continues to be a burden on the Canadian economy. The common thread between the philosophy of lifelong education and labour

market concerns is the need to facilitate adult education. It is with this approach that he promotes research into barriers to participation in adult education.

Rubenson (1983: 10-15) classifies recruitment impediments in adult education into the following categories:-(i) situational barriers which stem from the person's most immediate situation and could include lack of time due to home or work responsibilities, geographical isolation, etc.; (ii) dispositional barriers which stem from one's self concept, confidence level of aspiration and attitude towards adult education (this factor is felt to be the most significant hindrance to continuing education); and (iii) institutional barriers which have to do with the availability of relevant courses, scheduling and problems relating to location and transportation. It is necessary for policy makers to understand these barriers before developing policies for continuing education.

Rubenson (1983: 17-19) continues to use a model of recruitment factors and barriers to point at some difficulties experienced with the concept of lifelong education. His main concern is that adult education programmes are often developed towards the demand rather than the need for continuing education. Barriers, and particular dispositional barriers, create a shift in demand for continuing education to middle and upper

classes who generally have a strong secondary and post-secondary education and subsequently a positive self concept of learning. Educational policy makers, he contends, should also consider the need created by lower classes who typically do not have strong secondary and post-secondary education.

The aim in developing continuing education is to develop an educational system which will relate equally to society and which will provide the maximum outcome for society. Rubenson (1983: 22) hints that this should be achieved through a conscious effort of secondary education to create in students clear values which motivate for continuing learning. He further suggests that policy makers should aim at target groups and thus correct many of the imbalances occurring in adult education and that there should be a closer coordination of education policy makers and other social sectors, especially labour policy and social policy (Rubenson, 1983: 34). It can be interpreted from what Rubenson says that close attention has to be paid to the link between education and labour market developments and barriers, which may discourage participation in adult education.

R.T. Adams<sup>16</sup>, the past chairperson of the Federal Government appointed Commission of Inquiry on Educational Learning and Productivity, issued the report Education and Working Canadians, which proposed views on the development of a national strategy for improving work

skills of Canadian employees. In his paper Skills Development for Working Canadians-Towards a National Strategy (Adams:1983) he points out some of the training problems of Canadians.

First of all there is the problem of acquiring occupational skills, for he feels that a problem of under qualification exists because:

...many adult Canadians have received no comprehensive portable training and are in a situation where they lack the possibility of upward and vertical mobility (Adams, 1983: 6).

Clearly stated, there is a problem of acquiring occupational skills. Although Canada has an extensive education and training system, it is estimated that over 50% of the labour force have not received formal training for a career or occupation (Adams, 1983:7).

Adams (1983: 8) indicates that the secondary school system is not geared towards career training because the Canadian idea of providing occupational education is to postpone such training for the post secondary level. The problem, however, is that some 70% of Canadians over the age of fifteen have no more than a secondary school education. As a result, there has been a shift in the 1980's towards secondary school systems providing more emphasis on vocational training. He feels that the change has not been significant to create dramatic changes. The fact remains that a significantly large

number of Canadians are leaving ~~secondary~~ school to enter the labour market; consequently, there is added pressure on Provincial Governments (since secondary education is a provincial responsibility) to expand occupational education at the secondary level.

Adams (1983: 10) notes that most comprehensive initial training for occupations is provided primarily by post secondary institutions, colleges, and universities. Although it is widely considered that the university has a broader role than fulfilling the skill needs of industry, it is a fact that the large majority of university students go to university to prepare for careers; therefore, universities can be regarded as vocational training institutions. The difficulty faced in viewing university as an occupational training facility is that it is not often clear when training is related to a job; for example, philosophy graduates may be classified as fully employed if they acquire a job requiring any university degree, but under employed if they acquire a job waiting on tables. Adams states that:

...a large percentage of university graduates enter occupations for which they have few or no substantive qualifications (1983: 12).

Colleges (including Trades and Technical Institutions) are established in all provinces with the major function of providing students with relevant

occupational qualifications. The problem here; however, appears to be that the colleges have often turned out many graduates with qualifications of little demand (Adams, 1983: 14). The Canadian Employment and Immigration Commission and the various colleges have made progress over the last few years in achieving a closer fit between supply and demand in regard to skills; and a New Occupational Projection System has been developed to help in the achievement of this goal. Adams says that:

...regardless of these efforts, it is estimated that roughly 80-90% of secondary school leavers, 35-40% of university graduates and 20-25% of college graduates leave school to enter jobs for which they have little or no training (1983: 15).

With this realization in mind, Adams turns his attention to training in industry. He states that what happens is that students eventually manage to find jobs even though they lack relevant skills or have qualifications for which there is little demand. What appears to happen is that employers hire "unskilled" people and provide them with the minimum amount of training necessary to do a specific job. Once the employee is functioning within that job, there is little comprehensive training leading to portable occupational qualifications. Federal Government policies to promote employer training and development have been ineffective and very few companies have systematic employee



development programmes available to all their employees.

Adams summarizes the negative effects which this total situation has produced:

- (i) Many Canadian workers are not as well trained as their counterparts in other countries. In particular, Japan and Germany seem to place much greater emphasis on training in industry. Japanese workers, for example, received two-and-one-half times as much training on-the-job annually as does the Canadian worker.
- (ii) A large number of Canadian Working people and women in particular, are being underutilized because they lack the qualifications necessary to move upward in organizational hierarchies. No doubt this relative waste of talent results in a lower level of economic performance than possible.
- (iii) People possessing only specific skills are particularly vulnerable to the new technology (microtechnology, robotics, etc.) which is predicted to have an enormous effect on industry during the next few decades. It is very difficult for those with non-portable skills to find new employment and they are, therefore, prone to be unemployed for long periods (1983: 20).

Adams (1983: 56) outlines a proposal of the Commission which could be implemented by the Federal Government, and if implemented, would have the effect of significantly expanding the availability of development opportunities of working adults. The package consists of a levy-credit training scheme, a training fund to which individual employers could apply, a registered educational leave savings plan, and a limited right to

educational leave for specific employees under specific conditions. Also included is a proposal for the establishment of an agency directed by representatives from labour, management, education and government to administer the programmes. This levy-credit training scheme is seen to have implementation difficulties, but is presented as a framework upon which a suitable structure for educational change can be developed in order to solve some of the latent problems of occupation training and education which presently exist.

Adams (1983: 70) suggests in closing that, while serious attention is given to the fabrication of such a structure, the Canadian Employment and Immigration Commission (CEIC) should take modest steps towards improving the training opportunities of employed Canadians. This would include making changes in policy emphasis and administration to make the National Training Act more responsive to the individual needs of working people; and introducing a Registered Educational Leave Plan, a right to leave for union representatives, and special initiatives for the employed under-educated.

Selected review of the literature on the previous pages shows; therefore, that the concept of education is changing dramatically, since education is no longer considered the process of learning exclusively for children. Society is facing an age when education is now being viewed as a process which is continuous throughout

life, and with this recognition there must be changes in consideration given to how the education system interacts with and functions within society. The result is a variety of new forces existing between society and the individual and between individuals, which do not exist under traditional education ideals. These forces create the necessity for negotiation between society and the individual, and competition between individuals.

The response of post-secondary institutions to the demands for adult training is seen by Rebenson (1983: 34) to be a direct relationship between supply of labour and subsequent demand for specific education and training. Thus, changes within post-secondary education seem to be dependent almost totally on the labour market itself and the individual appears to have little or no input into the change.

Based on the previous discussions it is concluded that an imbalance between the demands of the labour market and the product of the post-secondary educational system does not minimize post-secondary education, and the demand for post-secondary education remains high because of the need for technical training. It is suggested; however, that there is a need to restructure post-secondary education providing continuing education for people in the work force, rather than providing credentials for people to enter the labour market.

The next chapter presents a brief description of the

Newfoundland secondary and post-secondary educational system as it relates to this study.

## CHAPTER 3

## THE NEWFOUNDLAND EDUCATIONAL SYSTEM

The purpose of this chapter is to review the organization of the educational system in Newfoundland and the focus of this review is on the options that are open to the students in the Newfoundland educational system in making decisions towards career training and selecting post-secondary programmes. The material is presented in two sections, the first section deals with the high school system with the aim of determining the opportunity offered to secondary students to examine post-secondary programme options and to make sound career decisions. The second section details post-secondary programme options in the province, and outlines the various criteria used for screening applications. Special consideration is given to the degree of contact the various programmes generally allow students to make with the work place. The idea of the amount of contact the post-secondary student has with the labour market is also discussed in this chapter.

Secondary Education

Education in Newfoundland is organized under the Denominational System. Provincial schools are organized

into thirty-five School Boards, each coming directly under the authority of a religious denomination. The curriculum is designed by the Provincial Department of Education. Consultants within the Department for each subject area develop course formats for approval, and once approved, assist in implementation of the subject curriculum through the various School Boards. Each School Board is responsible for its overall subject, implementation and the hiring of teachers to teach a set number of courses or classes. School administrators, principals and vice-principals, in each school are responsible for developing timetables, designating teacher assignments and allocating students to classes. Teachers of each subject have considerable latitude in choosing the approach or delivery of material within course outlines and recommended texts.

In September 1983 the Department of Education changed the high school programme structure and implemented grade twelve into the high school system.<sup>17</sup> The expanded programme was designed on the format of courses organized at levels I, II, and III, with subjects given a course number in either the 1000, 2000, or 3000 series, depending on the level most appropriate for the course. For the first time in the Newfoundland education system students could choose subjects based on the credit system. The credit system consisted of a set of required and elective courses and the criteria of a minimum number

of course credits for graduation. The graduating student can obtain either of three categories of high school diplomas, depending on the nature and level of courses completed and the final grade achieved in specified courses. The student may achieve (i) a Graduation Diploma, (ii) a Graduation with Distinction Diploma, or (iii) a Graduation with Honours Diploma. The requirements are outlined in Appendix A.

Career Education 3101 is one of the new courses offered in the expanded high school programme. According to the booklet: SENIOR HIGH SCHOOL COURSES DESCRIPTION, authorized by The Minister of Education,<sup>14</sup> this course is designed for developing self understanding and self awareness and helping relate students' interests and abilities with potential careers. Specifically it emphasizes four chief areas: Self Awareness, Knowledge of the World of Work, Decision Making, and Job Search Techniques. The prescribed texts include A CAREER PLANNING GUIDE and A JOB SEARCH GUIDE, both publications of the Occupational and Career Analysis and Development Branch of the Department of Employment and Immigration.<sup>15</sup>

—The strength of such a course as Career Education 3101 must be considered in terms of what need it fulfills and consequently how well it satisfies that need. The need is clear, the high school consists of young people in their teenage years in the process of developing their own sets of values, and gaining independence from their

parents or guardians. For the most part their environment has been clearly defined for them and all major decisions have been made on their behalf.

