THE EMPLOYABILITY CHARACTERISTICS OF THE 1978 TEACHER EDUCATION GRADUATES FROM MEMORIAL UNIVERSITY OF NEWFOUNDLAND

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by

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ABSTRACT

The study was an attempt to determine the problems associated with the movement of beginning teachers from Memorial's Faculty of Education to the teaching force. The purpose of the study was to gain a better understanding of the kinds of problems encountered by these graduates in their efforts to gain entry into their particular career. The study was of particular importance since it was undertaken during a period of declining enrollments and alleged teacher oversupply.

The determinants of beginning teacher's occupational attainment status were grouped into three categories: (1) ascribed or background factors; (2) achieved factors, and (3) personal, self-concept factors. Each set of factors were comprised of a number of individual characteristics, and investigated in order to determine their relative influences upon the beginning teacher's success, or lack of success, in obtaining a teaching appointment for the 1978-79 school year. The data were collected by the researcher through two surveys; the first was at the time of graduation and the second was shortly after the beginning of this school year. The statistical analysis consisted of Pearson product moment correlations and regression analysis.

The study found that the most influential determinants of the beginning teacher's occupational attainment

status were the efforts one places in their job search, (an inverse relationship), the willingness of the individual to relocate, the individual's participation in the internship, as opposed to the regular, student teaching program, the number of family contacts already in the teaching profession, and the presence of qualifications enabling the individual to teach either French or special education. Other characteristics investigated did not prove to be significantly related to one's chances of obtaining employment in the teaching profession.

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CHAPTER I

INTRODUCTION

It appears that a smooth and efficient transfer of people from schooling to the occupations in which they are trained must be a primary goal of a society such as ours. Indeed, with the possible exception of organizing itself for full functional integration of its diverse institutions and activities, probably none of society's functions is taken more seriously than preparing its members for the economic roles each must assume in order to ensure its orderly continuation and development. Included in this process is the socialization of the individual to regard this process as most vital to his own well-being, and the socialization of the individual to strive towards being fully integrated economically into the social framework by being educationally prepared for the occupation of his choice. Armed with this specialized training the individual expects to move successfully from the realm of education to the realm of work, thereby obtaining his individual share of society's economic and social rewards.

In an economic system such as ours, however, the realms of training and of work are separate and distinct. In such a case, the total responsibility for bridging the gap between training and work lies largely with the individual himself. Neither one's training institutes, nor his perceived career institution, have any responsibility for his success or

failure to move from training to work. The result is that certain attributes of the individual may determine success in entering a preferred career occupation (e.g., his background characteristics, his achieved characteristics, his attitudes towards life and his profession, and his efforts to obtain employment). Given this to be the case, it is the purpose of this study to attempt to determine which of these factors are the "best" determinants for successful entry into the occupation under investigation, that of the teaching profession.

The teaching profession, like other occupations in the Western World, recruits its members according to the fundamental laws of supply and demand. In a period when the demand for new teachers exceeds their supply, such as was the case with the need for new teachers to service the baby-boom generation during the 1950's and early 1960's, the influence of the individual characteristics mentioned above becomes less influential. During periods such as these there is a need for all teachers who are trained to the minimally accepted standards for entry into the profession. Conversely, in a period when the supply of new teachers into the labour market exceeds the demand, these characteristics assume greater significance. At the present time, when the supply of new teachers appears to have grown more rapidly than their need in the marketplace, the relative significance of these characteristics in determining successful entry into the teaching profession may take on a greater importance. Thus,

now that these factors may be more visible, there is a definite need to investigate their functional importance in order to determine the relative influences of each in determining an individual's chances of entering the teaching profession.

Background to the study

The late President Kennedy, in his message on education to the eighty-eighth congress, January 29th, 1963, stated that

> Education is the keystone in the search for freedom and progress .... For the nation, increasing the quality and availability of education is vital to both our national security and our domestic well-being. A free nation can set no higher standards of excellence than that set in its schools and colleges.
>
> (Kennedy, 1963)

This speech formalized a process begun after the conclusion of the Second World War in which increasing sums of government monies were used to create a large educational infrastructure to provide universal primary and secondary schooling to the new "baby-boom" generation, as well as ensuring open, liberalized access to the large numbers of new post-secondary training institutes that were being built. The most important of these colleges was that of teacher training institutes, as increasingly greater numbers of teachers were needed to sustain this growth.

However, the optimism of the sixties has declined in the seventies. This can be attributed at least in part to certain demographic trends, sex role stereotype shifts, and

economic considerations. The tidal-wave of the baby-boom generation is over and fertility rates, which began declining sharply in the mid-sixties, are starting to have their effect on the numbers of children entering school age (see Tables 1 and 2). This phenomena has occurred concurrently with the new career aspirations of large numbers of young women, which is keeping them in the labour force for longer periods of time. To compound the issue, both developments have occurred at a time when governments, caught in a worldwide economic recession, have perceived the natural demographic declines in education as a convenient rationale for providing cuts in the amounts of money allocated to education. The cumulative result has been the displacement of fully qualified and certificated teachers who, upon completion of their training, cannot be assimilated into the teaching profession. With large social, economic, and personal investments in their chosen career, these individuals are now being told that their services are not needed, and that their formal educational qualifications, while possibly beneficial in a general, intrinsic sense, are not beneficial to them in the economic sense in which they anticipated.

This problem of teacher over-supply, while neither unique to Newfoundland or Canada, nor as serious here as in some other Western nations, is still one that has become increasingly serious and visible. Each succeeding graduating class of potential teachers is additionally aggravating the total situation.

TABLE 1

Birth Rates [1]
(Newfoundland)

Year	Population (000's)	Live Births	Rate (000's)
1960	448	14,514	32.4
1961	458	14,244	31.1
1962	468	14,350	30.7
1963	476	14,764	31.0
1964	483	14,328	29.7
1965	488	14,697	30.1
1966	493	13,580	27.5
1967	499	13,066	26.2
1968	506	12,635	25.0
1969	514	13,751	26.8
1970	517	14,121	27.3
1971	522	13,280	25.4
1972	532	14,535	27.3
1973	541	12,659	23.4
1974	542	10,581	19.5
1975	550	9,193	16.7

[1] Statistics Canada, Projected Population by Sex and Age for Newfoundland, 1972.

TABLE 2

Actual and Projected Enrollments
of Six-Year Old Cohort:
1967-68 to 1985-86

Year	Actual Enrollment [1]	Year	Projected Enrollment [2]
1967-68	13,132	1976-77	11,159
1968-69	13,444	1977-78	11,450
1969-70	13,501	1978-79	10,383
1970-71	13,719	1979-80	10,189
1971-72	13,473	1980-81	10,383
1972-73	12,993	1981-82	10,577
1973-74	12,522	1982-83	10,969
1974-75	12,387	1983-84	11,159
1975-76	12,568	1984-85	11,450
		1985-86	11,741

1 Department of Education, Province of Newfoundland and Labrador.

2 Statistics Canada, Projected Population by Sex and Age for Newfoundland, 1972.

The Newfoundland Task Force on Education stated,

> The enrollment decline has occurred at a time when the chronic shortage of qualified teachers was just beginning to be overcome. The policies that led to the increase in teacher supply and quality (such as the expansion of the university system, the growth of part-time study, and strong salary incentives) were formulated at a time when decreased enrollments could not be foreseen. The 5-10 year lag between the implementation of such policy and its fruition in terms of increased teacher supply coincided with the emergence of a declining birthrate and its impact on enrollments.
>
> (Crocker and Riggs, 1978, p. 4-5)

Thus, at a time when the problems surrounding the supply end of the bridge between training and work were being overcome, the demand for their services decreased. Instead of creating a relatively harmonious balance between training and work, the pendulum has gone in the opposite direction.

The seriousness of the current decline in the need for new teachers can be determined from Table 3. In the mid nineteen sixties, total annual withdrawals from the province's teaching profession was approximately 25 per cent, a large proportion of which were assumed to be women taking up household duties. By the 1975-76 school year the number of withdrawals had dropped to approximately 8 per cent of the teaching force, and it is still declining as the economy, in general, and the numbers of teachers needed, in particular, continue to contract.

The implications of this reduction in the need for new teachers for Memorial University's Faculty of Education is substantial, as can be seen from Tables 4 and 5. According

TABLE 3

Actual and Projected Number of Teachers:
1965-66 to 1985-86

Year	Actual Teachers [1]	Year	Projected Teachers [2]
1965-66	5545	1976-77	7432 ± 225
1966-67	5644	1977-78	7286 ± 216
1967-68	5855	1978-79	7165 ± 217
1968-69	6206	1979-80	7045 ± 216
1969-70	6315	1980-81	6933 ± 216
1970-71	6437	1981-82	6852 ± 214
1971-72	6648	1982-83	6781 ± 211
1972-73	6893	1983-84	6749 ± 209
1973-74	7095	1984-85	6757 ± 208
1974-75	7370	1985-86	6793 ± 210
1975-76	7532		

[1] Department of Education, Province of Newfoundland and Labrador.

[2] R. Clifton and J. Bulcock. Demography and Education: Implications for Newfoundland and Labrador, p. 14.

TABLE 4

Actual and Projected Teacher Acquisitions
1968-69 to 1985-86 [1]

Year	Teacher Acquisitions	Year	Projected Acquisitions
1968-69	1651	1976-77	623 ± 25
1969-70	1447	1977-78	497 ± 11
1970-71	1410	1978-79	447 ± 18
1971-72	1444	1979-80	383 ± 14
1972-73	1431	1980-81	334 ± 14
1973-74	1270	1981-82	314 ± 10
1974-75	1156	1982-83	281 ± 8
1975-76	953	1983-84	282 ± 8
		1984-85	290 ± 8
		1985-86	290 ± 10

[1] R. Clifton and J. Bulcock. Demography and Education: Implications for Newfoundland and Labrador, p. 14.

TABLE 5

Projected Teacher Acquisitions from Memorial:
1977-78 to 1984-85 [1]

Year	Projected Acquisitions	Year	Projected Acquisitions
1977-78	373	1981-82	236
1978-79	335	1982-83	211
1979-80	287	1983-84	212
1980-81	251	1984-85	217

[1] R. Clifton and J. Bulcock. Demography and Education: Implications for Newfoundland and Labrador, p. 14.

to Clifton and Bulcock (1978, p. 9)

> The projections for the year 1977-78 proved to be very accurate since approximately 350 teachers from Memorial were hired. Assuming that these trends are accurate we calculate that from 1977-78 to 1984-85, there will be a general decrease in the number of teachers hired from Memorial University. This decline will be approximately 156 teachers or 42 per cent of the number of acquisitions from Memorial in 1977-78.

Taking into account the finding of the Task Force on Education (1978, p. 52) that Newfoundland presently has the youngest teaching force in Canada, and that the steep decline in withdrawals from the system is expected to continue, this represents a dramatic drop in career opportunities for the province's young education graduates.

In addition to these handicaps, young education graduates attempting to enter the teaching force for the first time face two additional obstacles. If we assume that age and years of experience are significant factors in the recruitment of new teachers to fill the limited number of vacancies that become available each year, then it can also be assumed that first priority will be given to experienced teachers attempting to re-enter the profession after a period of absence. The Task Force on Education report that 40 per cent of the teacher acquisitions in the 1977-78 school year were experienced teachers (Crocker and Riggs, 1978). This group were comprised primarily of women who had completed household responsibilities, such as child-raising, and were again available to become actively involved in their profes-sion and former teachers who took leave of absence to further

upgrade their academic qualifications at Memorial University. Thus, this reserve pool of available personnel, with their prior experience in teaching, had a decided advantage over new graduates and limited further their chances of successfully bridging the gap between training and work.

Another reserve pool of highly qualified graduates that is also competing for the available positions is that of recent graduates of previous years who were unable to obtain a position previously but who are still committed to the teaching profession. The NTA Bulletin, November 29th, 1977, reports that, "In Newfoundland, there were 1,000 unemployed teachers as of September 1, 1977" (Williams, 1977). Though it is not known as yet the precise accuracy of this statement it is expected that this is, indeed, a good approximation of the problem at hand. Given the fact that these former graduates are older and probably more experienced in positions other than teaching, they may also receive preferential treatment over more recent graduates in the school boards' hiring practises. Thus, in addition to demographic and policy limitations, new graduates from Memorial's Faculty of Education are also further handicapped by the presence of these two additional reserve pools of available teaching personnel.

It is in the context of these particular handicaps that face the beginning teacher in his efforts to obtain an initial teaching position that this research was undertaken. The premise is that if individual characteristics play a

dominant role in the success or failure of new teachers to secure a position in their chosen profession, then these characteristics will be even more evident during the present period of declining opportunities.

Significance of the study

The demographic shifts in recent years have spawned a number of studies dealing with their effects upon educational institutions (i.e., O.E.C.D. reports; Stapleton Report; Ontario Commission on Declining Enrollments; Newfoundland Task Force on Education, etc.). Very little effort, however, has been spent on characterizing the problem at the level of the individual teacher graduate, particularly in relation to the effect these changes have had on the graduate's ability to assimilate successfully into the teaching profession. Therefore, it is the task of this study to investigate the problems related to declining enrollments from the supply, rather than the demand, perspective, in an effort to determine the individual characteristics that are most important in determining the teacher graduates' ability to obtain employment upon completion of his training.