Meanwhile, within a period of just two or three years they are expected to independently make their first major decisions--what course of study should they follow and what career should they pursue. Ironically, their first decisions are among the most important that they will ever make, because these decisions represent a choice of direction which can not easily be changed or rerouted and which will dictate much of what their future will be.

The two major considerations a course such as Career Education 3101 lends itself to are (i) how accessible it is to students and (ii) how applicable the timing of its access is in relation to the career making process.

The expanded high school programme is designed to allow students to have a choice in course work. For example, students may choose which course of science they would prefer to study, or decide if there are optional courses which they prefer to take. The problem encountered by school administrators is how to establish a timetable which will allow the greatest number of options to students while maintaining a balanced and realistic workload for the staff. Obviously, the only alternative open to the person responsible for developing the time table is to balance the courses as realistically as possible.



Career Education is designated as an option course, and inevitably gets slotted together with one or more alternative courses. The student who wishes to complete a competing course or requires a competing course as a credit is therefore not able to enroll in this course. The outstanding question is whether Career Education should stand as an optional credit course or if it should be slotted as a compulsory credit and therefore placed in the timetable with a greater degree of accessibility for all students. ✓

The question of timeliness deals not only with the accessibility of the course, but also at what level the course is made available. Specifically, this deals with when the course is taken and how this relates to when the student is in the process of making career related decisions.

In most cases Career Education 3101 is offered to Level III students only (i.e. students who have completed course studies at the first and second year of high school level).<sup>20</sup> In any case the course is offered on a one course--one school year basis, with instruction ranging from two or three school periods per week of instruction. This means that this course, which is designed to assist the student in making logical career decisions, is not completed by the student until the end of the high school programme. Considering that applications for post-secondary education institutions

are required to be completed and submitted before the end of the final term, then there is little logic in offering a course which gives exposure to methods of career decision making if it is not completed before the decisions are required to be made.

Equal in many ways to this is the situation existing between the availability of freedom of subject choice for students within the restructured high school programme and the completion of the Career Education 3101 course. Beginning at Level I, students have freedom to choose the courses which they would like to complete as a part of their high school programme. Such decisions could result in the student choosing courses for other than good academic reasons. The decision is an important one and a bad choice could seriously impede entry into a desired post-secondary programme at the end of the high school programme.

To summarize, Career Education 3101 is provided to secondary students in Newfoundland in the form of a single course. The same programme which makes this course available, establishes course selection options and graduation requirements which results in only a portion of the student body taking the course (See Appendix A). Moreover, since the course is structured as a level III credit, the students who take the course, do so at the end of their secondary school programme, after many career goals and decisions are required to have been

made. This appears to establish a weakness in both the course itself and the ideology upon which the revised high school programme is built.

### Post-secondary Education

Students graduating from high school are strongly encouraged to continue their education at the post-secondary level. Post-secondary education within the province offers several alternatives, depending on the level of high school diploma obtained. The student may choose between Memorial University, The Cabot Institute (formerly called The College of Trades and Technology), The Marine Institute (formerly called The College of Fisheries and Marine Technology), one of the District Vocational Schools, the Bay St. George Community College, or one of several private colleges. Whichever choice is made by the student, entry is ultimately determined through application directed to these institutions.

#### Memorial University

Memorial University exercises an open approach to entry, such that all applicants having the minimum requirements of a 60% average in Level III courses, including Level III courses in academic maths, English,

and one pure science, are automatically accepted.<sup>21</sup> In some cases even these requirements can be waived. For example, a student has the right to request special permission from the Registrar to enter Memorial University with less than the minimum requirements provided that the application is accompanied by a letter of support from the high school principal. Such cases are judged individually by a special committee. In addition to this policy, the university accepts application from persons satisfying the condition of a "mature student", i.e. applicants who may not have satisfied the academic requirements but are twenty-one years of age or older.

The student entering Memorial University enters a General Studies Programme, which includes major work in a wide variety of subject areas. Students then wishing to enter either of the Faculties of Nursing, Engineering, Education, Commerce, Music, and Medicine; or the Schools of Pharmacy, and Social Work, may do so through special application after completion of specified courses (usually considered to be part of the first academic year). Some of these programmes, such as Engineering, have an "open-entry" policy, (i.e. students having minimum qualifications are accepted and students are screened through grade level attainment); other programmes such as Medicine have a "closed-entrance" policy, (i.e. student applications are carefully screened

and only a specified number of candidates are selected).

University faculties requiring application for entry are generally career oriented, since these faculties specialize in training people for specific occupations. Most of these faculties have made a concentrated effort over this last decade to implement "work terms" into their programmes.<sup>22</sup> As a part of the programme the student is required to complete a semester of course work and each alternate semester the student is placed in a work setting. Although the duration of the programme to completion is extended, the student gains considerable practical experience in several work places and is able to make important contacts in the field of study, which can be used later as employment opportunities or references. The Faculty of Education now gives students the option to complete a credit internship of one term teaching in a school or a two week student teaching block.<sup>23</sup> The Faculty of Social Work has implemented a one term placement in a social work office, as a part of the programme requirements.<sup>24</sup> The faculties offering more than a one-term work experience programme remain limited.

This method of bringing the student in contact with the labour market seems to be quite successful; however, around forty percent of Memorial University students graduate at the Bachelor's level in faculties which do not have work term programmes.<sup>25</sup> This means that a large

number of graduates from Memorial University have little or no direct contact with the area of the labour market dealing directly with their academic specialization.

The number of students having contact with the labour market in the area of their academic specialization through work term programmes has increased significantly over the past decade.<sup>26</sup> Nevertheless, it must be considered that the total number of job occupations that have been touched by these programmes would seem insignificant when one considers the possible range of occupations open to students and which must be filled over the next generation by students presently in the educational system.

Faculties with work term programmes have to find placements for students, and this chore becomes more difficult as the number of students increases.<sup>27</sup> Difficulty in finding placements means that students may have little control over the occupational speciality which they aspire towards. For example, a student may be assigned to a work term project which is not directly related to his specific academic interest.

The Cabot Institute, the Marine Institute,  
the District Vocational Schools, and the Bay  
St. George Community College.

These colleges and vocational schools provide a post secondary education which is distinctly career oriented, and offer a variety of trade and occupational programmes leading to graduation with an array of certificates and diplomas.<sup>25</sup> For example, the Cabot Institute offers the Diploma of Applied Arts for the successful completion of a Business, Community Recreation Leadership, Appraisal/Assessment, Computer Studies, or Food Administration programme, and a Diploma of Technology for the successful completion of an Engineering or Medical programme.

In most cases, the successful completion of these programmes means that the student has achieved a diploma or certificate and is ready to begin the search for employment. Some programmes, such as Medical Laboratory and X-ray Technology require additional testing before professional certification.

Entry into these post-secondary institutions is limited by classroom size and facilities; thus, admission to most programmes is competitive. Students' applications are reviewed primarily on the level of achievement of high school Public Examination marks. This gives consideration to the category of graduation certification (general diploma, matriculation or honours matriculation), and often the average of marks achieved.

This means that the entry depends on obtaining the minimum grade average required to compete for entry rather than on obtaining the minimum requirements as specified for entry into that programme.

In 1985 the Cabot Institute implemented several changes in selection procedure.<sup>29</sup> The changes include selecting students, on a first come basis, from those who have met the minimum entry requirements. Students become eligible to apply for entry into course programmes upon registration for the final academic year of secondary school which would allow successful completion of minimum requirements. All applications are processed according to the date/time received and students are admitted, subject to class enrollment limitation, in all cases where minimum entrance requirements have been achieved.

The important ramification of this change in policy is that students now must have made a career decision by the beginning of the final year of high school, rather than at the end of that year. If the course programme in post-secondary school requires specific courses in, for example, one of the sciences, then there may be a requirement for students to have made their career decision before entering into the first year of the high school programme. Meanwhile, as previously stated, the student usually has access to career education information only during the final year of the high school programme.



Newfoundland, then has a wide variety of post-secondary programme choices to offer the high school graduate, and students are free to choose among these as long as they obtain the minimum entry requirements specified for each programme. Students applying for various programmes are screened in one of three ways, depending on the policy accepted by the individual post-secondary institution. For example, Memorial University accepts all students obtaining minimum entry requirements, the Cabot Institute accepts students with minimum entry requirements in order of receipt of applications, and other institutions accept students on the basis of competition of high school grade level average. Therefore students' chances of being accepted in the post-secondary programme of their choice may be hindered if they are not given entry information on post-secondary programmes.

Another important aspect of post-secondary education is the limited accessibility students have to the labour market before and during post-secondary school. Effort has been made through work-term programmes to provide students with practical work experience and to allow students the opportunity to establish contacts within the professional community. Nevertheless, as it has been previously pointed out, the number of programmes presently in place affects only a percentage of the total number of graduates, and the total amount of time spent

on work placement is generally low in relation to the length of training programme offered.<sup>30</sup>

The amount of exposure the student has to the labour market as the result of the post-secondary educational programme is an important factor when considering how the individual is prepared by the educational system to enter the world of work, but this is not the only factor worthy of consideration. Students themselves have a responsibility to make their own approach to the labour market by taking full-time or part-time jobs relating to their planned career or by approaching friends and relatives.

The degree to which this is done must be considered when examining the educational system, because if this practice is carried out extensively by the individual, then post-secondary education does not need to be concerned with the amount of work experience it provides its students. The following chapter is designed to investigate the idea of student contact with the work place and outlines a study designed to measure the amount of contact first year post-secondary students have with the labour market through their own initiative. The methodology of this study is also discussed in the next chapter.

## CHAPTER 4

## METHODOLOGY

This chapter outlines a study of post-secondary education in Newfoundland conducted by presenting a questionnaire to a sample of first year students at Memorial University, the Cabot Institute (formerly called the College of Trades and Technology), the Marine Institute (formerly called the College of Fisheries and Marine Technology), and eight District Vocational Schools throughout the province. (See appendix B) The purposes of the survey are to determine the reasons why students chose the post-secondary programme in which they are presently registered and to determine the degree to which students are prepared to make the transition from post-secondary education to the labour market.