In such a study there are of necessity two distinct groups - those who were successful in obtaining a teaching position after graduation from the Faculty of Education, and those who were not as successful. These two groups will be looked at in order to determine the characteristics that might distinguish them. In doing this, all factors taken into consideration are determined at the level of the

individual; thus, its effects on educational institutions and recruitment practises are not directly studied. It is hoped that the information obtained from this study on the characteristics of individuals in teacher training that determine their success or failure in entering the teaching profession during a period of declining need for new recruits, can complement the studies already undertaken at the institutional level regarding the effects of declining enrollments on teacher supply and demand.

Limitations of the study

In conducting research of this nature, it is unfortunate, but nevertheless true, that a certain number of limitations have to be assumed. This is true of all social research, and is particularly familiar to those researchers who investigate social phenomena without previous studies of a similar nature to provide guidelines. The best example of such a situation is the arbitrary manner in which the characteristics that were considered in this study were identified with the problem of teacher employability. Other characteristics of equal or greater importance to the outcome under consideration may not have been considered by the researcher hence were not measured or included in the survey. Nevertheless, although the selection of individual characteristics included are part of a subjective bias as to what factors were relevant in the study, they were determined only after careful consideration.

Another limitation is the time interval during which

this particular study took place. The sample used was the Spring, 1978 graduates in education who attended Memorial University on a full-time basis. The outcome factor was their ability to secure employment in the teaching profession for the 1978-79 school year. Since we do not have a previous or subsequent study to determine the representatives of this sample to other graduating classes, any attempt to generalize the findings here to other graduates must be treated with a degree of caution.

The third limitation is the representativeness of this sample to the total population of this particular graduating class. The return rate for both questionnaires was approximately 79 per cent of the total possible population. While every effort was made to survey the remaining 21 per cent, they did not reply. The reasons for not replying are not known; thus it cannot be ascertained whether this group represents a definite bias in the study or not. It can only be assumed that their failure to reply represents a number of random reasons and that this 21 per cent is divided similarly to the rest of the sample on the characteristics under investigation.

It should be noted that all questionnaires were of a self-report nature. Therefore, there were few ways, except in the case of some particular factors where the information was obtained from the registrar's files, to provide independent confirmation of the information being provided. However, it is assumed that the respondents reported the information in a responsible and accurate manner.

Other limitations dealing with the methodology for the operationalization of the variables will not be mentioned here. Rather they will be included in the section dealing specifically with the methodology.

Most of these limitations are general to survey research designs and were known prior to the initiation of the investigation. It is not believed that these limitations are serious enough to distort any possible findings to the point of making them insignificant to the study at hand. Rather they are limitations that must be recognized and incorporated into the overall research perspective.

CHAPTER II

THE THEORETICAL MODEL

Perhaps the most general statement that can be made about the determinants of one's probability of obtaining employment is that is reflects an interaction between the characteristics of the individual and that of his environment. The salient environmental characteristics, for the young university graduate seeking a career in teaching, are the rapidly declining school enrollments, and the presence of a large reserve pool of qualified teachers. Given these phenomena, the study concentrated on the supply side of the labour market, and sought to determine the individual characteristics, (ascribed, achieved, and attitudinal), that were important in accounting for the success, or lack of success of Memorial University's education graduates in obtaining a teaching position.

The mechanisms used by new graduates in their attempts to secure a teaching position are many and varied. Some of those at the individual's disposal are characteristics over which one has no control, such as family or background factors which are an integral part of the individual's identity. These are called 'ascriptive' characteristics because they are ascribed to the individual by circumstances or events that originated outside one's sphere of influence. Other factors, which are directly a product of his own efforts or deliberate manipulations are termed 'achieved'

characteristics, since these factors were localized within the realm of one's own control, and are a product of his efforts. A third group of factors are the 'personal' set of characteristics, which define attitudes and beliefs concerning oneself in relation to his career profession - i.e. teaching. All three groupings are perceived as mechanisms which influence the probability of one's success or failure to market his professional skills and training, particularly at a time when the numbers of new teachers being recruited into the profession is in a period of decline. Thus, given that these three groupings of individual characteristics, and the several factors that comprise each of them, affect one's efforts to obtain a teaching position at the present time, it is the intent of this research to determine which of the characteristics are most significant in influencing occupational 'success' or 'failure' in the teaching profession in Newfoundland.

The characteristics accounted for in this study were developed from the realm of 'conventional wisdom' regarding the processes involved in influencing occupational attainment in the labour force. Some of these factors (for example, the ascriptive characteristics) are quite general in their influence on labour market opportunities, while others (for example, the achieved characteristics) are directed more specifically in their impact towards the teaching profession. Most have been discussed at one level or another, but few attempts have been made to incorporate them into an empirical

study. For this reason, the research presently undertaken is an initial attempt to give this common-sense conventional wisdom some objective meaning. To accomplish this task the notions of conventional wisdom or informed opinion regarding the particular characteristics included in this research is a necessary initial justification for their inclusion.

As described above, the characteristics researched in this study fall within three umbrella groupings - ascribed characteristics, achieved characteristics, and personal characteristics. Each will be outlined below, together with their elements. Each grouping will be placed in the context of a particular statistical model and the three models will comprise the general model that is formulated in order to test specific hypotheses regarding the determinants of occupational attainment in teaching for the Spring (1978) graduate class in education at Memorial University.

Ascribed Characteristics

The ascribed or background characteristics which require consideration as possible determinants or occupational success or failure are as follows: (1) sex, (2) age, (3) community size of one's hometown, (4) socio-economic status of the family, (5) family links to the teaching profession, (6) religious affiliation. Each will be treated in turn below.

Sex

> People still believe that the qualities which make a good elementary teacher are those which make a good mother ... Thus,

> there are unwritten laws, perhaps, saying elementary education is not a "male profession" and men in the profession may be confronted with "little whispers". It takes a kind of strength to ... go into a profession facing public criticism, even though that criticism is just a weird mix of unwritten laws, unspoken biases, and role stereotyping.
>
> (Whittemore, 1973, p. 317-8)

Thus, even with the professionalization of women in the teaching force in recent years, this lack of vertical mobility, combined with still significant numbers having children, produce an annual exodus from the teaching profession to other duties. These personnel are replaced in elementary positions by other women. Thus it appears to create a demand for female teachers that is significantly in excess of that of their male counterparts, resulting in a differential demand for new teachers entering the teaching force based on sexual differences.

In this regard, Kaplan (1975) points out that,

> Primary and elementary teaching positions are still largely a female domain. Males tend to avoid elementary education and tend to lean towards either secondary teaching positions, post-secondary teaching positions, or an administrative role.
>
> (Kaplan, 1975, p. 354)

Age

In this study, age may be a proxy for experiences other than experiences as a teacher. As Seefeldt (1973) suggests,

> Age generally reflects experiences in other occupational, community, and university endeavours and is associated with maturity

> and self-confidence. Studies have also indicated that the age of the teacher is significantly related to the total academic achievement of children ... Older teachers appeared to be more effective in fostering the achievement of Head Start children than did younger teachers.
>
> (Seefeldt, 1973, p. 309-10)

For this reason, age is being considered as an influential variable in determining job attainment in the education profession.

Community-size of One's Hometown

> Programs of teacher preparation and the professional sub-culture of educators seem to have a strong urban bias. That is, superintendents, principals, and teachers in the urban centers are far more influential than teachers and principals in the smaller or "less modern communities" in Newfoundland.
>
> (Herrick, 1974, p. 178)

For the reasons suggested by Herrick (1974), and others, such as accessibility to services and entertainment, there is a continuous mobility shift from the small rural settlements to larger urban centers in order to enhance one's professional teaching career. This leaves the majority of new vacancies to be filled each year in communities that are rural, or isolated.

> However, there are special difficulties encountered in recruiting qualified teachers for small, isolated communities ... Many Newfoundland university graduates are unwilling to teach in small communities.
>
> (Herrick, 1974, p. 179)

This is particularly true among graduates whose primary socializing environment has been the larger urban centers.

Those graduates most inclined towards teaching in small, rural communities are individual's who grew up in similar communities and are less likely to be culturally displaced by returning to such an environment. Even in the present context of a teacher surplus, it is these individuals who may be most likely to apply to teach in small, rural communities and who may be the most likely candidates for acceptance to the position. Since the majority of new positions available, at present, to beginning teachers, are in these small, rural communities, these individuals may have a definite advantage over their urban counterparts, in obtaining a teaching position.

Socio-economic Status of the Family

Socio-economic status is a composite of a number of particular background characteristics, such as one's parents' education, occupation, and frequency of unemployment; it is an attempt to measure "family status" in the community relative to other family units.

It is generally believed that the socio-economic status of the family is operative in determining occupational success or failure in the labour market. The sociological literature provides ample support for this position:

> Many people in our society believe that everybody has an equal opportunity to be "successful" and that there are no psychological and social barriers ... But, contrary to that belief, the fact is that in our society opportunities, money, jobs, training, knowledge, power, status, prestige, and education etc. are not equally distributed. Thus, in an unequal situation people belonging to various groups are treated differently, i.e., they are expected to perform at different levels.
>
> (Singh, 1974, p. 9-10)

> Students occupational expectations were similar to fathers occupational levels ... Generally students who perceived that it would be easy to obtain employment after graduation from a post-secondary school held higher occupational expectations than did students who perceived it would be difficult to obtain a job after graduation ... Thus, those students with working class expectations perceived that it would be more difficult to obtain a job after graduation from Memorial University than did those students with upper middle class expectations.
>
> (Parsons, 1974, p. 4-5)

These statements indicate that one's success or failure in both the realm of post-secondary education and labour market entrance is closely tied to the socio-economic status of the family. The extent to which this is true in educational hiring practises is the purpose for its inclusion in this study. It may similarly be expected that SES is a determinant of the occupational success of university graduates in Education.

Family Links to the Teaching Profession

Having members of the family, particularly the immediate family, in the teaching profession is believed to be instrumental in determining the "success" of an individual in entering the profession himself. Generation after generation, people from certain religions, certain nationalities, certain ethnic groups, certain economic classes, etc. have been channelled by educational systems into certain specific types of jobs in the occupational structure (Singh, 1977). This factor combined with the strong sense of familism that originated with the patrilocal

extended family in the fishing industry (Firestone, 1974), and extended into the political and bureaucratic life of outport "men of power" after Confederation (Perlin, 1974) tended to create a power base in which students were socialized to occupational expectations that were similar to their fathers' occupational levels (Parsons, 1975). In this context, those students who had a link to the teaching profession prior to the attainment of their formal qualifications, could perhaps exploit these links to their advantage in seeking their own teaching position. Thus, the probability of an individual being successful in obtaining a teaching position upon completion of formal training could increase proportionally with the number of immediate family members already employed in the profession.

Religious Affiliation

In Newfoundland's demonimation school system, religious affiliation is generally believed to hold substantial influence in determining one's entry into the teaching force. The denominationalist argument is that,

> Ultimately, the primary responsibility and fundamental rights in their children's education lie with God, not with the government, not even with educators, but always with the parents. Insofar as parents belong to a denomination, and insofar as their denomination engages in the educational enterprise, their continuing church attendance or membership is an implicit indication that they are passing on to their church the rights and responsibilities associated with the education of their children.
>
> (Shaw, 1967, p. 19)

Another example of the churches' control over the educational enterprise, including teacher selection is the following,

> There would be little point in having Catholic school boards or a Catholic school system if there were teachers in the schools who did not share our goals, or even worse, who actively worked to undermine them.
>
> (Tracy, 1976, p. 2)

These statements led Dr. Magsino to comment,

> There is no doubt that school boards have the right to select teachers according to their denominational standards.
>
> (Magsino, 1977, p. 8)

Thus, it is for this reason that religious affiliation is expected to influence teacher selection and therefore occupational chances.

Achieved Characteristics

The achieved characteristics considered in this research are as follows: (1) marital status, (2) level of specialization, (3) area of academic specialization, (4) type of student teaching, (5) academic achievement (at Memorial), (6) certification level, (7) mobility, and (8) effort. Each of these characteristics will be considered in turn in this section.

Marital Status

The marital status of the individual seeking a teaching position has been subjected to much speculation. Some educators believe that being married is a definite asset in influencing one's chances of obtaining a suitable

teaching position. This belief is based on notions of increased maturity and increased family responsibilities that accompany marriage. For this reason, it was decided that marital status is a characteristic of the individual that should be considered.

Level of Specialization

The teacher training program at Memorial University has three levels of specialization, (1) primary, (2) elementary, and (3) high school. A student who completes the high school program is generally not considered qualified to teach at the primary and elementary levels, and vice versa. To a lesser degree, this is also true for the primary and elementary decisions. The possibility, then, that the supply/demand match is different for different levels of specialization was considered. This characteristic can best be supported by the statement that at a time when there is generally believed to be an oversupply of teachers in the labour market,

> in the area of primary education, school boards were unable to fill large numbers of positions with teachers whose qualifications match the job vacancy.
>
> (Cramm and Cluett, 1979, p. 10)

Area of Academic Specialization

Students in the faculty of education generally study a concentration of courses in a particular academic subject area. If school boards attempt to match positions with a particular subject area, this factor will influence hiring

preferences. This belief is best illustrated by the following comment:

> Teachers are trained to work with children, not only at certain age levels, but also in specific subject areas. If they decide to be high school teachers, they also become specialists in specific subject areas such as Mathematics, History, Biology, etc. In this context, those engaged in hiring practises would be attempting to match the job qualifications of the applicants with the needs of the job vacancy being advertised.
>
> (Cramm and Cluett, 1979, p. 3-4)

Thus, depending on their particular qualifications and competencies, and the needs of the labour market at a particular time, individual graduates may meet with varying degrees of success in finding a teaching position, depending upon their particular area of academic specialization.

Type of Student Teaching

This characteristic may be a proxy for practical classroom experience since the amount of practical experience obtained by the teacher graduate prior to assuming a teaching position depends primarily on the type of student teaching completed while at university. At Memorial, there are presently three types of student teaching: (1) the regular program (one-half day per week for one semester, plus a two-week block); (2) the internship (one full semester in a particular school); and (3) the professional semester (one-half day per week for two semesters, plus a two-week block). In this study all the participants completed either of the first two options, with no one engaged in the latter option. Therefore, this study restricts

itself to these two only.

There is some evidence to suggest that educational administrators place more emphasis on one's practical teaching experiences than on university professional training in their recruitment practises. One new teacher states, "The Principal would come in and say that I should just forget everything I learned at university and start from scratch". Another stated, "One of the biggest problems is that the things we get at conferences and workshops (organized by the university) are not relevant to our situations" (Singh and Baksh, 1977, p. 197). If this is the prevailing attitude, and greater credence is given to practical experience, then the probability that those new graduates who completed the internship student teaching program, thereby having obtained more practical classroom experience, obtaining a teaching position will be greater than those students who only completed the regular program.

Academic Achievement

In any occupational group it is generally believed that the efforts of employers in hiring practises are to select the best qualified candidates available. Education is no exception. Husén and Bulcock conclude that:

> Current educational theory and practise is still largely supportive of the proposition that the greater the aptitude of the student for coping with the increasingly complex classroom environments provided by the schools, and the more effective the socializing treatments in these settings, the greater the probability that the individual will receive preferred treatment at later stages in the career cycle.
>
> (Husén and Bulcock, 1977, p. 36)

"The school as a social mobility escalator, given the contemporaneous economic and demographic context, has become a hotbed of academic competition and performance pressure." (Husén and Bulcock, 1977) Thus, increased academic competencies is viewed as a vehicle for making the graduate more effective as a teacher, and thus more marketable in the teaching force. In this sense, academic achievement assumes the prevailing educational ideology; namely, that success in school will be replicated on the labour market.

Certification Level

Certification level, like academic achievement, is an indication of performance at university. In this case, it indicates the number of credits or degrees obtained while in teacher training and is linked to the notion of the degree of professionalization of the individual teacher graduate. Since it is the desire of educational administrators to create a professional teaching force, the upgrading of one's qualifications to a higher certification level is considered advantageous to seeking a teaching position.

The desire to employ teacher graduates who have the highest certification levels is best noted in the preliminary report of the Task Force on Education, it states that,

> The trends in certification is such that the rate of increase in the highest certificate levels, especially certificates V and VI, has been nothing short of phenomenal.
>
> (Crocker and Riggs, 1978, p. 47)

Thus, while a higher certification level does not guarantee one a teaching position, it is perceived as increasing one's probability of employment.

Mobility

It is thought that the teaching profession is probably one of the most decentralized occupations available, with many of its members located in small, rural settlements. It is also one of the most mobile with members moving from these settlements to larger urban centers as they obtain the necessary practical experience. This mobility pattern is best illustrated by the following statements:

> Teaching has conventionally been regarded as an occupation with a high degree of mobility, both in and out of the profession, and in terms of movement of teachers between schools.
>
> (Crocker and Riggs, 1978, p. 41)

> An important factor evident was the movement of individuals (teachers) from smaller to larger towns, and from smaller to larger school districts, and from smaller-sized to larger-sized schools. This may mean that the smaller-sized school district may be placed in a position that it must face the alternative of hiring "captive" local teachers or be perennially forced with substantial yearly faculty turnover rates.
>
> (Orlich, 1972, p. 234)

This movement of teachers from rural to urban areas, indicates that new teacher graduates without any prior experience would have the best probability of obtaining a teaching position in the small rural outport schools. In this way, they would replace those moving to larger centers. Therefore, to obtain some initial experience, beginning

teachers need to be mobile, moving to whatever part of the province that they are needed. Orlich (1972) in this regard says that,

> Charters proposed that entering and first-five-year teachers tend to be highly mobile ... In short, a newly employed teacher has a greater probability of being highly mobile than a person who has taught for some time.
>
> (Orlich, 1972, p. 234)

Thus, the mobility of the individual graduate is a characteristic that must be recognized in any study regarding the probability of employment.

Effort

Success in the labour market is primarily a function of the practises engaged in by the individual in his efforts to obtain employment (Harvey and Mosemann, 1975). This statement relates to the need to measure an individual's efforts to obtain employment, both in terms of the type of efforts engaged in, and the intensity of these efforts, in relation to success or failure to obtain a teaching position. Thus, in this research, an attempt was made to determine this characteristic by obtaining the frequency with which each individual respondent engaged in a number of dimensions of the effort factor. The dimensions considered were, (1) sponsorship of a university professor, (2) sponsorship of a relative or friend, (3) sponsorship of a member of the clergy, (4) checked with a Canada Manpower Center, (5) checked with the Campus Placement Center, (6) replied to specific newspaper advertisements, and (7) sent general letters of

application to various school boards. The beliefs implied in this effort characteristic are: (1) that one's probability of success in the labour market increases proportionately with the frequency of their efforts on these various dimensions, and (2) that certain dimensions are more powerful in influencing employment success than others. In this sense, the effort characteristic is an attempt to determine the relative influences of particular job search routes taken by teacher graduates on success or failure to enter the teaching profession.

Personal Characteristics

One's definition of the situation plays a crucial role in a person's behaviour in a given situation (Singh, 1973). This group of characteristics has a number of labels in the sociological research literature: world-view (Redfield, 1953), value-orientations (Kluckholn and Strodtbeck, 1961), yet, in essence, it is an attempt to define one's perceptions of one's own individuality in relation to his environment. In this case, it is in relation to his ability to enter the teaching profession. While there is no means to measure these characteristics directly, composite instruments have been developed and are generally recognized by social scientists as legitimate and useful means of obtaining this information.

The personal characteristics included in this study are, (1) loci of control, (2) religiosity, (3) perceptions of employability, (4) perceptions of teaching competency

(based on student teaching experiences), and (5) perceptions of commitment to teaching. Each of these are dealt with in turn below.

Loci of control

Loci of control defines an individual's perceptions of the ability to control or manipulate his own destiny. In the research literature, it has been variously referred to as fatalism (Parsons, 1975), subject to nature/mastery-over-nature (Kitchen, 1965), and loci of control (Phares, 1976; Clifton, 1977). Most recently (and importantly) it has been referred to as "field dependence/independence" (Cole and Scribner, 1974). In this instance, using the label of loci of control, there are two dimensions of the concept that will be examined. They are internal loci of control, and external loci of control.

> In terms of instrument values .... we may examine differences such as internal and external loci of control ... A person who expects that rewards tend to be determined by luck, chance, fate, as under the control of powerful others, or as unpredictable is said to believe in external control, while a person who expects that events tend to be "contingent upon his own behavior or his own relatively permanent characteristics is said to believe in internal control".
>
> (Clifton, 1977. p. 188)

It is these dimensions of loci of control that will be measured in relation to their relative influences upon the probability of employment among new teacher graduates.

Religiosity

Religiosity is another self-concept characteristic of particular importance in a denominational educational system.

The literature justifying the inclusion of religious affiliation in the study can also be used in relation to the inclusion of religiosity. However, to add to this rationale we can also consider the following statement,

> The aims of public education in Newfoundland certainly reflect the enlightened, democratic and Christian principles of our educational system and certify to the fact that education in this province is built on a firm foundation. Thus, we believe that his (a human beings) best and fullest development can be achieved only in a Christian, democratic society and that the aims of education, both general and specific, must be conceived in harmony with such a belief. We also believe that one who has achieved his fullest and best development as an individual is one who, to the best of his ability, is possessed of a religious faith as maintained and taught by the Church of his affiliation.
>
> (Molloy, 1975, p. 383 in Book of Newfoundland)

This statement best sums up the interrelationship in Newfoundland's denominational system between religiosity and teacher selection.

In this study, religiosity was composed of two separate dimensions. One was a self-reporting attitudinal scale of one's perceived religiosity, while the second was the frequency of the respondents' church attendance. Both of these are considered to be important dimensions in measuring the religiosity characteristic.

Perceptions of employability

In any study of occupational attainment characteristics, there is a need to determine one's own perceptions of his employability. The inclusion, in this research, can be justified by the notion that one's concerns regarding a number

of dimensions of his own employability status, can affect his behavior in seeking a teaching position, and thus the subsequent outcome. In this sense, it is a measure of one's self-confidence in seeking a teaching position and in his ability to obtain one.

No support was found in the literature for this relationship.

Perceptions of teaching competency

Teacher competencies are variously defined as "attitudes, understandings, skills, and behaviors that facilitate intellectual, social, emotional, and physical growth in children" (Cooper et al., 1973, p. 17), "functional abilities which teachers demonstrate in their day-to-day job-related activities" (Dodl et al., 1973, p. 194), and "demonstrated ability to perform the functions required in a certified teaching position" (Schalock, 1973, p. 199).

In this study, it is included as an attempt to identify the relationship between one's self-perceived ability to perform these tasks and the probability of employment in the teaching profession. In this context, it is assumed that a graduate's perceptions of his competency to perform these duties in the classroom is an important character trait used by administrators in selecting new personnel.

Perceptions of teaching commitment

For many teacher graduates the teaching profession has traditionally been regarded as a stepping-stone to a more rewarding career choice. This is best recognized in the following statement:

> Teaching has conventionally been regarded as an occupation with a high degree of mobility both in and out of the profession .... This issue is important because teacher education programmes have been geared to produce teachers to allow for a high rate of attrition and because it is widely assumed that a teacher leaving the profession will have no difficulty in returning.
>
> (Crocker and Riggs, 1978, p. 41)

In this context, many teachers have traditionally entered the profession with the knowledge of it being a stepping-stone to another, more desirable career. While this practise has declined enormously with the stabilization of the teaching force it has not been eliminated. However, educational recruiters, with the aid of a surplus of possible candidates to choose from for a particular teaching position, will be inclined to prefer an individual who is committed to the teaching profession as a career choice. Thus, those education graduates that perceive teaching as a long-term career will have greater probabilities of succeeding in the labour market than those who do not perceive themselves as having such a commitment to the profession.

Hypotheses

Ascribed Characteristics

There is a greater probability of employment for females than males in the teaching profession.

There is a greater probability that older, more mature teacher graduates will obtain a teaching position than younger teacher graduates.

There is a greater probability that students from

families of higher socio-economic status will find employment in the teaching profession than students from lower socio-economic families.

There is a greater probability that one's success in finding a teaching position increases with the number of family members already in the profession.

There is a greater probability that members of particular religious denominations have more opportunities to enter the teaching profession than those of certain other denominations.

There is a greater probability that one's employment in the teaching profession increases with the decreased size of one's hometown.

Achieved Characteristics

There is a greater probability that married teacher graduates will be more successful in finding a teaching position than unmarried teacher graduates.

There is a greater probability that primary and elementary teachers have more opportunities to enter the teaching profession than high school teachers.

There is a greater probability that graduates trained in specialist areas (eg., special education, French, physical education, etc.) will obtain a teaching position than those trained in the Arts and Sciences.

There is a greater probability that a greater proportion of teacher graduates who completed the intership

student teaching program will find a teaching position than those who completed the traditional, one-credit program.

There is a greater probability that one's chances of obtaining a teaching position increases with academic performance (as measured by grade-point average at Memorial University).

There is a greater probability that the higher one's teacher certification level, the better the chances of successfully obtaining a teaching position.

There is a greater probability that a teacher graduate who is mobile, (i.e., willing to relocate in order to obtain a teaching position), will be more successful in finding a teaching position, than one who is not mobile.

There is a greater probability that one's chances of obtaining a teaching position will increase with the amount of effort one undertakes in seeking such a position.

Personal Characteristics

There is a greater probability that an individual with a high internal loci of control will have more success in finding a teaching position than an individual with a high external loci of control.

There is a greater probability that individuals who are religiously inclined and who support this belief by being active in their denominational activities will obtain a teaching position before those graduates who are not religiously inclined and thus do not support their denomination.

There is a greater probability that an individual with high perceptions of his own employability will be more successful in finding a teaching position than an individual with low perceptions of his employability.

There is a greater probability that the more competent a teacher graduate perceives himself in the fulfillment of his role, the better are his chances of successfully obtaining a teaching position.

There is a greater probability that the more committed a teacher graduate is to the teaching profession, the better his chances are of successfully entering the teaching profession.

CHAPTER III

METHODOLOGY

The Sample

The sample for this study was defined as all prospective student teachers enrolled full-time in the Faculty of Education at Memorial University during the Winter Semester, 1978, who were graduating during the Spring, 1978, convocation. The total number was 263 students. Of these, 215 completed the first questionnaire during March and April, 1978, for a return rate of 82 per cent of the total sample. This first questionnaire gathered information such as: family background characteristics (socio-economic status, religion, size of hometown, and the number of family members already in the profession), achievement characteristics (professional status, specialization, and willingness to relocate), and personal characteristics (fatalism, religiosity, perceptions of employability, perceptions of teaching competence, and commitment to teaching).

From the 215 students surveyed, 28 indicated on the initial questionnaire that they were not intending to seek a teaching position for the 1978-79 school year. These were excluded from the sample, and the sample was reduced accordingly from 263 to 235. The return rate, then, was 187/235 or 80 per cent.