This survey was conducted in April 1984 and April 1985 at Memorial University and in November 1985 at the Cabot Institute, the Marine Institute, and the District Vocational Schools. TABLE 1 outlines the size of the samples selected in each of these post-secondary institutions.

TABLE 1

SIZE OF SAMPLE IN SELECTED POST-SECONDARY  
INSTITUTIONS IN NEWFOUNDLAND BY YEAR.

INSTITUTION	YEAR	SIZE OF SAMPLE
Memorial University	1984	200
Memorial University	1985	200
Cabot Institute	1985	100
Marine Institute	1985	100
Each District Vocational School	1985	50

Memorial University:  
Survey of Students' Views

An important consideration to be made is whether university training is designed to provide "higher education" or designed to provide necessary credentials for people to find employment. The questionnaire is therefore structured to determine if students interpret their university programme as a means towards higher education or a means towards occupational qualifications.

Considerable thought is given to the method of selecting a non-biased sample of Memorial University students. Degree programmes at Memorial University range

from specifically technical areas such as engineering and teacher training to specifically academic areas such as the study of philosophy and literature. It can also be argued that technical areas may be entered purely from an academic perspective and that academic areas may be entered purely for reasons of career aspirations. This is overcome by drawing samples of students in first year English classes, because all students are required to register for English 1000/1001 in the first year. Consequently, first year English classes constitute an ideal mixture of students from all disciplines, and most closely represent a cross section of the population of first year university students.

The only exception is the existence of a "foundations" programme, in which students with a weak academic background in high school English courses are required to register for an extra semester. Students within this programme complete a non-credit course in their first semester and then enter the regular credit course for the second and third semesters. The sample of student population is therefore drawn from the second semester, which means that all first year English students are in credit courses. Consequently, a sample of students drawn from English 1000 or English 1001 classes is determined to represent the total first year student population.

University records<sup>31</sup> show the total registration of

first year permanent, on-campus students to be 1,363 for 1983-84 and to be 3,172 for 1984-85. The figure for 1983 is down; this may be due to the number of high school students retained in the additional secondary school year.

The method used in sampling students was to approach a professor in the Département of English who was willing to assist in the study. In April 1984, the professor agreed to distribute copies of the questionnaire to her students, to ask three or four colleagues to assist by doing the same and to relay instructions on how to distribute these questionnaires. She indicated that classes in English 1000/1001 generally have an average of thirty students so each professor was given twenty copies of the questionnaire to ensure that there were fewer questionnaires than the total number of students in the class. She also said that most professors have two groups of students. So allowing for class size and the number of professors involved, it was decided that a sample size of two hundred was appropriate because there is a limit to the number of classes of English 1000/1001 and the number of students in each class. This professor was asked in April 1985 to repeat the same procedure in presenting another set of two hundred questionnaires to first year English students.

Students in English 1000/1001 are not separated by sex, faculty or achievement. Those who take English 1000

during the second semester have usually taken Foundation English during the previous fall semester or have repeated English 1000. It was therefore requested that questionnaires be distributed as equally as possible between English 1000 classes and English 1001 classes; however, there was no way of determining how evenly this was done. The professor who served as contact person in the Department of English chose professors to assist her by approaching colleagues whom she thought would be willing to assist in the study. There is no indication of how representative these colleagues were of the professors in the Department of English. Furthermore, there is no means of knowing the degree to which the sample may be biased according to sex and achievement level because there was no information gathered relating to the number of males and females in each class.

Instructions were relayed to each professor to place a total of twenty questionnaires on desks before the class period began, and students who sat at desks with questionnaires were asked to complete the form by indicating the most appropriate response(s). The questionnaire is presented in Appendix B.

The questions on the questionnaire are designed to create two categories. Responses to questions number 2 (Unemployed, upgrading), 3 (Specific career in mind) and 8 (Sponsored by employer) indicate the degree to which the student's academic programme is career oriented;

either because these students became unemployed and are now upgrading their job qualifications, or are sponsored by an employer to obtain an increase in job qualifications, or have a specific career in mind which they are working towards. Responses to questions number 1 (Study for education sake), 4 (Nothing better to do), 5 (Programme a second choice), 6 (Pressured by parents), and 7 (No career in mind) indicate the ways students visualize their enrollment in the programme other than career orientation. Response to question number 9 (None of above) allows for those students who feel that their enrollment in the programme is for reasons other than those listed above. An evaluation of individual responses to question number 9 (None of above) allows the evaluator to leave the response separate, or to slot the response into one of the other eight responses if it is clear that the response matches the explanation.

Students who responded to question number 3 (specific career in mind) were asked to further indicate which of 3[a] (Previous exposure), 3[b] (Hopes to get experience), 3[c] (People willing to help), or 3[d] (No experience/ exposure until after graduation) was most appropriate. These responses are designed to identify two distinct categories of students: first, those who have developed a connection between the labour market and their academic career through direct on-the-job experience or important contacts; and second, those who



have not already developed a link between the labour market and their chosen career. A response from either question number 3[a] (Previous exposure) or 3[c] (People willing to help) indicates a link between the two has been established in some way; whereas, a response from either question number 3[b] (Hopes to get experience) or 3[d] (No experience/ exposure until after graduation) indicates that there has been no previous exposure to the kind of work in question. Response 3[e] (None of above) allows the student to answer individually, although the researcher makes an attempt to interpret individual answers to determine if the response is actually appropriate to either question number 3[a] (Previous exposure), 3[b] (Hopes to get experience), 3[c] (People willing to help), or 3[d] (No experience/ exposure until after graduation).

The first set of questionnaires was given to students in April 1984 and the second set given in April 1985. This procedure is followed because in September 1983 the Newfoundland high school programme was revised to implement the equivalency of grade 12, and the graduates of the new high school programme would not enter Memorial University until September 1984.<sup>12</sup>

Although the main idea is to sample students' perspective of their post-secondary school programme, the opportunity also exists to evaluate whether the revised high school programme (which includes a course option in Career

Education, the opportunity for more exposure to career counsellors, and additional time for making career decisions) had an appreciable effect on the career goals of students entering Memorial University. <sup>31</sup> Consequently a comparison is made between two samples of Memorial University students:- one representing graduates from the former high school system, and one representing high school graduates from the extended high school programme. This is in addition to a comparison made between post-secondary institutions. The results of these findings are tabled and discussed in Chapter Five.

#### The Cabot Institute: Survey of Students' Views

The Cabot Institute encompasses students in a wide variety of technical areas including: (i) Academic Services Programmes (e.g. Computer Studies), (ii) Business Education and Applied Arts Programme (e.g. Secretarial Science), (iii) Construction and Resource Programmes (Civil Engineering Technology), (iv) Electrical and Electronics Programmes (e.g. Radio and T.V Servicing), (v) Mechanical Programmes (e.g. Plumbing, and Domestic Heating), (vi) Medical Services Programmes (e.g. Medical Laboratory Technology), and (vii) Service Programmes (eg. Beauty Culture). <sup>32</sup> These programmes generally range in duration from one to three years;

however, the study surveyed only students in the first year of study in order to be consistent with the level of students surveyed at Memorial University.

The study was conducted by using the same questionnaire as given to the sample of Memorial University students. (See Appendix B)

The contact at the Cabot Institute (the Personnel and Public Relations Officer) was requested to ask a number of homeroom instructors to distribute the questionnaires to their homeroom class. The number of full time first year students registered at the Cabot Institute in November 1985 totaled 607 and homeroom classes ranged in size from fifteen to twenty-five students. Because of the size of the classes the instructors were given ten questionnaires for each class surveyed to ensure that there were fewer questionnaires distributed to the class than the total number of students in the class. It was decided that a sample size of one hundred would be appropriate because there was a limit to the number of first year classes and the number of students in each class. The contact was requested to ask the instructors to place the questionnaires on desks within the homeroom class before the students entered, and as students came into the room, students with questionnaires were asked to read them carefully and complete them by marking the appropriate responses.

The aim of the researcher was to select a non-biased

sample of students from the Cabot Institute. In this case it was expected that the sample might contain some sex bias because classes in the Cabot Institute are either traditionally male orientated or traditionally female orientated. There was no means of knowing the degree to which the sample was biased according to sex because the contact was only instructed to choose a number of first year classes by selecting a number of first year homeroom instructors. Generally the male student enrolment in the Cabot Institute largely outnumbers the female student enrolment.

Another possible bias exists in the level of academic achievement, since different programmes require different academic entry qualifications. Here again there can be no measure of the degree of this bias. Consequently, the study made no attempt to consider the views of post-secondary students in relation to their level of academic achievement at the secondary school level. The results are tabled and discussed in Chapter Five.

Students who responded to question number 3 (Specific career in mind) were asked to further indicate either 3[a] (Previous exposure), 3[b] (Hopes to get experience), 3[c] (People willing to help), or 3[d] (No experience/ exposure until after graduation). The responses obtained are evaluated in the same manner as the responses obtained from the samples of students at

Memorial University. Consequently, responses to questions number 3[a] (Previous exposure) and 3[c] (People willing to help) are combined to indicate the degree to which a link existed between the course programme and the labour market, and responses to questions number 3[b] (Hopes to get experience) and 3[d] (No experience/ exposure until after graduation) are combined to indicate non-association between the course programme and the labour market. The rationale is that for those students who have made career choices, questions number 3[a] (Previous exposure) and 3[c] (People willing to help) represent positive responses, whereas questions numbers 3[b] (Hopes to get experience) and 3[d] (No experience/ exposure until after graduation) represent negative responses to having made contact with the labour market. The results are tabled and discussed in Chapter Five.

#### The Marine Institute: Survey of Students' Views

The Marine Institute encompasses students in a wide variety of programmes involved with various branches of marine-related technology and applied sciences, including: Three-year Technology Programmes leading to Diploma of Technology (e.g., Electrical Technology and Electronics Technology), Two-year Technical Programmes

leading to Certificate of Technology (e.g. Small Craft Design and Marine Electronics), One-year Vocational Programmes leading to Vocational Certificate (e.g. Refrigeration Plant Operation and Marine Diesel Mechanics), and Short Courses leading to Vocational Certificate (e.g. Marine Cooking and Stewarding and Marine Stewarding).<sup>16</sup>

The study was conducted by using the same questionnaire as given to the sample of Memorial University and Cabot Institute students. (See Appendix B)

The contact at the Marine Instituté (the Guidance Counsellor) was requested to ask a number of homeroom instructors to distribute questionnaires in their homeroom classes. The instructions given were similar to those given to instructors at the Cabot Institute. The number of full time first year students registered at the Marine Institute in November 1985 totaled 255 and homeroom classes ranged in size from fifteen to twenty-five students.<sup>37</sup> Because of the size of the classes, the instructors were given ten questionnaires for each class surveyed to ensure that there were fewer questionnaires distributed to the class than the number of students in the class. It was determined that a sample size of one hundred would be appropriate because there was a limit to the number of first year classes and the number of students in each class.