In September, 1978, these graduates were asked to complete a second questionnaire. This questionnaire sought

information on the occupational status of the graduates, for example, if they were employed as a teacher and the amount of effort they had made towards obtaining a teaching position. A total of 185 of the 187 who received the second questionnaire responded, which is 79 per cent of the total sample of 235.

These two questionnaires were the only research instruments used in this study. Additional data, such as age, sex, marital status, and grade-point average in academic studies at Memorial University, were obtained from the Registrar's listing of education graduates. Thus, all the variables used in this research were operationalized from that data collected from these three sources.

The Research Procedure

There has always been controversy concerning the appropriate application of analytic techniques in sociological analysis. However, the kinds of problems and the type of data this research deals with may perhaps be handled best by multiple regression analysis.

Multiple regression analysis has certain distinct advantages in statistical analysis. Blalock states:

> We are often not only interested in significance tests and measures of degree of relationship but also may want to describe the nature of the relationship between the two variables so that we can predict the value of one variable if we knew the other. When interest is focused primarily on the exploratory task of finding out which variables are related to a given variable, we are likely to be mainly interested in measures

> of degree of relationship such as correlation coefficients. But once we have found the significant variables, we are more likely to turn our attention to regression analysis in which we attempt to predict the exact value of one variable from the other.
>
> (Blalock, 1972, p. 361)

In this research, multiple regression analysis is used not only to determine which of the variables in the data are significant in relation to the dependent variable, but also to predict the relative importance of the significant variables used. In this case, it is used "as an inferential tool by which the relationships in the population are evaluated from the examination of sample data" (Nie et al., 1975, p. 321). Once these relationships are determined, it can then be used for prediction purposes among the independent variables that proved to be significant. Thus, since predicting the effects of the independent variables on the outcome is the primary concern of this study, multiple regression analysis is the most appropriate procedure to use.

In using multiple regression analysis, however, certain assumptions about the nature of the data are necessary. One necessary presupposition is that all the variables are at the interval level. In this research, however, a number of independent variables are not interval. Therefore, in order to include them in the multiple regression analysis format, a special procedure called "dummy variable analysis" was used.

Dummy variables are designed to permit the inclusion

of nominal variables into regression analysis. In this case, "a set of dummy variables is 'created' by treating each category of a nominal variable as a separate variable and assigning arbitrary scores for all cases depending upon their presence or absence in each of the categories" (Nie et al., 1975, p. 374). In doing this, one "suppresses" a category of each nominal variable, which then becomes a reference category for its counterpart. This permits the application of the ordinary least squares criterion, thereby meeting the assumption of intervalness of the data for regression purposes. This procedure will be used on all nominal independent variables in the regression analysis.

Another special feature of this research is that it also has a dichotomous, nominal dependent variable. While it is common in regression analysis to have dummy independent variables, it is less frequent that the dummy variable procedure is used on the dependent variable or outcome.

A third feature of the research procedure is the method in which the regression analysis is organized. In sociological research this procedure is called "cluster" analysis. This means that the independent variables are clustered into blocks of variables according to some common criteria, with each cluster being included as a separate and independent regression equation. According to social science researchers, "The reason for separating these variables into blocks (or clusters) of this sort is to bring some kind of order into the regression analysis (Coleman, 1975, p. 357).

The clustering of variables not only gives order to the regression analysis, but it also reduces the regression equation to manageable proportions. In this research, it is desirable because of the large number of independent variables. Rather than having all of these variables included in a single regression equation, thereby heightening the sensitivity of the estimates to sampling fluctuation, they are separated into three distinguishable equations for the purposes of preliminary analysis. Once the relative strengths of the relationships of the independent variables on the dependent variable are determined in the confines of their particular clusters, those that prove to be insignif-icant will be deleted from the analysis, while those that are significant can then be grouped into a single regression equation for a more rigorous analysis. In this way, the task of clustering the variables is designed primarily for the exploratory task of determining the magnitude and sig-nificance of the relationships between independent and dependent variables. Once this is completed, and the list of variables reduced to a level that can be managed in a single regression equation, the need for clustering is eliminated.

The end result of this analysis will be a listing of the particular characteristics analyzed in this study that proved to be significant in predicting the occupational attainment status of these teacher graduates in September, 1978. The relative significance of these variables as

predictors will be contained in the standard regression coefficient, which determines the strength of the relationship on the particular outcome being studied.

Operationalization of the variables

The Dependent Variable

The dependent variable is question 1 in appendix B. It is a dichotomous variable at the nominal level in which the respondent answered either 'yes' or 'no' to the question regarding his/her occupational status in the teaching profession in September, 1978. A 'yes' response was scored 1, while a 'no' response was scored 0, in accordance with the presence or absence criteria outlined for dummy variables in regression analysis.

The Independent Variables

This research concerned itself with only the supply problems of new teacher graduates in their efforts to find a teaching position. Therefore, all variables were operationalized at the level of the individual. They were as follows:

Ascriptive Characteristics

Sex - Sex is a nominal, dichotomous variable which was scored in the following manner; Male = 1, Female = 2. The students' sex was obtained from the Registrar's listing of graduating students in education; thus, it does not appear on either of the questionnaires.

Age - Age was also obtained from the Registrar's listing of student graduates in education. It was operationalized as the last two digits in the individual's date of birth. Its range was between 39 (representing 1939, and 59 representing 1959) with approximately 95 percent of the cases being between 50 and 59.

Community Size - The community size of one's hometown was obtained from question 19 (c) in appendix A. The respondents stated the approximate population of the community they regarded as home and this was scored in the following manner:

0 - 500	= 1	15,001 - 30,000	= 5
501 - 2,000	= 2	30,001 - 50,000	= 6
2,001 - 5,000	= 3	50,001 - 100,000	= 7
5,001 - 15,000	= 4	100,001 - +	= 8

Socio-economic Status - The socio-economic status of one's family of origin was developed from information provided on father's occupation, father's unemployment status, father's education, and mother's education. This information was given in response to questions 14, 15, and 16, respectively, in appendix A.

The father's occupation was recorded in a list of 57 possible occupations. It was then recoded according to the Blishen scale, and was ranked in accordance with their appropriate value (Blishen, 1967). The father's unemployment status was recorded on a 7-point scale, ranging from 0 to 6 as is shown in question 15,

appendix A. Both the father's and mother's education was recorded on a 9-point scale ranging from 0 to 8 as shown in question 16, appendix A.

To create a composite score of socio-economic status, the information was factor analyzed, using the principal-factor analysis program developed by Nie et al. (1970) in the computer program, the Statistical Package for the Social Sciences (S.P.S.S.). The objective of principal-factor analysis is to account for or explain, a matrix of covariances by a minimum, or at least a small number of hypothetical variates or factors (Lawley and Maxwell, 1963, p. 2).

The factor analysis program first compiles the correlation matrix for the relationships among the variables. The correlations among the socio-economic status variables is shown in Table 6. The factor analysis yielded one factor, shown in the unrotated factor matrix (Table 7). This single relationship may be thought of as evidencing a single influence on the data, or as presenting a single category or dimension by which the data may be classified. The first unrotated factor delineates the largest pattern of the relationships in the data; the second delineates the next largest pattern that is independent of the first, and so on. Thus, the amount of variance, (obtained from the percentage of the variance included

TABLE 6

Correlation Matrix for Social Class Variables

				Mean	S.D.
Father's Occupation	1.000			44.28	14.8
Father's Unemployment	.160	1.000		4.66	2.06
Father's Education	.541	.246	1.000	2.28	2.04
Mother's Education	.434	.341	.478	2.77	2.11

TABLE 7

Factor Matrix for Social Class Variables

	Factor	Communality
Father's Occupation	.657	.432
Father's Unemployment	.358	.128
Father's Education	.750	.563
Mother's Education	.683	.466
Eigenvalue	1.589	
Percent of variance	100%	

in Table 7), described decreases successively with each factor; the first factor contains the greatest amount of variation, the last factor the least. Since socio-economic status is comprised of only one factor the amount of variation explained is 100%.

The other statistics given in the unrotated factor matrix (Table 7) is the communalities and the eigen-values. The communalities are defined as the proportion of variance of a variable that is shared in common with other variables in the set (Nie et al., 1975, p. 480). The eigenvalues, like the percentage of variance, is another indication of the relative importance of a factor. Ordinarily, an eigenvalue greater than or equal to 1 is required for a factor to be treated as significant (Nie et al., 1975, p. 478).

In order to construct meaningful composite scores representing the factor determined by the unrotated factor matrix, factor score coefficients had to be calculated; they are reported in Table 8. The S.P.S.S. factor analysis program calculates the factor-score coefficient matrix F from the formula

$$F = S'R^{-1}$$

where S is the rotated factor structure matrix (which equals the factor pattern matrix for an orthogonal rotation) and R is the correlation matrix. A composite scale is then built for each factor in the final solution.

TABLE 8

Factor Score Coefficients for Social Class Variables

	Factor
Father's Occupation	.270
Father's Unemployment	.098
Father's Education	.422
Mother's Education	.330

For each data case a vector of factor scores may be computed using

$$f = Fz$$

where F is the factor score coefficient matrix and z is the vector of standardized values of the variables which have been factor analyzed (Nie et al., 1975, p. 488).

From the factor-score coefficient matrix, Table 8, a composite social class scale was constructed as follows:

$$S.E.S. = .270z_1 + .098z_2 + .422z_3 + .330z_4$$

where z_1 to z_4 represents the standardized values of the variables designated father's occupation, father's unemployment level, father's education, and mother's education, respectively. The internal consistency of reliability of the four items is .776 (Cronbach, 1951). This is obtained from the alpha equation for reliability which is

$$\alpha = \frac{p \cdot \bar{r}}{1 + (p-1)\ \bar{r}}$$

where p = the number of correlations and $\bar{r}$ = the mean of the correlations amongst the items comprising the scale.

Religious Affiliation - Religious affiliation was obtained from information provided in question 19, appendix A. It was scored arbitrarily in the following manner:

Anglican = 0
United Church = 1
Roman Catholic = 2
Jewish = 3
Salvation Army = 4
Pentecostal = 5
Seventh-Day Adventist = 6
Other = 7

These categories were collapsed according to the match between religious affiliation and the appropriate school board in the denominational setting. Thus, they were recoded as follows: 0, 1, 3, 4, 7 = 0; 2 = 1; and 5, 6 = 2.

Family Contacts in the Profession - This information is contained in question 18 (a), appendix A. The variable was constructed from that part of the question that asked the graduates to report the number of members of their immediate family working in the teaching profession. These were scored the same as they were reported on the questionnaire, except that "three or more" was simply reported as 3.

Achieved Characteristics

Program Level - This item asked the respondents to report the type of educational program they completed in the faculty. It is contained in question 4 (b), appendix A. It was scored in the following way:

Primary = 0
Elementary = 1
High School = 2
Vocational = 3

Certification Level - The certification level is contained in question 9, appendix A. It was scored as follows:

Grade IV = 0
Grade V = 1
Grade VI = 2

Student Teaching Experience - Student teaching experience is contained in question 2, appendix A. Its scoring format was:

1 credit = 0

5 credits = 1

Academic Specialization - This information was obtained from question 6, appendix A. Each subject area listed was scored either 1 or 0, depending on whether it was checked or not checked, respectively. Since the category "other" was used most frequently to report special education, it was defined as special education, and only those that reported their expertise in this academic field were recorded here. The list of academic specialities was then collapsed into the following groups:

Special Education
French
Physical Education
Religious Education
Mathematics
English
Pure Science - Biology, Chemistry, Physics, General Science
Social Science - History, Social Studies, Geography, Economics

The academic subject areas of industrial arts, art, music, business education, and home economics were termed "non-academic specialities" and were placed in a separate regression statement with the dependent variable - employment status.

Academic Achievement - The academic achievement score for each respondent in the sample was obtained from the Registrar's listing of student graduates in the Faculty of Education. The score obtained was the grade-point average of their academic performance at Memorial University.

Mobility - The mobility variable (i.e., whether the graduate was willing to move anywhere in the Province to find a job), was created from information given in question 11, appendix A. The response to this questionnaire item was recorded as follows:

Yes = 1
No = 0

Marital Status - Marital Status information for each respondent was obtained from the Registrar's office. Its scoring format was:

Single = 0
Married = 1

Effort - To develop a measure of the individual's effort, in relation to their job search between the period when they graduated (May, 1978), and the opening of the academic school year (September, 1978), information was gathered on the frequency in which they performed the various tasks outlined in question 4, appendix B.

The intercorrelations among these variables is shown in Table 9. The factor analysis procedure yielded three factors. These three independent sets of

TABLE 9

Correlation Matrix for Effort Variables

Variables							Mean	S.D.
1 *	1.000						1.56	1.19
2	.139	1.000					5.09	5.71
3	.131	.463	1.000				1.85	3.71
4	.117	.277	.231	1.000			1.16	1.13
5	.045	.375	.176	.156	1.000		11.48	9.50
6	.064	.296	.157	.082	.609	1.000	13.75	12.28
7	.050	.082	.032	.128	.051	.269	14.78	34.16

*Variable numbers correspond to those in text.

relationships in the data, as shown in Table 10, are evidence of three separate dimensions of the effort characteristic, and are thus included as separate variables. The three factors reported in Table 10 were rotated obliquely in order to achieve a simpler and theoretically more meaningful factor pattern.

> With the oblique solution, as opposed to the orthogonal one, axes are allowed to rotate freely to "best" summarize any clustering of variables; the final factors are allowed to be correlated. If the cluster of relationships are in fact uncorrelated, then oblique rotation will result in orthogonal factors. Therefore, the difference between orthogonal and oblique rotation is not in discriminating uncorrelated from correlated factors but in determining whether this distinction is empirical or imposed on the data by the model.
>
> (Rummel, 1970, p. 476)

> Oblique rotation is justified on the grounds that the real world should not be treated as though phenomena coagulate in unrelated clusters; phenomena can be interrelated in clusters, so the clusters themselves can be related. Oblique rotation allows this reality to be reflected in the loadings of the factors and their correlations.
>
> (Rummel, 1970, p. 477)

Thus, using oblique rotation, the factor pattern that emerged is shown in Table 11. This matrix was examined by columns in order to interpret the meaningful content of the factors. The parameters in the Table define the patterns of the data and gives a measure of the degree of involvement in the pattern of each variable. The intercorrelations among the factors are reported in Table 14 and the factor structure matrix, in Table 12, gives the correlation of each item with

TABLE 10

Factor Matrix for Effort Variables

Variables	Factor 1	Factor 2	Factor 3	Communality
1*	.156	-.119	.144	.059
2	.667	-.324	.053	.553
3	.473	-.396	.171	.409
4	-.309	.266	.075	.180
5	.758	.401	-.079	.742
6	.617	.338	-.063	.499
7	-.033	.265	.509	.331
Eigenvalue	1.745	.691	.328	
Percent of Variance	63%	25%	12%	

*Variable numbers correspond to those in text.

TABLE 11

Rotated Factor Pattern for Effort Variables

Variables	Factor 1	Factor 2	Factor 3
1*	.244	-.019	.080
2	.621	.208	-.113
3	.642	-.014	-.019
4	-.335	-.033	.189
5	.004	.861	.030
6	-.005	.709	.031
7	.014	.045	.576

*Variable numbers correspond to those in text.

each factor. "The loadings are strictly interpretable as correlations. The rotated factor pattern (Table 11) is recommended for use in identifying the variable most highly involved in a factor" (Rummel, 1970, p. 468).

Table 13 reports the factor score coefficient, which is used to construct a composite score for each of the factors. It should be noted that the factor score variable produced by the S.P.S.S. (Statistical Package for the Social Sciences, Nie et al., 1975) included a term for each variable in the factor analysis; however, "It has been customary to build factor scales employing only those variables that have substantial loadings on a given factor" (Nie et al., 1975, p. 488). Thus in this analysis, a factor score variable which included terms only for the highly loaded variables was created using the compute statement of S.P.S.S. .

Factor I is termed "Effort" (support general). The four items which comprise this factor, in order of magnitude are:

Item No.	Factor Loading	Content
3	.642	Checked with campus placement center
2	.621	Checked with Canada Manpower Center
4	.335	Sought sponsorship of family, relatives, or friends
1	.244	Sought sponsorship of a university professor

TABLE 12

Factor Structure Matrix for Effort Variables

Variables	Factor 1	Factor 2	Factor 3
1*	.229	.066	.053
2	.709	.435	-.190
3	.639	.217	-.090
4	-.368	-.161	.228
5	.309	.861	-.004
6	.246	.706	.003
7	-.034	.028	.573

*Variable numbers correspond to those in text.

TABLE 13

Factor Score Matrix for Effort Variables

Variables	Factor 1	Factor 2	Factor 3
1*	.095	.003	.058
2	.473	.103	-.134
3	.370	.009	.005
4	-.138	-.005	.135
5	.034	.651	.024
6	.008	.276	.021
7	.027	-.004	.540

*Variable numbers correspond to those in text.

TABLE 14

Factor Correlations for Effort

	Factor 1	Factor 2	Factor 3
Factor 1	1.000	-	-
Factor 2	.359	1.000	-
Factor 3	-.111	-.039	1.000

While these items may seem to be different at first glance, they all reflect the individual's efforts to obtain support for their job search. In items 4 and 1, the support is directed towards individuals, while in items 2 and 3, it is particular institutional agencies (i.e., Canada Manpower). While this distinction is recognized, the four still can be placed together conceptually in the context of assistance to one's efforts. The additional support for placing these items together is their mathematical loadings on a single factor. Therefore, both conceptually and mathematically, they can be identified as a single factor.

From the factor score coefficient matrix (Table 13), a composite score for this factor was constructed as follows:

Effort (support general) = $.095z_1 + .473z_2 + .370z_3 - .138z_4$

where z_1 to z_4 represents the standardized values of the items designated above. The internal consistency of reliability is .638 (Cronbach, 1951, pp. 297-334).

Factor II is termed "Effort" (applications). The two items that load significantly on this factor are:

Item No.	Factor Loading	Content
5	.861	Replied to specific newspaper or other advertisements
6	.709	Sent general letters of application to various school boards

Both of these items are similar conceptually in that they represent direct action taken by the individual to secure a teaching position.

From the factor score coefficient matrix (Table 13), a composite score coefficient for this factor was constructed as follows:

Effort (applications) = $.651z_1 + .276z_2$

where z_1 and z_2 represent the standardized values of the items designated above. In a scale consisting of two items the reliability estimate is the same as the correlation coefficient - .609 (Cronbach, 1951, p. 297-334).

Factor III is termed "Effort" (support clergy). Of the items included in the analysis, this did not load significantly with any of the others. However, given the importance of the clergy in Newfoundland's denominational school system it is not surprising that this factor should have a unique position. The item was as follows:

Item No.	Factor Loading	Content
7	.576	Sought sponsorship of a member of the clergy

Since the factor is isolated unto itself, there is no need to create a weighting procedure. Therefore, the factor score was the reported frequency of the number of times the respondent performed the task in his job search efforts. Similarly, one cannot obtain a reliability estimate for a single factor.

Personal Characteristics

Loci of Control - The items used to obtain a measure of loci of control in this research are contained in question 24, appendix A. The items were scored as follows:

0 = strongly agree
1 = agree
2 = disagree
3 = strongly disagree

Items 2 and 3 were then recoded in the opposite direction. The items were then factor analyzed using the same procedure described in the previous section. The intercorrelations are shown in Table 15. The factor analysis procedure yielded two factors. Table 16 presents the unrotated factor matrix and the communalities. These factors were then rotated obliquely. The factor pattern which resulted from this rotation is shown in Table 17, and the intercorrelations among the factors are in Table 20. The factor structure matrix is reported in Table 18, and the factor score coefficients are in Table 19. The latter was used to create a composite for each of the two dimensions of loci of control.

Factor II is control over personal events. The three items which comprise this factor, in order of magnitude, are:

Item No.	Factor Loading	Content
3	.695	Becoming a success is a matter of hard work, luck has little or nothing to do with it

TABLE 15

Correlation Matrix for Loci of Control

Variables						Mean	S.D.
1*	1.000					.79	.75
2	.080	1.000				2.05	.64
3	.255	.200	1.000			1.90	.84
4	.182	.074	.127	1.000		1.40	.74
5	.126	-.038	.082	.168	1.000	1.51	.82
6	.177	.142	.167	.344	.327	1.47	.77

*Variable numbers correspond to those in text.

TABLE 16

Factor Matrix for Loci of Control Variables

Variables	Factor 1	Factor 2	Communality
1*	.367	.160	.160
2	.212	.198	.084
3	.449	.497	.448
4	.445	-.109	.210
5	.371	-.215	.184
6	.695	-.281	.562
Eigenvalue	1.200	.449	
Percent of Variance	73%	27%	

*Variable numbers correspond to those in text.

TABLE 17

Rotated Factor Pattern for Loci of Control Variables

Variables	Factor 1	Factor 2
1*	.142	.320
2	-.003	.292
3	.070	.695
4	.417	.084
5	.448	-.054
6	.741	.021

*Variable numbers correspond to those in text.

TABLE 18

Factor Structure Matrix for Loci of Control

Variables	Factor 1	Factor 2
1*	.273	.378
2	.116	.290
3	.214	.667
4	.452	.255
5	.426	.129
6	.750	.324

*Variable numbers correspond to those in text.

TABLE 19

Factor Score Matrix for Loci of Control

Variables	Factor 1	Factor 2
1*	.097	.183
2	.006	.137
3	.049	.556
4	.191	.096
5	.182	.002
6	.598	.147

*Variable numbers correspond to those in text.

TABLE 20

Factor Correlations for Loci of Control

	Factor 1	Factor 2
Factor 1	1.000	.408
Factor 2	.408	1.000

Item No.	Factor Loading	Content
1	.320	Knowing the right people is important in deciding whether a person will get ahead
2	.292	When I make plans, I am almost certain that I can make them work

From the factor score coefficient matrix, Table 19, a composite score for this factor was constructed as follows:

Control over personal events = $.556z_1 + .183z_2 + .137z_3$

where z_1 to z_3 represents the standardized values of the items stated above. The internal consistency reliability of these three items is .393 (Cronbach, 1951). This is much too low to be taken as a serious measure of loci of control.

Factor I is control over societal events. The three items which comprise this dimension are:

Item No.	Factor Loading	Content
6	.741	The world is run by a few people in power and there is not much the little guy can do about it
5	.448	There will always be wars, no matter how hard people try to prevent them
4	.417	As far as world affairs are concerned, most of us are victims of forces we can neither understand nor control

From the factor-score coefficient matrix, the composite score for this factor was constructed as follows:

Control over societal events = $.598z_1 + .182z_2 + .191z_3$

where z_1 to z_3 represents the standardized values of the items stated above. The internal consistency of reliability of these three items is .538 (Cronbach, 1951).

The instrument used to measure loci of control was previously used in a number of other research studies, e.g., (Parsons, et al., 1974). However, in this sample, the reliability of the scores (P = .393 for Factor II and .538 for Factor I) are too low for it to be regarded as a dependable measure. The result is that it is not worth pursuing in the research investigation in this study.

Religiosity - There are a number of dimensions of religiosity, three of which are represented here. The first two are contained in the instrument used in question 22, appendix A. The third dimension is contained in question 21, appendix A. The first two will be presented first since they were developed from the same question.

This question was scored in the following manner. Definitely agree = 0; definitely disagree = 3. Item 4 was then recoded in the opposite direction for analysis purposes.

The items were factor analyzed using the same procedure as above. The intercorrelations are presented in Table 21. The factor analysis procedure yielded two factors. Table 22 is the unrotated factor matrix and the communalities.

These factors were then rotated obliquely which resulted in the factor pattern presented in Table 23. The factor intercorrelations is reported in Table 26 and the factor structure matrix is reported in Table 24. The factor score coefficient (Table 25) was used to create a composite for each of these two dimensions of religiosity.

Factor I is belief in religious organization. The four items used to create this factor, in order of magnitude, are as follows:

Item No.	Factor Loading	Content
2	.737	The best way to foster the moral development of civilization is through organized religion
3	.698	There should be stricter observance of the sabbath, the religious day of rest
1	.649	Everyone should believe in and practice some religion
4	.221	The world moves in an evolutionary process of unfolding rather than through divine guidance

TABLE 21

Correlation Matrix for Religiosity

Variables						Mean	S.D.
1*	1.000					1.99	.93
2	.458	1.000				1.70	.78
3	.521	.466	1.000			1.46	.80
4	.156	.218	.195	1.000		1.39	.82
5	.413	.251	.375	.194	1.000	2.41	.73
6	.330	.186	.303	.181	.655	2.14	.83

*Variable numbers correspond to those in text.

TABLE 22

Factor Matrix for Religiosity Variables

Variables	Factor 1	Factor 2	Communality
1*	.667	.233	.499
2	.551	.396	.461
3	.659	.288	.517
4	.285	.043	.083
5	.740	-.384	.696
6	.656	-.444	.627
Eigenvalue	2.242	.641	
Percent of Variance	78%	22%	

*Variable numbers correspond to those in text.

TABLE 23

Rotated Factor Pattern for Religiosity Variables

Variables	Factor 1	Factor 2
1*	.649	-.100
2	.737	.130
3	.698	-.039
4	.221	-.102
5	.084	-.787
6	.028	-.806

*Variable numbers correspond to those in text.

TABLE 24

Factor Structure Matrix for Religiosity Variables

Variables	Factor 1	Factor 2
1*	.701	-.438
2	.670	-.254
3	.718	-.402
4	.275	-.218
5	.494	-.831
6	.391	-.792

*Variable numbers correspond to those in text.

TABLE 25

Factor Score Coefficients for Religiosity Variables

Variables	Factor 1	Factor 2
1*	.304	-.065
2	.320	.010
3	.341	-.050
4	.060	-.025
5	.126	-.508
6	.035	-.419

*Variable numbers correspond to those in text.

TABLE 26

Factor Correlations for Religiosity Variables

	Factor 1	Factor 2
Factor 1	1.000	-.520
Factor 2	-.520	1.000

From the factor score coefficient matrix, the composite score for this factor was constructed as follows:

Religiosity A = $.304z_1 + .320z_2 + .341z_3 + .060z_4$

where z_1 to z_4 represents the standardized values of the items stated above. The internal consistency of reliability of these four items is .750 (Cronbach, 1951).

Factor II is belief in spiritualism. The two items used to create this factor are:

Item No.	Factor Loading	Content
6	.806	There is life after death
5	.787	There is an almighty god who watches over us

The factor score coefficient was then used to create the following composite measure:

Religiosity B = $.508z_1 + .419z_2$

where z_1 and z_2 are standardized values of the items above. The internal consistency of reliability, which is the same as their intercorrelations is .655.

Factor III is Religiosity C. This factor is a measure of one's self-reported frequency of church attendance. The scale ranged from 0 (do not attend church) to 4 (attend church regularly - once a week).