The sample of students selected at the Marine Institute was subject to the same sex and academic achievement level biases as the sample of students at the Cabot Institute. However, the study makes no attempt to consider the views of post-secondary students in relation to their sex or academic achievement at the secondary school level.

The responses of students to question number 3 (Specific career in mind) are evaluated further in the same manner as the responses of students surveyed in each of the post-secondary institutions above. The results are tabled and discussed in Chapter Five.

#### District Vocational Schools: Survey of Students' Views

There were, at the time of the study, seventeen District Vocational Schools located throughout the province. The programmes offered were primarily of one year duration and included such areas as Autobody Repair, Mechanics, Clerk Accounting, Clerk-typing and Drafting. Over the last several years most or all of these District Vocational Schools have been offering Pre-vocational courses to High School students in their respective districts; however, this survey eliminated these students from the sample because this level and category of student is not comparable with student samples in the

other post-secondary institutions.

In order to maintain a workable volume of data, it was decided that it would be necessary only to survey half the number of Vocational Schools. The schools were selected by drawing every other school from the alphabetical listing. Each school's principal was contacted directly and asked to assist in the survey. All principals contacted agreed to participate. It was learned from discussion with the principals at the time of the study, that the total enrollment of first year students for the 1985-1986 academic year in schools surveyed ranged in size from approximately 100 to approximately 280 students. It was decided that a sample size of 50 per school was appropriate because of the limited size of homeroom classes and the number of first year students. The principals were asked to select five homeroom instructors and requested them to place the questionnaires on desks in the homeroom class before the students entered. Students with questionnaires were then instructed to read the forms and complete them appropriately.

The samples of students selected within the District Vocational Schools are subject to the same sex and academic achievement level biases as the sample of students at the Cabot Institute and Marine Institute. However, the study makes no attempt to consider the views of post-secondary students in relation to their sex or



academic achievement at the secondary school level.

The responses of students to question number 3 (Specific career in mind) are evaluated further in the same manner as the responses of students surveyed in each of the post-secondary institutions above. The results are tabled and discussed in Chapter Five.

The next chapter is designed to outline and ~~interpret~~ the responses gained from distribution of questionnaires to first year students at Memorial University, the Cabot Institute, the Marine Institute and the eight District Vocational Schools.

## CHAPTER 5

## RESULTS, OBSERVATIONS AND ANALYSIS

Memorial University

From the study conducted at Memorial University in April 1984 and April 1985, it is found that a large majority of students surveyed perceive their university programme as being career oriented, and are working towards the necessary qualifications for that career goal. TABLES 2 and 3 show that of the students surveyed, 83.0% and 73.0% respectively, have a specific career in mind and are working towards the qualifications necessary to reach that goal, and 5.5% to 13.0% respectively, are seeking a degree in order to find a job although they have no definite career plans.

It was anticipated that the sample of students surveyed in April 1985 would show a marked increase in the number of students with specific career plans, in relation to those without any career in mind. This was based on the idea that the students surveyed in April 1985 had graduated through the recently implemented extended high school programme, and as mentioned, one of the reasons behind the implementation of an extra year of high school was to allow students an added year at the secondary level to make career decisions.

TABLE 2

STUDENT RESPONSES ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR MEMORIAL  
UNIVERSITY STUDENTS IN APRIL 1984

Question #	No. of responses	% of total
1 (Study for education sake)	11	5.5
2 (Unemployed, upgrading)	2	1.0
3 (Specific career in mind)	166	83.0
4 (Nothing better to do)	5	2.5
5 (Programme a second choice)	3	1.5
6 (Pressured by parents)	2	1.0
7 (No career in mind)	11	5.5
8 (Sponsored by employer)	0	0.0
9 (None of above)	0	0.0
total	200	100.0

TABLE 3

STUDENT RESPONSES ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR MEMORIAL  
UNIVERSITY STUDENTS IN APRIL 1985

Question #	No. of responses	% of total
1 (Study for education sake)	13	6.5
2 (Unemployed, upgrading)	0	0.0
3 (Specific career in mind)	146	73.0
4 (Nothing better to do)	8	4.0
5 (Programme a second choice)	2	1.0
6 (Pressured by parents)	0	0.0
7 (No career in mind)	26	13.0
8 (Sponsored by employer)	0	0.0
9 (None of above)	5	2.5
total	200	100.0

The findings contradict this. The sample surveyed in April 1985 shows a decline of 10.0%, from the sample surveyed in April 1984, in the number of students working on qualifications for a chosen career. The sample surveyed in April 1985 also showed a 7.5% increase from the sample surveyed in 1984, in the number of students who had no career in mind and were working towards a degree in order to find a job (See TABLES 2 and 3).

TABLES 4 and 5 further analyse responses to question number 3 (Specific career in mind) made by the sample of Memorial University students surveyed in April 1985.

TABLE 5 indicates that, of the Memorial University students surveyed who have chosen a specific career and who are working towards necessary qualifications, 16.4% have made a contact with the occupation through job experience or people whom they feel are willing to help them, whereas 83.6% have made no such contact. It is further shown that of the total students surveyed, only 12.3% progressed through their first year of university studies having developed contacts within the labour market and only 4.1% progressed through their first year of university studies having gained exposure to the work related to their career interest.

TABLE 4

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO SAMPLE OF FIRST YEAR MEMORIAL UNIVERSITY STUDENTS IN APRIL 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure)	6	3.0	4.1
3[b] (Hopes to get experience)	84	42.0	57.5
3[c] (People willing to help)	18	9.0	12.3
3[d] (No experience, exposure until after graduation)	38	19.0	26.0
3[e] (None of above, because...)	0	0.0	0.0
Non responses to # 3	54	27.0	N.A.**
Total	200	100.0	99.9

\* Represents % of total number of #3 responses and the total number of #3 responses is 146 (see TABLE 3, p. 88).

\*\* Not Applicable

TABLE 5

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR MEMORIAL  
UNIVERSITY STUDENTS IN APRIL 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure) + 3[c] (People willing to help)	24	12.0	16.4
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	122	61.0	83.6
3[e] (None of above because..)	0	0.0	0.0
Non responses to # 3	56	28.0	N.A.
Total	200	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 146 (see TABLE 3, p. 88).

\*\* Not Applicable

The Cabot Institute

The results gained from the questionnaire presented to a sample of Cabot Institute students, as represented in TABLE 6, indicate that 64.0% of the students surveyed had chosen a specific career and were working towards necessary qualifications.

TABLES 7 and 8 further analyse responses to question number 3 (Specific career in mind) made by sample of Cabot Institute students surveyed in November 1985.

TABLE 8 shows that of the number of students who had chosen a specific career and who were working towards necessary qualifications, 40.6% made contact with the occupation through job experience or people whom they felt were willing to help them, and this represents only 26.0% of the total responses. On the other hand, 51.6% who had chosen a specific career and who were working towards necessary qualifications, had made no such contact, and this represents 33.0% of the total responses.

The results show that the percentage of first year students at the Cabot Institute who made contact with the labour market is relatively low. However, this percentage, 40.6%, is significantly higher than the 16.7%, for the sample of first year Memorial University students surveyed in April 1985. (See TABLE 5)

TABLE 6

STUDENT RESPONSES ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR CABOT  
INSTITUTE STUDENTS IN NOVEMBER 1985

Question #	No. of responses	% of total
1 (Study for education sake)	7	7.0
2 (Unemployed, upgrading)	7	7.0
3 (Specific career in mind)	64	64.0
4 (Nothing better to do)	4	4.0
5 (Programme a second choice)	6	6.0
6 (Pressured by parents)	3	3.0
7 (No career in mind)	6	6.0
8 (Sponsored by employer)	0	0.0
9 (None of above)	3	3.0
Total	100	100.0



TABLE 7

FURTHER STUDENT RESPONSES TO #3. (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO SAMPLE OF FIRST YEAR CABOT INSTITUTE STUDENTS IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure)	11	11.0	17.2
3[b] (Hopes to get experience)	24	24.0	37.5
3[c] (People willing to help)	15	15.0	23.4
3[d] (No experience/ exposure until after graduation)	9	9.0	14.1
3[e] (None of above, because...)	5	5.0	7.8
Non responses to # 3	36	36.0	N.A.**
Total	100	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 64 (see TABLE 6, p. 93).

\*\* Not Applicable

TABLE 8

FURTHER COMBINED STUDENT RESPONSES TO #3  
 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
 GIVEN TO SAMPLE OF FIRST YEAR CABOT  
 INSTITUTE STUDENTS IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure) + 3[c] (People willing to help)	26	26.0	40.6
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	33	33.0	51.6
3[e] (None of above because..)	5	5.0	7.8
Non responses to # 3	36	36.0	N.A.
Total	100	100.0	100.0

\* Represents % of total number of #3 responses and the  
 total number of #3 responses is 64 (see TABLE 6, p. 93).

\*\* Not Applicable

### The Marine Institute

The results gained from a sample of Marine Institute students, as shown by TABLE 9, indicate that 72.0% of the students surveyed had chosen a specific career and were working towards necessary qualifications. This is a slightly higher percentage than found in the study of students at the Cabot Institute, but again much lower than the 83.0% and 73.0% respectively, found from the survey of April 1984 and April 1985 at Memorial University.

TABLES 10 and 11 further analyse responses to question number 3 (Specific career in mind) made by sample of Marine Institute students surveyed in November 1985. TABLE 11 shows that 41.6% of the number of students who had chosen a specific career and who were working towards necessary qualifications, had made contact with the occupation through job experience or people whom they felt were willing to help them, and this represents only 30.0% of the total responses. On the other hand, 55.6% who had chosen a specific career and who were working towards necessary qualifications, had made no such contact, and this represents 40.0% of the total responses.

The results show that the overall percentage of first year students who made contact with the labour market is relatively low, although the percentage is

significantly higher than the 16.7% found among first year students surveyed in April 1985 at Memorial University.