Perceptions of Employability - The items used to create a measure of perceptions of employability are contained in question 26, appendix A. These

items were scored on a three point scale (0 = quite worried, 1 = somewhat worried, 2 = not worried at all). Item 7 was then recoded in the opposite direction for analytical purposes.

The items were then factor analyzed using the same procedure described previously. The intercorrelations are shown in Table 27. The factor analysis procedure yielded three factors. Table 28 is the unrotated factor matrix and the communalities. This indicated three independent factors operating in the instrument. These factors were then rotated obliquely which resulted in the factor pattern presented in Table 29. The intercorrelations among the factors are presented in Table 32. Factor III, consisting of items 5, my lack of experience), and 7, (the possibility of being away from home), explained only 10.4 per cent of the variance, and had a reliability of .135; therefore it was deleted from any further investigation. The factor structure matrix is reported in Table 30, and the factor score coefficient is in Table 31. The latter was used to create a composite for each of the remaining two dimensions of employability.

Factor I is general opportunities. The six items that comprise this factor, in their respective order of magnitude are:

Item No.	Factor Loadings	Content
6	.563	Getting a job I like
10	.543	Getting a job for which I have been specifically trained

TABLE 27

Correlation Matrix for Perceptions of Employability

Variables										Mean	S.D.
1*	1.000									.88	.68
2	-.004	1.000								1.66	.61
3	.031	.513	1.000							1.72	.62
4	.406	.030	.073	1.000						.62	.71
5	.150	.095	.045	.260	1.000					.80	.69
6	.223	.177	.060	.282	.195	1.000				1.02	.71
7	.013	.033	.108	.070	.135	-.065	1.000			1.53	.72
8	.267	.106	.081	.235	.151	.310	.023	1.000		1.15	.71
9	.151	.257	.152	.253	.290	.242	.131	.280	1.000	1.24	.71
10	.282	.230	.135	.232	.115	.317	.046	.332	.376	.87	.71

*Variable numbers correspond to those in text.

TABLE 28

Factor Matrix for Employability Variables

Variables	Factor 1	Factor 2	Factor 3	Communality
1*	.423	-.312	-.056	.280
2	.502	.734	-.082	.798
3	.327	.454	.064	.317
4	.492	-.300	.096	.341
5	.365	-.119	.277	.225
6	.503	-.145	-.211	.318
7	.116	.040	.394	.170
8	.490	-.173	-.122	.285
9	.559	-.005	.159	.338
10	.568	-.068	-.128	.344
Eigenvalue	2.051	1.004	.357	
Percent of Variance	61%	29%	10%	

*Variable numbers correspond to those in text.

TABLE 29

Rotated Factor Pattern for Employability Variables

Variables	Factor 1	Factor 2	Factor 3
1*	.534	-.131	.020
2	.033	.893	-.054
3	.009	.546	.086
4	.528	-.109	.184
5	.259	-.005	.342
6	.563	.073	-.136
7	.073	.041	.417
8	.535	.032	-.046
9	.396	.188	.242
10	.543	.162	-.047

*Variable numbers correspond to those in text.

TABLE 30

Factor Structure Matrix for Employability Variables

Variables	Factor 1	Factor 2	Factor 3
1*	.513	-.024	.127
2	.194	.892	.079
3	.118	.557	.161
4	.549	.019	.292
5	.338	.094	.402
6	.545	.164	.005
7	.033	.086	.406
8	.531	.130	.084
9	.489	.300	.361
10	.564	.261	.103

*Variable numbers correspond to those in text.

TABLE 31

Factor Score Coefficients for Employability Variables

Variables	Factor 1	Factor 2	Factor 3
1*	.207	-.041	.016
2	.024	.795	-.044
3	-.007	.131	.103
4	.231	-.030	.174
5	.096	-.005	.274
6	.231	-.001	-.116
7	-.021	.038	.310
8	.210	.019	-.033
9	.168	.062	.240
10	.231	.049	-.034

*Variable numbers correspond to those in text.

TABLE 32

Factor Correlations for Employability Variables

	Factor 1	Factor 2	Factor 3
Factor 1	1.000	.195	.234
Factor 2	.195	1.000	.141
Factor 3	.234	.141	1.000

Item No.	Factor Loadings	Content
8	.535	Having the right connections
1	.534	The possibility of being turned down
4	.528	The number of other people trying for the job
9	.396	Knowing where to look and what to do to find a job

The factor score coefficient matrix was then used to create the necessary composite measure:

$$\text{General opportunities} = .207z_1 + .231z_2 + .231z_3 + .210z_4 + 168z_5 + .231z_6$$

where z_1 to z_6 represents the standardized values of the items stated above. The internal consistency of reliability of these six items is .932 (Cronbach, 1951).

Factor II is personal concerns. The two items that comprise this factor are:

Item No.	Factor Loading	Content
2	.893	My personality or appearance
3	.[illegible]6	Getting good references

The factor score coefficient matrix was then used to compute the composite measure as follows:

$$\text{Personal concerns} = .795z_1 + .131z_2$$

where z_1 and z_2 are the standardized values of the two items. The internal consistency of reliability

is the correlation coefficient .512 (Cronbach, 1951).

This latter reliability coefficient indicates that this measure is also not reliable enough to be used in further analysis. Therefore, it was dropped from any further investigation, leaving only general opportunities (now simply termed employability) to be used in the regression analysis.

Perceptions of Teaching Competency - The items used to measure perceptions of teaching competency (based on their experiences as student teachers), are contained in question 30, appendix A. This instrument contained 8 items each of which was scored in the following manner:

I found it very difficult = 0
I found it somewhat difficult = 1
I didn't find it difficult at all = 2

The items were then factor analyzed similarly to the previous variables. The intercorrelations among the items are shown in Table 33. The factor analysis procedure yielded three factors.

Table 34 is the unrotated factor matrix and the communalities. This indicated three factors operating in the instrument. These factors were then rotated obliquely, which resulted in the factor pattern presented in Table 35. Factor II, which contained only item 6, (preparing lessons), was deleted from further analysis, as a reliability coefficient cannot be computed for a single variable. Similarly, Factor III, which contained items 5, (conversing

TABLE 33

Correlation Matrix for Teaching Competency

Variables								Mean	S.D.
1*	1.000							1.66	.53
2	.361	1.000						1.71	.50
3	.273	.210	1.000					1.55	.56
4	.382	.406	.272	1.000				1.67	.52
5	.215	.150	.241	.119	1.000			1.87	.40
6	.392	.289	.019	.135	.342	1.000		1.62	.54
7	.189	.118	.182	.141	.462	.256	1.000	1.66	.56
8	.376	.197	.233	.314	.212	.359	.146	1.45	.54

*Variable numbers correspond to those in text.

TABLE 34

Factor Matrix for Teaching Competency Variables

Variables	Factor 1	Factor 2	Factor 3	Communality
1*	.625	.189	-.136	.441
2	.483	.229	-.132	.303
3	.368	.306	.245	.290
4	.507	.443	-.070	.459
5	.558	-.287	.505	.649
6	.705	-.541	-.409	.957
7	.426	-.166	.339	.324
8	.507	.091	-.086	.272
Eigenvalue	2.264	.789	.646	
Percent of Variance	61%	21%	18%	

*Variable numbers correspond to those in text.

TABLE 35

Rotated Factor Pattern for Teaching Competency Variables

Variables	Factor 1	Factor 2	Factor 3
1*	.620	-.140	.036
2	.554	-.067	-.039
3	.376	.270	.216
4	.709	.119	-.080
5	-.068	-.038	.826
6	.226	-.862	.190
7	.010	-.021	.562
8	.444	-.142	.082

*Variable numbers correspond to those in text.

informally with students), and item 7, (associating with school staff), was deleted as it registered a reliability coefficient of only .461. The result is that the teaching competency variable was comprised of five items, (items 1, 2, 3, 4, and 8), all of which loaded favourably on Factor I.

The intercorrelations among the factors are presented in Table 38 and the factor structure matrix is in Table 36. The factor score coefficients reported in Table 37 were used to create a composite for the factor - perceptions of teaching competency. This was constructed using the following items:

Item No.	Factor Loadings	Content
4	.709	Conducting formal discussions with class
1	.620	Lecturing
2	.554	Asking/answering questions
8	.444	Motivating students to learn
3	.376	Maintaining class-room discipline

The factor score coefficient matrix was used to compute the following composite measure:

$$\text{Teaching competency} = .281z_1 + .188z_2 + .181z_3 + .360z_4 + .141z_5$$

where z_1 to z_5 are the standardized values of the items described above. The internal consistency of reliability of these items is .881 (Cronbach, 1951).

TABLE 36

Factor Structure Matrix for Teaching Competency

Variables	Factor 1	Factor 2	Factor 3
1*	.651	-.217	.316
2	.546	-.126	.205
3	.436	.196	.337
4	.662	.048	.202
5	.285	-.145	.802
6	.406	-.914	.406
7	.249	-.101	.569
8	.495	-.205	.289

*Variable numbers correspond to those in text.

TABLE 37

Factor Score Matrix for Teaching Competency

Variables	Factor 1	Factor 2	Factor 3
1*	.281	.055	.046
2	.188	.073	-.004
3	.181	.069	.125
4	.360	.077	.023
5	.023	.125	.615
6	.132	-.046	.109
7	.025	.058	.218
8	.141	.060	.035

*Variable numbers correspond to those in text.

TABLE 38

Factor Correlations for Teaching Competency Variables

	Factor 1	Factor 2	Factor 3
Factor 1	1.000	-.116	.422
Factor 2	-.116	1.000	-.139
Factor 3	.422	-.139	1.000

Perceptions of Teaching Commitment - The items used to obtain a measure of one's commitment to the teaching profession are contained in questions 32 and 33, appendix A. Question 32 was scored on a four point scale from 0 (uncertain) to 3 (decline and continue to seek a teaching position). Question 33 was scored on a three point scale from 0 (uncertain) to 2 (a long term career investment). These two questions were then recoded in the following manner.

Question 32 -- 3 = 2; 0 = 1

Question 33 -- 0 = 1

This resulted in each question becoming a dichotomous, nominal variable with the values 1 and 2. These two variables were then added together to create the composite variables - commitment to teaching. This composite is also a dichotomous, nominal variable and will be entered into the regression analysis utilizing the dummy variable procedure.

CHAPTER IV

RESULTS

This research involves a number of independent variables which have been both conceptually and methodologically divided into three categories or clusters. The presentation and examination of the results will follow the same format.

Included in the findings of this research will be the Pearson product moment correlation coefficients, which are used as measures of the degree of association between the variables; the multiple regression analysis, used to identify the relative effects of the independent variables on the dependent variable; and their level of significance. The results will be presented in two stages - firstly, that of the preliminary cluster analysis used to identify the significant predictors of employment status, and secondly, the final regression analysis which includes those significant, independent variables in a single regression statement.

The overall descriptive statistics regarding the magnitude of a teacher surplus and the scope of the problem of transition from one's formal training in the teaching profession to the realm of work is contained in Appendix C. This part of the study (pp. 152 to 168) reports that 53% of the Spring, 1978, graduating class in Memorial's Faculty of Education were employed in September, 1978. Thus, since almost one-half of these graduates were unsuccessful in

obtaining a teaching position upon completion of their formal training, the question that this study sought to answer was, "What are the differences, if any, between these two groups?"

Ascribed Characteristics

The results for the ascribed variables are presented in Tables 39, 40, and 41. The basic zero-order relationships (correlation coefficients) presented in Table 39 indicate the degree to which variation in one of these variables is related to variation in another. The most important of these correlations for this study is that between the dependent and independent variables. This is because our primary concern is with the association these independent variables have with employment status. Thus, the interrelationships of the independent variables among themselves are not a primary concern in this study.

The dependent variable is positively correlated with the independent variables, age, family contacts, and being a member of the Pentecostal or Seventh-Day Adventist denominations. It is negatively correlated with sex, socio-economic status, the community size of one's hometown and being a member of the Roman Catholic denomination. The variable with the strongest relationship with employment status is that of the number of family contacts in the teaching profession with a coefficient of .220. The age of the education graduate was most closely correlated with sex, while socio-economic status correlated most highly with the size of the community

TABLE 39

Correlations, Means, Standard Deviations of Ascribed Variables

Variables	Variables										
	1	2	3	4	5	6	7	8	$\bar{X}$	S.D.	N
1. Employment Status	1.000	-	-	-	-	-	-	-	.529	.500	185
2. Age	.099	1.000	-	-	-	-	-	-	55.048	3.091	185
3. Sex	-.023	.333	1.000	-	-	-	-	-	1.562	.497	185
4. S.E.S.	-.000	-.031	-.028	1.000	-	-	-	-	.088	.859	162
5. Community Size (Hometown)	-.095	-.145	-.055	.324	1.000	-	-	-	4.076	2.585	183
6. Family Contacts	.000	.081	-.056	.014	-.163	1.000	-	-	.640	.947	178
7. Catholic	-.103	.204	.110	.080	.066	-.022	1.000	-	.394	.490	185
8. Pentecostal Seventh-Day Adventist	.111	.032	-.022	.031	.042	.064	-.147	1.000	.032	.177	185

in which they regarded as home. However, except for the relationship between socio-economic status and community size, and the relationship between age and sex, the remaining correlation coefficients are too small to be considered important.

In order to more fully explore these bivariate relationships, however, it is necessary to use more rigorous analytic techniques. The correlation coefficient can be misleading since it indicates a direct one-to-one relationship between one independent variable and another independent variable or the dependent variable. However, social phenomena cannot be isolated into a one-to-one relationship but rather are influenced by a number of external or extraneous factors. Therefore, it is necessary to use a second mode of analysis - that of multiple regression analysis.