TABLE 9

STUDENT RESPONSES ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR MARINE  
INSTITUTE STUDENTS IN NOVEMBER 1985

Question #	No. of responses	% of total
1 (Study for education sake)	4	8.0
2 (Unemployed, upgrading)	2	1.0
3 (Specific career in mind)	36	72.0
4 (Nothing better to do)	0	0.0
5 (Programme a second choice)	3	6.0
6 (Pressured by parents)	2	4.0
7 (No career in mind)	2	4.0
8 (Sponsored by employer)	0	0.0
9 (None of above)	1	2.0
total	50	100.0

TABLE 10

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO SAMPLE OF FIRST YEAR MARINE INSTITUTE STUDENTS IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure)	8	16.0	22.2
3[b] (Hopes to get experience)	16	32.0	44.4
3[c] (People willing to help)	7	14.0	19.4
3[d] (No experience/ exposure until after graduation)	4	8.0	11.1
3[e] (None of above, because..)	1	2.0	2.8
Non responses to # 3	14	28.0	N.A.**
Total	50	100.0	99.9

\* Represents % of total number of #3 responses and the total number of #3 responses is 36 (see TABLE 9, p. 97).

\*\*Not Applicable

TABLE 11

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR MARINE  
INSTITUTE STUDENTS IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3
3[a] (Previous exposure) + 3[c] (People willing to help)	15	30.0	41.7
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	20	40.0	55.6
3[e] (None of above because...)	2	4.0	5.6
Non responses to # 3	13	26.0	N.A.**
Total	50	100.0	99.9

\* Represents % of total number of #3 responses and the total number of #3 responses is: 36 (see TABLE 9, p. 97).

\*\* Non Applicable

District Vocational Schools

TABLE 12 outlines the results gained from samples of students drawn from each of eight District Vocational Training Schools throughout the province. The results show that of the first year District Vocational students surveyed, the percentage of students who indicated that they had a specific career in mind and were working towards necessary qualifications ranged from 58.0% in the St. Anthony District Vocational School to 80.0% in the Burin District Vocational School.

TABLE 13 through to TABLE 28 outline a breakdown of responses for question 3 (Specific career in mind) for each of the District Vocational Schools surveyed. These results indicate that of those students who had a specific career in mind and were working towards necessary qualifications, a range of from 34.3% found at Bell Island District Vocational School to 43.8% found at the Port-aux-Basques District Vocational School had made contact with the labour market in order to gain exposure to the work of their chosen career or to get related experience.

TABLE 12

STUDENT RESPONSES ON QUESTIONNAIRE TO  
QUESTION #3 (SPECIFIC CAREER IN MIND) GIVEN  
TO SAMPLE OF FIRST YEAR STUDENTS IN EIGHT  
DISTRICT VOCATIONAL SCHOOLS IN NOVEMBER 1985.

Name of school	No of responses	% of total responses
Bell Island District Vocational School	35	70.0
Burin District Vocational School	40	80.0
Clareville District Vocational School	36	72.0
Corner Brook District Vocational School	35	70.0
Lewisporte District Vocational School	36	72.0
Grand Falls District Vocational School	31	62.0
Port-aux-Basques District Vocational School	32	64.0
St. Anthony District Vocational School	29	58.0

\* Sample size is 50 (see TABLE 1, p. 73).



TABLE 13

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO SAMPLE OF FIRST YEAR BELL ISLAND DISTRICT VOCATIONAL STUDENTS IN NOVEMBER, 1965.

Question #	No. of responses	% of total	% of #3 <sup>*</sup>
3[a] (Previous exposure)	5	10.0	14.3
3[b] (Hopes to get experience)	15	30.0	42.9
3[c] (People willing to help)	7	14.0	20.0
3[d] (No experience/ exposure until after graduation)	6	12.0	17.1
3[e] (None of above, because..)	2	4.0	5.7
Non responses to # 3	15	30.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 35 (see TABLE 12, p. 101).

\*\* Not Applicable

TABLE 14

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR BELL ISLAND  
DISTRICT VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure) + 3[c] (People willing to help)	12	24.0	34.3
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	21	42.0	60.0
3[e] (None of above because..)	2	4.0	5.7
Non responses to # 3	15	30.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 35 (see TABLE 13, p. 102).

\*\* Not Applicable

TABLE 15

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC  
CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO  
SAMPLE OF FIRST YEAR BURIN DISTRICT  
VOCATIONAL SCHOOL STUDENTS IN  
NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure)	8	16.0	20.0
3[b] (Hopes to get experience)	14	28.0	35.0
3[c] (People willing to help)	6	12.0	15.0
3[d] (No experience/ exposure until after graduation)	9	18.0	22.5
3[e] (None of above, because..)	3	6.0	7.5
Non responses to # 3	10	20.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 40 (see TABLE 12, p. 101).

\*\* Not Applicable

TABLE 16

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR BURIN DISTRICT  
VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure) + 3[c] (People willing to help)	14	28.0	35.0
3[b] Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	23	46.0	57.5
3[e] (None of above, because..)	3	6.0	7.5
Non responses to # 3	10	20.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 40 (see TABLE 15, p. 104).

\*\* Not Applicable

TABLE 17

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC  
CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO  
SAMPLE OF FIRST YEAR CLARENVILLE DISTRICT  
VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure)	7	14.0	19.4
3[b] (Hopes to get experience)	12	24.0	33.3
3[c] (People willing to help)	6	12.0	16.7
3[d] (No experience/ exposure until after graduation)	8	16.0	22.2
3[e] (None of above, because..)	3	6.0	8.3
Non responses to # 3	14	28.0	N.A.**
Total	50	100.0	99.9

\* Represents % of total number of #3 responses and the total number of #3 responses is 36 (see TABLE 12, p. 101).

\*\* Not Applicable

TABLE 18

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR CLARENVILLE  
DISTRICT VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure) + 3[c] (People willing to help)	13	26.0	36.1
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	20	40.0	55.6
3[e] (None of above because..)	3	6.0	8.3
Non responses to # 3	14	28.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 36 (see TABLE 17, p. 106).

\*\* Not Applicable

TABLE 19

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC  
CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO  
SAMPLE OF FIRST YEAR CORNER BROOK DISTRICT  
VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure)	8	16.0	22.9
3[b] (Hopes to get experience)	15	30.0	42.9
3[c] (People willing to help)	5	10.0	14.3
3[d] (No experience/ exposure until after graduation)	6	12.0	17.1
3[e] (None of above, because..)	1	2.0	2.9
Non responses to # 3	15	30.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 35 (see TABLE 12, p. 101).

\*\* Not Applicable.

TABLE 20

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR CORNER BROOK  
DISTRICT VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3
3[a] (Previous exposure) + 3[c] (People willing to help)	13	26.0	37.1
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	21	42.0	60.0
3[e] (None of above because..)	1	2.0	2.9
Non responses to # 3	15	30.0	N.A.*
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 35 (see TABLE 19, p. 108).

\*\* Not Applicable



TABLE 21

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC  
CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO  
SAMPLE OF FIRST YEAR LEWISPORTE DISTRICT  
VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3
3[a] (Previous exposure)	7	14.0	19.4
3[b] (Hopes to get experience)	12	24.0	33.3
3[c] (People willing to help)	6	12.0	16.7
3[d] (No experience/ exposure until after graduation)	8	16.0	22.2
3[e] (None of above, because..)	3	6.0	8.3
Non responses to # 3	14	28.0	N.A.
Total	50	100.0	99.9

\* Represents % of total number of #3 responses and the total number of #3 responses is 36 (see TABLE 12, p. 101).

\*\* Not Applicable

TABLE 22  
 FURTHER COMBINED STUDENT RESPONSES TO #3  
 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
 GIVEN TO SAMPLE OF FIRST YEAR LEWISPORTE  
 DISTRICT VOCATIONAL SCHOOL STUDENTS  
 IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3
3[a] (Previous exposure) + 3[c] (People willing to help)	13	26.0	36.1
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	20	40.0	55.6
3[e] (None of above because..)	3	6.0	8.3
Non responses to # 3	14	28.0	N.A.
Total	50*	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 36 (see TABLE 21, p. 110).

\*\* Not Applicable

TABLE 23

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO SAMPLE OF FIRST YEAR GRAND FALLS DISTRICT VOCATIONAL SCHOOL STUDENTS IN NOVEMBER 1985.

Question # of	No. of responses	% of total	% of #3*
3[a] (Previous exposure)	9	18.0	29.0
3[b] (Hopes to get experience)	14	28.0	45.2
3[c] (People willing to help)	3	6.0	9.7
3[d] (No experience/ exposure until after graduation)	4	8.0	12.9
3[e] (None of above, because...)	1	2.0	3.2
Non responses to # 3	19	38.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 31 (see TABLE 12, p. 101).

\*\* Not Applicable

TABLE 24

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR GRAND FALLS  
DISTRICT VOCATIONAL SCHOOL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3
3[a] (Previous exposure) + 3[c] (People willing to help)	12	24.0	38.7
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	18	36.0	58.1
3[e] (None of above because..)	1	2.0	3.2
Non responses to # 3	19	38.0	N.A.
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 31 (see TABLE 23, p. 112).

\*\* Not Applicable

TABLE 25

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC  
CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO  
SAMPLE OF FIRST YEAR  
PORT-AUX-BASQUES DISTRICT VOCATIONAL  
SCHOOL STUDENTS IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3**
3[a] (Previous exposure)	9	18.0	28.1
3[b] (Hopes to get experience)	14	28.0	43.8
3[c] (People willing to help)	5	10.0	15.6
3[d] (No experience/ exposure until after graduation)	4	8.0	12.5
3[e] (None of above, because..)	0	0.0	0.0
Non responses to # 3	18	36.0	N.A.
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 32 (see TABLE 12, p. 101).

\*\* Not Applicable

TABLE 26

FURTHER COMBINED STUDENT RESPONSES TO #3  
 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
 GIVEN TO SAMPLE OF FIRST YEAR  
 PORT-AUX-BASQUES DISTRICT VOCATIONAL  
 SCHOOL STUDENTS IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3
3[a] (Previous exposure) + 3[c] (People willing to help)	14	28.0	43.8
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	18	36.0	56.2
3[e] (None of above because...)	0	0.0	0.0
Non responses to # 3	18	36.0	N.A.
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 32 (see TABLE 25, p. 114).

\*\* Not Applicable

TABLE 27

FURTHER STUDENT RESPONSES TO #3 (SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE GIVEN TO SAMPLE OF FIRST YEAR ST. ANTHONY DISTRICT VOCATIONAL SCHOOL STUDENTS IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3 <sup>**</sup>
3[a] (Previous exposure)	6	12.0	20.7
3[b] (Hopes to get experience)	14	28.0	48.3
3[c] (People willing to help)	4	8.0	13.8
3[d] (No experience/ exposure until after graduation)	4	8.0	13.8
3[e] (None of above, because..)	1	2.0	3.4
Non responses to # 3	21	42.0	N.A. <sup>**</sup>
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 29 (see TABLE 12, p. 101).