Table 40 outlines the results of the regression analysis for all the ascribed variables, except that of the dummy variable - religious affiliation. This analysis indicates the relative effects of the predictor variables, i.e., relative to the other predictors included in this particular cluster. The B-coefficient is the partial regression coefficient, and may be considered as a measure of the influence of each independent variable upon the dependent variable with adjustments made for all the other independent variables. In other words, it is the measure of the relationship between the single independent variable and the dependent variable, when the effects of the other five predictor

TABLE 40

Results of Ascribed Characteristics (Less Religious Affiliation) in Multiple Regression Procedure

Independent Variables	B Coefficient	Beta Coefficient	Standard Error	F	Significance Level
Age	.014	.090	.013	1.145	N.S.
Sex	.045	-.045	.084	.293	N.S.
S.E.S.	.009	.016	.048	.040	N.S.
Community Size (Hometown)	.011	-.056	.016	.444	N.S.
Family Contacts	.106	.201	.042	6.231	.001
Constant	.231				

R^2 = .060

Standard Error of Estimate = .493

variables are controlled statistically. However, since the independent variables are not all measured similarly, it is difficult to determine the relative importance of the dependent variable on the basis of the B-coefficient. Therefore, it is standardized in the Beta coefficient, enabling the researcher to compare the relative effect on the dependent variable of each independent variable.

The overall accuracy of the prediction equation is reflected by the R^2, which is the proportion of variance explained. Prediction accuracy in absolute units is reflected by the standard error of estimate of the regression equation. The standard error of estimate may be interpreted as the standard deviation of residuals, and indicates the extent to which the predicted score of the dependent variable may vary from the actual score. The F ratio is the inferential statistic applied to test whether the observed linear association in the regression equation is statistically significant, while the significance level indicates the level at which it is significant, i.e., the probability that the results could have been obtained by chance.

In social research, the statistical significance of the B or Beta is conventionally defined by the criterion that the absolute size of the unstandardized regression coefficient (B) must be at least twice as large as its standard error. It must also be significant at the .05 level or less. In Table 40, the only ascribed characteristic that meets this criteria

is that of the 'number of family contacts already involved in the teaching profession'. Therefore, it is the only variable that is significantly related to occupational attainment among new teacher graduates. It is interesting to note that neither socio-economic status, nor age, proved to be signif-icantly related to job attainment.

Table 40 also indicates that these five ascribed variables combine to explain six per cent of the variance in occupational attainment.

Table 41 contains the results of the regression analysis for the dummy variable, religious affiliation. In accordance with the procedure required for dummy variable analysis, the protestant category is excluded and used as a reference for the other two. This procedure is best explained as follows:

> The inclusion of all dummies created from a given nominal variable would render the normal equation unsolvable because the K dummy variable is completely determined by the first K - 1 dummies entered into the regression equation. It is therefore necessary to exclude one of the dummies from the equation.
>
> The exclusion of one of the dummy variables does not actually result in a loss of information. Rather, the excluded category becomes a sort of reference point by which the effects of the dummies are judged and interpreted. For this reason, the excluded category is referred to as the reference category.
>
> (Nie et al., 1975, p. 374)

In this way each category of religion is repre-sented by a unique combination of the three dummy variables.

TABLE 41

Results of Multiple Regression Analysis for Religious Affiliation

Independent Variables	B Coefficient	Beta Coefficient	Standard Error	F	Significance Level
Catholic	-.090	-.088	.075	1.438	N.S.
Pentecostal Seventh-Day Adventist	.276	.098	.209	1.753	N.S.
Constant	.556				

R^2 = .020

Standard Error of Estimate = .498

Table 41 indicates that religious affiliation is not a significant predictor of occupational attainment, with a total explained variance of only two per cent. It is interesting to note that the Pentecostal and Seventh-Day Adventist variable did not prove significant, even though in a preliminary analysis, using descriptive statistics, (see appendix C), six of the seven individuals in this category were successful in finding a teaching position. Probably, the best reason for its lack of significance in this analysis is that the small number of graduates affiliated with these denominations cannot be adequately represented when included in the total number of the sample in this research.

Achieved Characteristics

The results for the achieved characteristics are presented in Tables 42, 43, 44, 45, and 46. The zero-order correlation coefficients for the academic specialization variables are presented in Table 42. From this, it can be noted that the highest correlation is between the social sciences and English. Other relatively high correlations are between the social sciences and mathematics, mathematics and the pure or natural sciences, and art and English, mathematics, the social sciences, and music. The four variables most highly correlated with occupational attainment are French, special education, art, and business education. The remaining correlations are not significant enought to be of any importance.

TABLE 42

Correlations, Means, Standard Deviations for Academic Specialization

	Variables	Variables																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	$\bar{X}$	S.D.	N
1.	Employment Status	1.000	-	-	-	-	-	-	-	-	-	-	-	-	-	.529	.500	185
2.	English	.004	1.000	-	-	-	-	-	-	-	-	-	-	-	-	.783	.412	185
3.	Mathematics	.049	.228	1.000	-	-	-	-	-	-	-	-	-	-	-	.589	.493	185
4.	Social Sciences	-.047	.446	.316	1.000	-	-	-	-	-	-	-	-	-	-	.654	.477	185
5.	Pure Sciences	-.073	.034	.307	.244	1.000	-	-	-	-	-	-	-	-	-	.432	.496	185
6.	French	.132	-.060	.021	-.062	-.071	1.000	-	-	-	-	-	-	-	-	.113	.318	185
7.	Physical Education	.078	-.026	-.153	-.155	.013	.033	1.000	-	-	-	-	-	-	-	.156	.364	185
8.	Religious Education	-.020	.243	.122	.170	.122	-.045	-.063	1.000	-	-	-	-	-	-	.345	.477	185
9.	Special Education	.160	-.074	-.003	.000	.084	.044	-.053	.101	1.000	-	-	-	-	-	.064	.247	185
10.	Industrial Art	.069	.038	.061	.053	.218	-.026	-.031	.013	-.019	1.000	-	-	-	-	.005	.073	185
11.	Music	.078	.192	.204	.196	.327	.237	.163	.287	-.028	.200	1.000	-	-	-	.118	.324	185
12.	Art	.125	.317	.406	.306	.060	.060	-.057	-.003	-.030	.111	.303	1.000	-	-	.302	.460	185
13.	Business Education	.120	.067	.020	.093	.189	-.045	.062	-.042	-.033	-.009	-.047	.101	1.000	-	.016	.126	185
14.	Home Economics	.093	.047	.069	.042	-.185	.007	-.018	-.145	.051	-.015	.168	.264	-.027	1.000	.043	.204	185

Table 43 notes the correlation coefficients for the remaining achieved characteristics. The dependent variable, employment status, is most highly correlated with type of student teaching, willingness to relocate, and effort. The three dimensions of effort all correlate highly, indicating that to a considerable extent the three dimensions are all measuring the same phenomena. For this reason, the variables, effort 2 and effort 3, were dropped from any further investigation leaving only effort 1 as the appropriate measure of one's job search efforts. It is also interesting to note that the variable effort is negatively correlated with occupational attainment. This negative correlation indicates that the more effort one places in seeking a teaching position the less are his chances of obtaining one. An explanation for this circumstance is that in the teaching profession positions are ordinarily filled early in the Spring. The majority of candidates who are successful obtain their positions at that time, probably with a minimum of effort. Those candidates who were not successful continue throughout the summer their efforts to obtain a teaching position, but their chances of actually obtaining a position diminishes as the summer progresses. This explanation is the only one that can be offered for the negative relationship between effort and the dependent variable.

Table 44 reports the results of the multiple regression analysis for the subject specialization variables. In

TABLE 43

Correlations, Means, Standard Deviations for Remaining Achieved Characteristics

Variables		Variables													
		1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$	S.D.	N
1.	Employment Status	1.000	-	-	-	-	-	-	-	-	-	-	.529	.500	185
2.	High School	-.081	1.000	-	-	-	-	-	-	-	-	-	.440	.497	184
3.	Elementary	.008	-.616	1.000	-	-	-	-	-	-	-	-	.326	.470	184
4.	Type of Student Teaching	.188	-.044	-.026	1.000	-	-	-	-	-	-	-	.211	.495	180
5.	Teacher Certification	.034	.575	-.332	.064	1.000	-	-	-	-	-	-	.643	.609	185
6.	Willingness to Relocate	.172	.198	-.143	.033	.040	1.000	-	-	-	-	-	.756	.430	185
7.	Marital Status	-.014	-.044	.046	.000	-.011	-.240	1.000	-	-	-	-	.159	.392	185
8.	Academic Achievement	.095	.045	-.162	.002	.092	-.198	.035	1.000	-	-	-	182.135	36.220	185
9.	Effort 1	-.248	.104	-.058	.079	.136	.124	.045	-.075	1.000	-	-	5.227	12.979	159
10.	Effort 2	-.229	.101	-.038	.047	.130	.117	.036	.068	.965	1.000	-	14.783	34.158	185
11.	Effort 3	-.237	.103	-.014	.071	.133	.121	.041	.072	.098	.961	1.000	1.112	2.867	185

TABLE 44

Results of Multiple Regression Analysis for Academic Specialization

*Independent Variables	B Coefficient	Beta Coefficient	Standard Error	F	R^2	Standard Error of Estimate	Significance Level
English	.006	.004	.089	.005	.000	.501	N.S.
Mathematics	.050	.049	.074	.454	.002	.501	N.S.
Social Science	-.050	-.047	.077	.418	.002	.501	N.S.
Pure Science	-.074	-.073	.074	1.004	.005	.500	N.S.
French	.208	.132	.115	3.261	.017	.497	.05
Physical Education	.107	.078	.101	1.137	.006	.500	N.S.
Religious Education	-.021	-.020	.077	.077	.000	.501	N.S.
Special Education	.324	.160	.147	4.820	.025	.495	.05
Industrial Arts	.472	.069	.501	.887	.004	.500	N.S.
Music	.121	.078	.113	1.134	.006	.500	N.S.
Art	.136	.125	.079	2.941	.015	.497	N.S.
Business Education	.478	.120	.289	2.718	.014	.498	N.S.
Home Economics	.230	.093	.180	1.625	.008	.499	N.S.

* Note that the results represent 13 separate regression equations.

this analysis, French and special education are the only academic subject areas that are significant predictors of occupational attainment. Art and business education are both relatively strong predictors, also, but they are not quite strong enough to be significant at the .05 level. Therefore, of all the academic specialities included in this research, the only ones significantly influencing occupational attainment are that of French and special education.

Since each subject specialization was analyzed in separate regression equations, a cumulative amount of the variance explained could not be computed. However, the amount of variance explained by each subject specialization is contained in the R^2 column in Table 44.

Table 45 notes the influence of the program level on occupational status. In this case, the dummy variable regression analysis indicates that this characteristic is not a significant, influencing factor on the dependent variable. However, as noted in the Table, a preliminary analysis of all the achieved characteristics in a single regression equation indicated that the high school program variable was a negative influence on employment status. Therefore, it was decided to include it with the list of significant predictors, even though it did not prove to be significant in this Table.

In this Table, also, in accordance with the procedure for dummy variable analysis, the variable primary level was used as the reference category. The amount of variance

TABLE 45

Results of Multiple Regression Analysis for Program Level

Independent Variables	B Coefficient	Beta Coefficient	Standard Error	F	Significance Level
*High School	.123	.122	.094	1.698	N.S.
Elementary	-.071	-.066	.100	.508	N.S.
Constant	.607				

R^2 = .009

Standard Error of Estimate = .500

* While the high school training program does not prove significant here, it is interesting to note that in a preliminary regression equation of all the achieved variables it did prove significant as follows: B: -.262; Beta: -.260; Standard Error: .132; F: -3.943. For this reason, it was included in the final regression analysis of significant variables.

explained in the dependent variable by this characteristic is less than one per cent.

The results of the regression analysis for the remaining achieved characteristics is contained in Table 46. The variables most significantly influential in predicting occupational attainment in order of their magnitude are 'effort' (negatively influential), 'willingness to relocate', and 'the type of student teaching program completed at Memorial'. The other predictors - 'teacher certification level', 'marital status', and 'academic achievement' at Memorial did not prove to be significant. The amount of variance explained by this analysis was sixteen per cent.

Personal Characteristics

The results of the analysis for the personal characteristics are contained in Table 47 and Table 48. The correlation coefficients, contained in Table 47, indicate that none of the personal characteristics are correlated significantly with occupational attainment. The only correlations worthy of notice are those between the three dimensions of 'religiosity'. This can be expected since these three variables are only measuring three different dimensions of the same characteristic.