\*\* Not Applicable

TABLE 28

FURTHER COMBINED STUDENT RESPONSES TO #3  
(SPECIFIC CAREER IN MIND) ON QUESTIONNAIRE  
GIVEN TO SAMPLE OF FIRST YEAR ST. ANTHONY  
DISTRICT VOCATIONAL STUDENTS  
IN NOVEMBER 1985.

Question #	No. of responses	% of total	% of #3*
3[a] (Previous exposure) + 3[c] (People willing to help)	10	20.0	34.5
3[b] (Hopes to get experience) + 3[d] (No experience/ exposure until after graduation)	18	36.0	62.1
3[e] (None of above because..)	1	2.0	3.4
Non responses to # 3	21	42.0	N.A.**
Total	50	100.0	100.0

\* Represents % of total number of #3 responses and the total number of #3 responses is 29 (see TABLE 27, p. 116).

\*\* Not Applicable



TABLE 29 outlines the combined responses to question 3 (Specific career in mind). For each District Vocational School responses 3[a] (Previous exposure) and 3[c] (People willing to help) are combined to indicate those who have made contact with the labour market in the area of their career goal, and responses 3[b] (Hopes to get exposure) and 3[d] (No experience/ exposure until after graduation) are combined to indicate those who have made no contact with the labour market. The results appear to be quite consistent. The percentage of students who indicate that they have made contact with the labour market, ranges from 20.0% in the St. Anthony District Vocational School to 28.0% in the Burin District Vocational School and the Port-aux-Basques District Vocational School.

TABLE 29

FURTHER COMBINED % OF STUDENT RESPONSES  
TO #3 (SPECIFIC CAREER IN MIND) FOR ALL  
DISTRICT VOCATIONAL SCHOOLS SURVEYED  
IN NOVEMBER 1985.

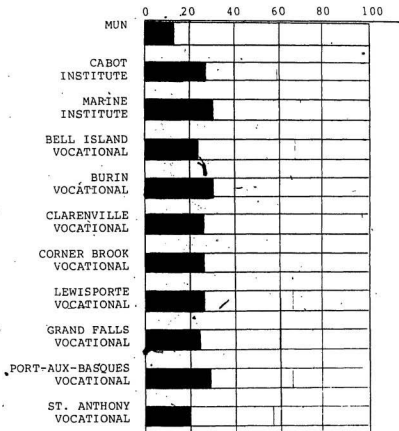
Name of school	% of total responses 3[a]+3[c]	% of total responses 3[b]+3[d]	% of total responses 3[e]	% of total non responses to #3
Bell Island District Vocational School	24.0	42.0	4.0	30.0
Burin District Vocational School	28.0	46.0	6.0	20.0
Clarendville District Vocational School	26.0	40.0	6.0	28.0
Corner Brook District Vocational School	26.0	42.0	2.0	30.0
Lewisporte District Vocational School	26.0	40.0	6.0	30.0
Grand Falls District Vocational School	24.0	36.0	2.0	38.0
Port-aux-Basques District Vocational School	28.0	36.0	0.0	36.0
St. Anthony District Vocational School	20.0	36.0	2.0	32.0

CHART 1 is a graphic representation of how the students surveyed in 1985 responded to question #3 (Specific career in mind).

The graph clearly indicates that there is a low percentage of students who have chosen a specific career and who have made contact with the labour market in their career areas by their first year of post-secondary study. From the fact that only 12.0% of Memorial University students surveyed in April 1985, and 26.0% of Cabot Institute students, 30.0% of Marine Institute, and between 20.0% to 28.0% of District Vocational School students surveyed in November 1985 have had previous exposure or contacts with the labour market, it is obvious that there is a significant number of students depending almost entirely on post-secondary academic training as a means of entering the labour market.

This emphasizes the underlying idea that many students choose occupations and complete the necessary academic qualifications before they think of gaining work experience relating to that occupation or establishing some contact with people in the area of their chosen career. Consequently, the process of entering the labour market may require accepting a job unrelated to the technical skills acquired, before they are able to find work in the occupation of their choice. When this occurs, there seems to be an inefficient use of human resources and post-secondary educational training.

CHART 1 COMBINED % OF STUDENT RESPONSE TO #3 (SPECIFIC CAREER IN MIND) FOR ALL POST-SECONDARY STUDENTS SURVEYED IN 1985.



Responses to 3[a] (Previous exposure)  
+ 3[c] (People willing to help)

Responses to 3[b] (Hopes to experience)  
+ 3[d] (No experience/ exposure  
until after graduation)

Non response to # 3[a,b,c,d] + 3[e]

Survey; R. Halliday, (Nov. 1985). St. John's, Nfld.

The results of the questionnaire circulated as a part of the study indicate that a relatively low percentage of students surveyed actually have a planned approach to the type of work they want to do as adults. It is emphasized that of the students surveyed, only 16.7% (see TABLE 5) of Memorial University students, 40.6% (see TABLE 8) of Cabot Institute, 40.5% (see TABLE 11) Marine Institute, and 24.0% to 28.0% (see TABLE 29) of District Vocational School students with specific career plans, made contact with the labour market. Some of these students may, indeed, enter the occupation of their choice after graduation, but it is felt that the process of getting into a career is highly competitive and requires careful career planning.

Furthermore, the low percentages of responses gained to questions 2 (Unemployed, upgrading) and 8 (Sponsored by employer), demonstrate that few of the students surveyed have returned to post-secondary studies after entering the labour market. Also, the relatively low percentages of responses gained from questions 1 (Study for education sake), 4 (Nothing better to do), 5 (Programme a second choice), 6 (Pressured by parents) and 7 (No career in mind) indicate that these students are largely career orientated.

It appears that there are students who are working towards academic qualifications for a specific career and not making contact with the labour market relating to

that career. This means that there are students who are heading towards entry into the labour market based solely on academic qualifications. It is speculated that the students in this situation may find themselves in difficulty entering the labour market and may lose job competitions to candidates with less academic qualifications but more related job experience.

In summation, the data gathered clearly suggests that of the students surveyed for each of the Cabot Institute, the Marine Institute, and the various District Vocational Schools, a relatively low number of those who perceived themselves as working towards academic qualifications for specific careers have made labour market contact. The number of students in this category at Memorial University is even less.

This seems to support the fact that post-secondary institutions are used for gaining credentials to enter the labour market rather than obtaining the training necessary to perform a specific job. This leads to the question of how effective our present school system is in developing a well trained labour force and how efficient our public policy is in balancing our nation's human resources.

The next chapter is designed to outline the conclusions gained from the information presented and to discuss the implementations of these findings.

## CHAPTER 6

## CONCLUSION AND IMPLICATIONS

It is important to maintain a close look at how the process of transfer from schooling to working is being carried out. This study to some degree shows that in the current structure of the post-secondary educational system in Newfoundland, many students fail to develop fundamental links between post-secondary studies and the work place. This leads to speculate that post-secondary students obtain skills that are not needed in the labour market. This results in excessive cost for post-secondary education and an underutilization of the province's human resources.

The Industrial Revolution changed the structure of the work force and the nature of work; this, in turn, forced a movement towards urbanization and more clearly defined class levels. Education became a luxury affordable only by the rich and upper class, and it would be these children who would fill the ranks of the next generation business and factory owners and management. During the nineteenth century the structure of the school was developing along the ideals of the upper class and modelled after the corporate state. The result was a predestined association between the level of achievement in the school system and the level of attainment in work

and in society. The freedom of right to education in a democratic society opened the door to a whole new phenomenon--upward class mobility.

The changes introduced to society because of the World Wars and a rapid increase in technology in the 1960's pushed education into a new approach towards the development of trained workers. Students flocked to post-secondary schools for job credentials in order to gain higher paid and more prestigious jobs, and governments quickly built technical and vocational schools in response to the demand.

Governments have responded in the past to the demand from the public for post-secondary education by building post-secondary educational institutions and implementing training programmes. These training programmes represent a democratic freedom of choice which allows individuals to select their own career, and at the same time becomes an important factor in that country's economic development. Educational policy must therefore create a balance between the demands for specific post-secondary education and the demands of the labour market for a skilled work force. The balance of expertise is controlled by balancing the choice of education programmes. This is achieved through overall education policy decisions at levels affecting what programmes are offered, how many institutions exist, and where these institutions are located.



The economic strength of a country, according to such people as former Prime Minister Pierre Trudeau, is largely dependent on its production capability and its competitiveness in international markets. It is reasonable to suggest that wages are an important aspect of production cost of goods and materials, because the final selling price must reflect all costs. This is particularly important in North America because we enjoy a high level of living, and a high wage structure tied in with it. Some countries, particularly those in the Far East, can produce a high-tech product at low cost but this generally means a lower standard of living.

The major concerns for production cost rest, therefore, not on the actual cost of production but on the relationship between the cost of the product and the level of living sustained. For Canadian production costs to be competitive with those of industrial nations, such as European countries and the United States, the efficiency of production becomes a critical factor. One important factor in the debate on the efficiency of production is the question of how efficiently the nation's human resource is trained by the public-school system and absorbed into the labour market. In this study it is shown that many students in post-secondary institutions in Newfoundland do not make contact with the labour market before or during their post-secondary studies. It can be implied from this that the

educational system in Newfoundland does little to encourage students to make such contacts, and thus is not maintaining efficiency because it is producing trained personnel which the labour market does not need and cannot utilize. 7

The labour market itself must be considered an important factor when considering movement from school to work. Generally, individual employers function independently of direct influence from the education system, for their major concern is to have an efficient work force that can perform a given function to produce a product or a service at a given cost. As outlined by Trudeau in his 1982 Speech to the Nation, a nation's economy stems fundamentally from the total production success of the labour market; therefore, it is important for a productive country to have a productive industrial base. However, at the root of industry's financial success is the labour force, because production costs are primarily geared to labour costs.

Employers have several main problems. First, it is important to find and retain employees who are able to do the most cost efficient job (i.e. the best work performed for the salary earned). When employers recruit employees to fill new or vacant positions, they are anxious to obtain an employee who has had experience doing that function, as this lessens the time required for incumbents to become familiar with the work and to

function at their greatest potential. This means that the demand for employees is for experienced workers.

Another problem experienced by employers is what criteria to use to select or rank candidates in the recruitment process. With the strength exercised by labour unions and the power of equal rights movements, it is necessary to be able to rationalize why one candidate is chosen over another. This brings education to the forefront, because education credentials play an important part in the recruitment process. This means that the person with the best chance of getting a particular job is the person who will accept the salary offered and who can display the most impressive resume. However, high education qualifications often mean a higher buying price or salary.

When this occurs, the education system becomes an operation to provide credentials which serve primarily in moving the candidate as closely as possible to the position of being selected to fill the job. There is no doubt that an educated employee may have innate skills and abilities that are valuable on the job, but can it be said that a technically trained student is more or less educated than a technically experienced employee. Coupled with this is the fact that the education system is providing only part of the criteria of recruitment, for no matter how technical colleges attempt to simulate the work place, there is no accepted substitute for

on-the-job experience.

Post-secondary education has an important function because there is often a significant amount of technical theory and practical skills necessary in order to begin to learn how to do a job. For example, secretaries can only perform all the aspects of their job after they know the office operation and procedures and have learned to handle clerical matters the way their supervisor requires. Nevertheless, the secretary requires typing and stenographic skills, and it seems most plausible that such skills be gained through qualified instruction outside the job market. It is therefore suggested that post-secondary institutions must respond directly to the labour market by providing specific practical theory and technical training needed for an individual to perform a given job.

The school system in Newfoundland may consider changes in its structure to place a greater emphasis on career education and counselling. If more emphasis were placed on these programmes, students would conceivably enter post-secondary programmes with a good understanding of conditions in the labour market relating to the occupational area they are attempting to enter. In the absence of such an understanding, very often the end result is a large number of unemployed post-secondary school graduates, hoping to find a job of any description. However, observation of the high school

system in Newfoundland seems to suggest that the present structure of career education fails to help students make career decisions, and to select post-secondary programmes which have meaning and purpose for their career goal. Consequently it appears that secondary school graduates may be primarily interested in choosing post-secondary school programmes of study, rather than choosing an occupation and then planning a means of getting into that occupation.

One can also make observation on the degree to which post-secondary educational institutions are active in attempting to introduce students to the work place. In some cases post-secondary institutions have implemented work term projects; however, these programmes seem to fall short of providing extensive work experience to large numbers of post-secondary students. In cases where post-secondary programmes do not provide students with work experience as a part of the curriculum, students must use their own initiative to get related work experience or to make contacts within the labour market with people who are willing to give them the leverage they need to get into the work force. The present study shows that students fail to establish contacts within the labour market.

Information gained from the sample of post-secondary students surveyed in the study, indicates that only 12.0% of Memorial University students (see TABLE 5), 26.0% of

Cabot Institute students (see TABLE 8), 30.0% of Marine Institute students (see TABLE 11), and between 20.0% to 28.0% (see TABLE 29) of District Vocational School students surveyed have had previous exposure or made contacts with the labour market during their first year of study. Thus, lack of exposure to the labour market by the first year study period may be due to the way the educational system is organized rather than to the age and maturity of the student. The implementation of an additional year of high school failed to show (see TABLES 2 and 3) an increase in the number of Memorial University students who had formulated definite career plans by their first year of study.

Notwithstanding the direct loss of post-secondary education investment when people are technically trained and can not find employment in their field of study, the indirect loss in terms of inefficient use of human resources could be enormous. If, for example, the number of man hours of work required for post-secondary technical training which is not being utilized in the labour market were turned to production work, it is conceivable that the result would have a substantial impact on increasing the country's competitiveness in terms of foreign markets and exports. Again, it is necessary to clarify the fact that there can always be justification for education for personal development. What is questioned here is the technical training skills

and manpower that is not utilized by the labour market.

In order to overcome these particular problems which may be imbedded in the fabric of Newfoundland education, it would be necessary to make a number of changes. First, an improved career education and career counselling programme needs to be devised. Students should be exposed to a curriculum which emphasizes the importance of making sound career choices and demonstrates techniques of selecting a career based on self analysis; and this material should be presented to students before the end of junior high school rather than in the last year of their senior high school studies. In this way the process of learning occupational research techniques may have a more practical application. One would expect that this would serve students in selecting high school courses and make their present course work more directed and meaningful.

Another change that could be implemented is to de-emphasize credentials in post-secondary institutions. In this way universities, colleges and vocational schools would be promoted as a source of what Thomas (1983: 5) refers to as "life-long" education, which is a process of continuing educational training throughout one's life, rather than a program that must be taken before students look for work. Students would not only be encouraged to choose occupations but also would be encouraged to find work related jobs that could and would lead to reaching

that career goal. Post-secondary schools could serve to provide technical and practical skills as well as knowledge of theory as these are required during one's career. This should conceivably lead to the assigning of greater responsibility on the job and consequently to the achieving of upward or lateral career mobility. The main purpose of post-secondary course work would be to gain the technical skills needed at or about the time required for a particular job function.

Many scholars such as Broudy (1964: 5-20) have suggested that secondary education should be structured towards providing the individual with a sound "basic" education and this emphasizes literature, language, and mathematics as well as a variety of basic skills material. Because the value of education would remain high there would be no necessity to change this ideal or philosophy. What would be stressed is the idea that students would consider such factors as supply and demand of trained personnel when selecting an occupation and would work into that career by combining work experience with technical training. Not only will this help develop a career with thought and precision, but also will avoid the waste of time and expenditure presently experienced by those who obtain post-secondary school credentials to find out later that they do not want that kind of work or that there is no demand for workers with that technical skill. It is reasonable to speculate that combining work



experience and technical training would allow people to have an opportunity to more closely monitor their own career preferences, and to be more aware of labour market conditions.

In order to bring about this change not only the educational system but also the labour market would have to enact several changes. Employers would need to be less dependent on credentials as a method for selecting new employees, and this would mean a change in present recruiting procedures. Employees would be hired primarily at the entry level (junior level of occupational classes) based on potential, and the employer would strive to train and develop that employee for specialized areas within the organization. Employers, therefore, must become sensitive to their own personnel requirements in terms of the potential of existing staff and make every possible opportunity available for their employees to enroll in post-secondary programmes to gain technical and practical training. This would mean that business and industry would have to implement human resource management programmes as outlined by Walker (1980: 67-80).

It is felt by this researcher as well as by such authors as Sutermeister (1976: 19-24) that the labour market would gain significantly from this change in personnel programming, because the employer would be in a better position to promote increased productivity and to

ensure that specific personnel needs are met. This might mean that government departments and private companies would have a larger number of entry levels for employees. However, one is led to speculate that the increased efficiency of staff, the down shifting of respective daily work functions, and the streamlining of supervisory and managerial personnel would mean greater savings in overall personnel expenditure, and this should have overall positive effects on the overall economy. One should also expect that this would create a greater employment base for youth and would result in a decrease in unemployment rate.

This thesis demonstrates to some degree that several problems presently exist in the process of career education and training that require attention. Although some changes in the educational system in the province have already been implemented in this respect (eg. the introduction of a Career Education course in the new high school programme) more changes seem necessary. It is conceded that such changes would mean drastic innovations in the structure of secondary and post-secondary education as well as in the process of employee training. It is hoped, however, that the present discussion will lead the way for further consideration and study in this area.

## FOOTNOTES

1. See Statistics Canada; Job Market Reality for Postsecondary Graduates: Employment Outcome by 1978, Two Years after Graduation, Education, Science and Cultural Division, Projections Section, Ottawa, 1978, p. 132.
2. See Trudeau, Pierre Elliott; The Prime Minister's Broadcast to the Nation on the Economy, Ottawa, October 19, 20, 21, 1982.
3. See Ginzberg, Eli; The House of Adam Smith, Octagon Books Inc., N.Y., 1964.
4. See Statistics Canada; Survey of Higher Education: Fall Enrolment in Universities and Colleges, 1953-69, Educational Division, Ottawa, Annual.
5. See Statistics Canada; Enrolment in Education Institutions by Provinces, 1951-52 to 1980-81, Economic Council of Canada, Ottawa, 1980.
6. See Statistics Canada; Federal and Provincial Student Aid in Canada: 1966-67 and 1967-68, Education, Science and Cultural Division, Financial Information Section, Ottawa, Annual.
7. See Statistics Canada; Out of School and Into the Labour Force: Trends and Prospects for Enrolment, School Leavers and the Labour Force in Canada--the 1960s through the 1980s, Education Science and Cultural Division, Projections Section, Ottawa, 1978.
8. The term "underemployment" is used by Statistics Canada to describe a condition in which workers' acquired skills and education exceed requirements. See Statistics Canada, Out of School Into the Labour Force.
9. Ibid., Statistics Canada; Job Market Reality for Postsecondary Graduates: p. 66.

10. Ibid., Statistics Canada; Out of School Into the Labour Force: p. 195.
11. Ibid., Trudeau, Broadcast to the Nation.
12. Information gained personally through discussion with the Director of Classification and Pay Division, Executive Council, Provincial Government of Newfoundland and Labrador, November 1986.
13. See Walker, James W.; Human Resource Management, McGraw-Hill Book Company, N.Y., 1980.
14. See International Commission on the Development of Education; Learning to Be: The World of Education Today and Tomorrow, [by] Edgar Faure et al., Paris, UNESCO, 1972.
15. See Rebensow, Kjell; Barriers to Participation in Adult Education, Background Paper 4 prepared for the Skill Development Leave Task Force, 1983.
16. See R.T. Adams; Skills Development for Working Canadians: Towards a National Strategy, Employment Canada, Hull, Quebec, 1983.
17. See Government of Newfoundland and Labrador; Handbook For Senior High Schools of Newfoundland and Labrador, Department of Education, Division of Instruction, October 1980.
18. See Government of Newfoundland and Labrador; Course Description: Career Education 3101, Department of Education, Division of Instruction, March, 1984.
19. See Davison, Catherine and L. Glen Tippet; A Career Planning Guide and A Job Search Guide, Employment and Immigration, Occupational and Career Analysis and Development Branch, 1977.

20. See Government of Newfoundland and Labrador;  
Senior High School Certification Handbook 1984,  
Department of Education, Division of Instruction  
(Testing), 1984, p. 5. Booklet indicates 3000 level  
courses normally studied third year.
21. See Memorial University of Newfoundland;  
Calendar 1986-87, University Relations Division,  
1986, p. 63.
22. See Memorial University of Newfoundland;  
Calendar 1972-73 through to 1986-87, University  
Relations Division, 1972 to 1986. Observation of a  
variety of programme contents.
23. Ibid., Memorial University of Newfoundland;  
Calendar 1986-87, p. 252-253.
24. Op. cit., p. 357.
25. Ibid., Memorial University of Newfoundland;  
Calendar 1986-87, Review of programme regulations for  
each faculty.
26. Ibid., Memorial University of Newfoundland;  
Calendar 1972-73 through to 1986-87. Review of  
programme regulations for each faculty.
27. Information gained personally from discussions  
with the Dean of Engineering and the Dean of Business  
Administration, August 1987.
28. See College of Trades and Technology;  
Prospectus 1986-87, Department of Education, 1986;  
Marine Institute, Calendar 1986-87, Department of  
Education, 1986; and District Vocational Schools;  
Prospectus 1984-86, Department of Education, 1984.
29. Information gained personally from a discussion  
with the Registrar, Cabot Institute, November 1985.

30. Ibid., Memorial University of Newfoundland; Calendar 1986-87. Review of programme regulations of each faculty with workterm requirements.
31. Information gained personally from a discussion with the Assistant Registrar, Memorial University, March 1987.
32. See Government of Newfoundland and Labrador Department of Education; Newsletter, Vol. 3, No. 1, September 1981.
33. Ibid., Handbook for Senior High School.
34. Ibid., College of Trades and Technology; Prospectus 1986-87.
35. Information gained personally from a discussion with the Personnel and Public Relations Officer, Cabot Institute, November 1985.
36. Ibid., Marine Institute; Calendar 1986-87.
37. Information gained personally from discussion with the Guidance Counsellor, Marine Institute, November 1985.
38. Ibid., District Vocational Schools; Prospectus 1984-1986.
39. Ibid., Trudeau; Broadcast to the Nation.
40. Ibid., Government of Newfoundland and Labrador; Senior High School Certification Handbook 1984.

## Bibliography

- Adams, R.J.; Skills Development for Working Canadians: Towards a National Strategy, Employment and Immigration Canada, Hull, Quebec, 1983.
- Becker, G.S.; Human Capital, Columbia University Press, N.Y., 1964.
- Berg, Ivar; Education and Jobs, The Great Training Robbery, Praeger Publishers Inc., N.Y., 1970.
- \_\_\_\_\_; Human Resources and Economic Welfare, Columbia University Press, N.Y. 1972.
- Blaug, Mark; The Utilization of Educated Manpower in Industry, Oliver and Boyd, Edinburgh, 1967.
- Bourdieu, Pierre, et al.; Knowledge, Education and Cultural Change, Richard Brown Inc., London, 1973.
- Broudy, Harry S. et al.; Democracy and Excellence in American Education, Rand McNally and Company, Chicago, 1964.
- Clark, W., M.S. Devereau and S. Zsigmond; The Class of 2001: The School-age Population-- Trends and Implications-1961 to 2001, Projections Section, Education, Science and Cultural Division, Statistics Canada, 1979.
- Clarke, W. and Z. Zsigmond; Job Market Reality for Post-Secondary Graduates: Employment Outcome By 1978, Two Years After Graduation, Catalogue 81-572E, Occasional, Statistics Canada, 1981.
- Croly, Herbert; The Promise of American Life, Capricorn Books, N.Y. 1964.
- Ginzberg, Eli; Human Resources, Greenwood Press Publishers, Conn., 1958.
- \_\_\_\_\_; The House of Adam Smith, Octagon Books, Inc. N.Y., 1964.
- \_\_\_\_\_; The Development of Human Resources, McGraw-Hill Book Company, N.Y., 1966.
- \_\_\_\_\_; Manpower for Development, Praeger Publishers, N.Y., 1971.
- Green, Colin; The Great School Legend, Basic Books Inc., 1972.

Harrington, Fred Harvey; The Future of Adult Education, Jossey-Bass Pub., San Francisco, 1977.

Hertzberg, Frederick; The Motivation of Work, John Wiley and Sons, New York, 1959.

\_\_\_\_\_ ; "Motivation, Hygiene Concept and Problems of Manpower," Personnel Administration, 27 (Jan. 1964), 3-7.

Karier, Clarence J. et al.; Roots of Crisis, Rand, McNally and Company, Chicago, 1973.

Katz, Michael B.; The Irony of Early School Reforms, Harvard University Press, Cambridge, Mass., 1968.

Levitan, Sam A., et al.; Human Resources and the Labour Markets, Harper and Row, N.Y., 1972.

Martin, Wilfred and Allan J. MacDonald; Canadian Education--A Sociological Analysis, Prentice-Hall, Scarborough, Ont., 1978.

Maslow, Abraham; "A Theory of Human Motivation," Psychological Review, 50, (1943), p. 370-396.

Paci, Massino; "Istruzione e Mercato Capitalistico del Lavoro in Scuola e Mercato del Lavoro," Il Mulino, Bologna, 1973.

Picot, G.; The Changing Education Profile of Canadians, 1961 to 2000: Projections of Education Attainment for the Canadian Population and Labour Force, Occasional, Statistics Canada, Ottawa, 1980.

Rebenson, Kjell; Barriers to Participation in Adult Education, Background paper 4, Skill Development Leave Task Force, Department of Administrative, Adult and Higher Education, University of B.C., Vancouver, B.C., March 1983.

Schultz, Théodore W.; "Investment in Human Capital," American Economic Review, 51 (March 1961).

Smith, Adam; The Wealth of Nations, Modern Library ed., New York, 1937, 265-66.

Spring, Joel H.; Education and the Rise of the Corporate State, Beacon Press, Boston, 1972.



Staley, Eugene; Planning Occupational Education and Training for Development, Praeger Publishers, London, 1971.

Sutermeister, Robert A.; People and Productivity, McGraw-Hill Book Company, N.Y., 1976.

Thomas, Alan M.; Learning in Society, a learning paper, Ottawa: Canadian Commission, UNESCO. 1983. 24,24.

Thurow, Lester C.; "Education and Economic Equality," The Public Interest, 28 (Summer 1972), 66-81.

Trow, Martin; Teachers and Students, Aspects of American Higher Education, McGraw-Hill, N.Y., 1975.

Trudeau, Prime Minister Pierre Elliot; The Prime Minister's Broadcasts to the Nation on the Economy, Oct, 1982.

Walker, James W.; Human Resource Management, McGraw-Hill Book Company, N.Y., 1980.

Zsigmond, Z.E., and C. J. Wenaces; Enrollment in Education Institutions by Provinces, 1951-52 to 1980-81, Statistics Canada, Economic Council of Canada, Ottawa, 1970.

Zsigmond, Z.E., et al.; Out of School: Into the Labour Force: Trends and Prospects for Enrolment, School Leavers and the Labour Force in Canada-- from the 1960s through to 1980s, Statistics Canada, Economic Council of Canada, Ottawa, 1978.

## APPENDIX A

## GRADUATION

Minimum graduation requirements include:

(A) The attainment of 21 credits in core courses, as follows:

CORE COURSE CATEGORIES	NO. OF CREDITS
English	3
Mathematics	2
Nfld. and Lab Culture	2
Literature	2
Science	2
Democracy	1
Canada Studies	1
World Studies	2
Literature	2

At least TWO of the following categories:

- |                                       |   |
|---------------------------------------|---|
| (i) Religious Education               |   |
| (ii) Physical Education<br>and Health | 4 |
| (iii) Fine Arts                       |   |
| (iv) Family Studies                   |   |
| (v) French                            |   |

(B) The attainment of an overall of 36 or more credits, such that:

1. Not less than 20 are for levels 2 and 3 courses.

2. Not less than 9 are for level 1 courses attained in a Newfoundland senior high school programme, and of these 9 credits, not less than 7 are to be for courses in which a Public Examination was provided.

#### GRADUATION WITH DISTINCTION

Has satisfied minimum graduation requirements, and attained 550 or more marks in any seven level 3 courses.

#### GRADUATION WITH HONOURS

Has satisfied minimum graduation requirements, and attained 550 or more marks in seven university preparatory level 3 courses including at least one course in each of English, Literature, Mathematics, Science, and Social Studies. The following level 3 courses are not designed to be university-preparatory courses and hence, may not be used to satisfy the level 3 course requirement for Graduation with Honours:

Business English 3102  
 Electronics 3104  
 Home Maintenance 3108  
 Business Mathematics 3202  
 Choral Performance 3103  
 Instrumental Performance 3104  
 Physical Education 3100  
 Environmental Science 3205  
 Career Education 3101

Information extracted from <sup>4(i)</sup> the Senior High School  
 Certification Handbook 1984.

## APPENDIX B

STUDENT QUESTIONNAIRE: administered April 1984, April 1985 and November 1985.

Please complete the following form questionnaire by indicating the response which best describes the reason why you decided to attend this college/vocational school/university.

1. I want to study for education's sake itself. I will think about a career later.
2. I became unemployed so I am taking advantage of the situation to increase my job qualifications.
3. I have a specific career in mind and I am working towards necessary qualifications. (If #3, then check one of the following.)
  - [a] -I have had previous exposure to this kind of work through on-the-job experience.
  - [b] -I have had no previous exposure to this kind of work, but I hope to be successful in getting work experience/exposure during my course programme (other than on-the-job training offered as a part of the programme).
  - [c] -I feel confident in obtaining work in this area because I have people willing to help me in my career.
  - [d] -I have had no experience in this kind of work and do not expect to have any until I graduate and find a job in this area.
  - [e] -None of the above because \_\_\_\_\_
4. I had nothing better to do so I chose this programme as an option.
5. I wanted to go to another college/vocational school/university but I was not accepted and chose this programme as a second option.
6. I was pressured by my family.
7. I do not have a specific career in mind, but hope to use a certificate/degree in finding a job.

8. I am sponsored in college/vocational school/university by my employer.

9. None of the above because \_\_\_\_\_

## APPENDIX C

110 Waterford Bridge Rd.  
St. John's, Nfld.  
ALE 1C9  
1985-11-05

Principal

Dear sir:

Reference our recent telephone conversation in which I requested your assistance in conducting a study on post-secondary education in this province.

Enclosed are fifty copies of a questionnaire which I would like distributed to a sample of first year students in your school.

Please select five homeroom instructors and give them each ten questionnaires. They should place the questionnaires on desks at random in the class before students enter. When students enter the class and sit at their desk, the instructor should explain that the questionnaires are part of a study being conducted by a graduate student at Memorial University. Students should then be requested to read the questionnaire carefully and complete them appropriately.

Completed questionnaires should be returned to the address above. Thank you kindly for your assistance with this study.

Yours truly,

Robert C.W. Halliday