Table 48 contains the results of the regression analysis for this cluster. As the Table indicates, none of the variables are influential in predicting job status. The

TABLE 46

Results of Multiple Regression Analysis for Remaining Achieved Characteristics

Independent Variables	B Coefficient	Beta Coefficient	Standard Error	F	Significance Level
Type of Student Teaching	.202	.200	.076	6.967	.001
Teacher Certification Level	.034	.041	.063	.296	N.S.
Willingness to Relocate	.265	.228	.092	8.171	.001
Marital Status	.029	.023	.099	.089	N.S.
Academic Achievement	.001	.114	.001	2.166	N.S.
Effort	-.202	-.288	.054	14.004	.001
Constant	-.029				

R^2 = .160

Standard Error of Estimate = .467

TABLE 47

Correlations, Means, Standard Deviations for Personal Characteristics

Variables	Variables									
	1	2	3	4	5	6	7	$\bar{X}$	S.D.	N
1. Employment Status	1.000	-	-	-	-	-	-	.529	.500	185
2. Church Attendance	.054	1.000	-	-	-	-	-	2.724	1.200	185
3. Religiosity A	.048	.370	1.000	-	-	-	-	-.008	.798	180
4. Religiosity B	-.049	.378	.438	1.000	-	-	-	.000	.845	182
5. Employability	-.013	-.020	.044	-.051	1.000	-	-	.007	.807	180
6. Teaching Competence	-.089	.041	-.032	-.019	.099	1.000	-	-.003	.796	175
7. Commitment to Teaching	.014	-.145	-.070	-.059	-.018	.141	1.000	3.573	.648	.185

TABLE 48

Results of Multiple Regression Analysis for Personal Characteristics

Independent Variables	B Coefficient	Beta Coefficient	Standard Error	F	Significance Level
Church Attendance	.033	.080	.036	.846	N.S.
Religiosity A	.042	.067	.055	.564	N.S.
Religiosity B	-.064	-.109	.052	1.492	N.S.
Employability	-.006	-.009	.048	.015	N.S.
Teaching Competence	-.061	-.097	.049	1.531	N.S.
Commitment to Teaching	.029	.037	.061	.228	N.S.
Constant	.334				

R^2 = .022

Standard Error of Estimate = .503

amount of variance explained by this cluster of personal variables is only two per cent.

Significant Characteristics

From the preliminary regressions the variables that indicated a significant influence on occupational attainment are as follows - 'completing the high school program (a negative relationship)', 'specializing in French or special education', 'completing the internship student teaching program', ' willingness to relocate', 'having family contacts in the teaching profession', and 'one's efforts in his job search' (again, negatively related). These variables were then placed in a single regression equation and analyzed for their relative influences. The results of this analysis are contained in Tables 49 and 50.

Table 49 is the basic zero-order correlation coefficients for this group of variables. The strongest correlation with employment status is 'one's efforts in his job search'. However, this relationship is negative. The only other relationship correlated above the .200 level is that of employment status and the family contacts characteristic.

The results of the regression analysis for this group of significant variables are contained in Table 50. In this analysis, the only characteristic that proved to be insignificant is that of completing the high school program. All the others, except that of special education and French, were

TABLE 49

Correlations, Means, Standard Deviations for Significant Characteristics from Preliminary Analysis

Variables	Variables										
	1	2	3	4	5	6	7	8	$\bar{X}$	S.D.	N
1. Employment Status	1.000	-	-	-	-	-	-	-	.529	.500	185
2. High School	-.081	1.000	-	-	-	-	-	-	.440	.497	184
3. French	.132	-.008	1.000	-	-	-	-	-	.113	.318	185
4. Special Education	.160	-.012	.044	1.000	-	-	-	-	.064	.247	185
5. Type of Student Teaching	.188	-.044	-.000	-.015	1.000	-	-	-	.211	.495	180
6. Willingness to Relocate	.172	.198	.114	.098	.033	1.000	-	-	.756	.430	185
7. Family Contacts	.220	-.002	.047	.118	-.049	.002	1.000	-	.640	.947	178
8. Effort	-.248	.104	-.056	.029	.079	.124	-.077	1.000	5.227	12.979	159

TABLE 50

Results of Multiple Regression Analysis for Significant Characteristics from Preliminary Analysis

Independent Variables	B Coefficient	Beta Coefficient	Standard Error	F	Significance Level
Effort	-.185	-.265	.052	12.633	.001
High School	-.084	-.084	.075	1.256	N.S.
French	.200	.127	.116	2.970	.01
Special Education	.244	.120	.150	2.642	.01
Type of Student Teaching	.211	.209	.074	8.071	.001
Willingness to Relocate	.253	.217	.088	8.182	.001
Family Contacts	.100	.189	.039	6.547	.001
Constant	.227				

R^2 = .227

Standard Error of Estimate = .[illegible]0

significant at the .001 level. French and special education proved to be significant at the .01 level.

The most important predictor of occupational attainment is 'effort'. However, the relationship is in a negative direction because it is a proxy for an early (Spring) appointment. Next are the type of student teaching and willingness to relocate which are of almost equal importance. This is followed by the family contacts characteristic and finally the subject specializations, French and special education. The total amount of variance explained by this analysis is twenty-two per cent of the total variance in the occupational attainment variable.

CHAPTER V

DISCUSSION

The purpose of this chapter is primarily to place the findings presented in Chapter IV in a meaningful context, thereby integrating the results of the research into the total perspective of the study. In doing this, the results of the research will be discussed in relation to both their theoretical and practical implications for the transition of education graduates at Memorial from school to work. It is hoped that the study can provide new insights into the present mismatch of teacher graduates with labour market demands, so that the present situation in which almost one-half of the graduating class failed to successfully find employment in their chosen career, can be alleviated.

Theoretical Implications

Theoretically, the study dealt with a number of hypotheses, each of which was predicted to be influential in one's efforts to make the transition from school to work. Clustered into common groupings, they were operationally defined and statistically measured for their relationship with the common dependent variable. This chapter is an attempt to bring some interpretations to bear on the results presented in Chapter 4.

Ascribed Characteristics

Among the six ascribed characteristics investigated

in the study, only one proved to be of significant importance to the transition process from school to work. This was the number of family members already working in the teaching profession. This characteristic proved to be significant at the .001 level, in both the preliminary analysis and in the final analysis of significant characteristics. Its correlation with the dependent variable employment status was .220, and its standardized regression coefficient in the final regression equation was .189. This indicates that the presence of family contacts in the education system is a significantly influential characteristic in determining the success of new teachers on the labour market.

This finding assumes greater significance when perceived in relation to the notions of social mobility, generally believed to be operational in the Western democracies. In these nations, political and economic relationships are believed to be structured around egalitarian, as opposed to elitist, principles. This means that successful entrance into the labour force, as well as vertical mobility within it, is governed by "contest", as opposed to "sponsored" mobility, (Carlton et. al., 1977, pp. 239-240), in which success is recognized solely on the basis of one's merits and achievements. According to this study, however, successful entrance into the teaching profession in Newfoundland may not be determined entirely in accordance with these principles, but rather with those governing "sponsored" social

mobility; that is, the entrance of candidates to the profession takes place to a certain extent through the "sponsorship" of existing members on the basis of ascribed, background characteristics.

The other predictors as defined in the list of hypotheses for the ascribed characteristics did not prove to significantly influence labour market success for beginning teachers. These characteristics were as follows; age, sex, socioeconomic status, the size of one's home community, and religious affiliation. It is particularly worthy to note the lack of significant relationship between employment status and socioeconomic status, in that the relationship between these two variables has been well documented elsewhere.

Another finding worthy of note in this analysis is the lack of a significant relationship between employment status and religious affiliation. This finding indicates that there are no significant differences in job attainment among the two major religious groups, i.e., the Roman Catholics and the Integrated. However, it probably does not give an accurate prediction for the minority religious groups - the Pentecostal and the Seventh Day Adventist. From a descriptive analysis outlined in Appendix C, we know that of the seven individuals in this sample who belong to these groups, six obtained employment in September, 1978. The reason that this finding did not appear significant in the

regression analysis is that the small numbers involved with these religious denominations would not significantly influence the total sample.

Achieved Characteristics

Of the eight achieved characteristics investigated in this research, four proved to be statistically significant to the occupation attainment prospects of Memorial's 1978 education graduates. The first of these is subject specialization.

The two subject areas that proved to be statistically important to job attainment were French and special education. These variables were correlated .132 and .160 respectively with occupational attainment and had standardized regression coefficients of similar magnitude. Their significance was at the .05 level. In the final analysis their standardized regression coefficients were .127 and .120 respectively. This indicates that of all the subject specializations investigated in this study, French and special education were the only two that were still significantly in demand and thus contained the best prospects for employment in teaching upon completion of one's academic training.

The other achieved characteristics that proved to be significant predictors of occupational attainment were the type of student teaching the individual completed while at Memorial University, the individual's mobility in the job market, that is, his willingness to relocate to a

geographic area of the province where the job is located, and the effort he puts into his job search.

The type of student teaching engaged in at Memorial correlated with occupational attainment at .188. Its standardized regression coefficient in the preliminary analysis was .200, while in the final analysis it was .211, both of which were significant at the .001 level. This indicates that those students who completed the internship student teaching program at Memorial had a significantly better chance of obtaining a teaching position after graduation than those who completed only the 1-credit program, other things being equal. Thus, practical classroom experience, even during the training program is a valuable asset to one's employability in the teaching profession.

This finding raises a number of questions regarding the student teaching program at Memorial University. For instance, are there fundamental differences between the students who enter the internship program in relation to those that complete the regular program? Are they more integrated into assuming the role of teacher in the classroom setting? Are they more committed to the teaching profession? Do school boards perceive the type of student teaching engaged in at Memorial University as a proxy for these more fundamental individual characteristics? These questions need to be raised in discussing the differences in success rates among those student teachers who engaged

in the different student teaching programs available at Memorial University, even though they cannot be answered in this study. The purpose for raising these questions is primarily to give a reflective perspective to the outcome stated above as well as to demonstrate a need for further investigation into this finding.

An individual's willingness to relocate was significantly correlated with occupational attainment ($r = .172$). The standardized regression coefficient in the preliminary analysis was .228, and in the final regression analysis of significant variables it was .219, both of which were significant at the .001 level. This indicates that the individual increases his chances of obtaining employment in the teaching profession with increased willingness to move to the area of the province where jobs are available. For beginning teachers, this usually means moving to the small outport settlements where there is a demand for new teachers.

It is interesting to note that over 75 percent of the participants in this study indicated their willingness to make such a move, of which 58 percent actually obtained employment (see appendix C). This finding contrasts sharply with other studies, particularly that of Dr. Phil Warren, who found that over 50 percent of the degreed teachers who comprised the active reserve pool of unemployed teachers, (30 percent were men and 71 percent were women), were not willing to relocate in order to assume a teaching position

(Warren, 1979, p. 22). A possible exploration of this divergency of views may be the relative youth of the majority of beginning teachers in this study, most of whom are not married, and, as such, do not have marital ties and responsibilities to prevent them from relocating.

The influence of the effort variables, while proving to be significant, was in opposition to that originally predicted. The correlation between the amount of effort put into one's job search and employment status was -.248. The standardized regression coefficient in the preliminary regression analysis was -.288 and in the final regression analysis it was -.265. In both analyses the coefficients were significant at the .001 level. One possible explanation for this unexpected outcome is that those students who obtained teaching positions upon graduation, did so soon after graduation in the Spring of the year when most teaching positions for the following school year are being filled. These students, therefore, obtained a teaching position with a minimum amount of effort relative to those students who did not, but continued their efforts to obtain employment throughout the summer. As the summer months progressed it became more difficult to obtain a teaching position as most positions had already been filled. Therefore, while these students placed additional efforts into their job search over a longer period of time, their actual chances of being successful in obtaining employment decreased. In this

context, it can fairly be stated that the instrument used to measure the effort characteristic turned out to be a proxy for early appointment. This is the best available explanation for the negative relationship between occupational status and effort. However, this is an ex-post-facto explanation and others may be developed that may be equally justifiable. In any case, this research did determine that the chances of successfully finding a teaching position decreased with an increase in one's job search activities.

An achieved characteristic that did not prove to be significant in determining the individual's employment status was that of academic achievement. According to the literature outlined in Chapter II, it is believed that one's academic performance at university is a significant influential factor in later labour market success. In this study, however, academic achievement at Memorial did not prove to be a significant factor in the various school board's hiring practices.

This finding again raises questions regarding the criteria used by the school boards for hiring purposes. It is generally believed that hiring, particularly in the public service, is based primarily on the principles of meritocracy, in which those candidates with the highest qualifications are desired over those with lesser credentials. In academic circles, such as Memorial University, this system is crucial to appointment practises. Therefore, the failure

of school boards to place importance upon academic qualifications in their hiring practises raises some very interesting questions. However, it was not within the scope of this research to further pursue this notion.

Personal Characteristics

As can be seen from Table 48, none of the personal characteristics included in this study proved to be significantly related to success, or lack of it, in the labour market. This means that one's perceptions on such issues as religiosity, employability, teaching competence, or commitment to the profession, are not influential predictors of one's employment status. Thus, none of these hypotheses were supported in the final analysis.

It is of particular interest to note the insignificance of the various measures of religiosity. In the denominational education system, such as we have in Newfoundland, it is often speculated that one's degree of religiosity is an important criterion for entrance into the education profession. In this research at least, this predictor did not have a significant influence upon the hiring of new teachers when other factors were taken into account.

The insignificance of these personal characteristics may not mean, however, that these composite self-perceptions are not operational in the teacher selection process. Rather, despite their conventional and widespread usage in survey

research, this type of fixed response measures may not be sufficiently comprehensive to adequately assess such a complex set of dimensions as self-perceptions. It may be, as Fisher (1977) suggests, that in order to adequately measure attitudinal variables,

> it is necessary to combine the advantages of both open and closed instruments into a single procedure which captures the richness and fullness of a respondent's attitudes in a reliable and meaningful quantitative form.
>
> (Fisher, 1977, p. 284)

By utilizing only a closed instrument, this research may have limited its effectiveness in measuring these personal characteristics.

A more fundamental concern is Gordon's (1968) suggestion that the nature of the relationship between self-concept level and other aspects of a person's life can never be established until the nature of self-concept is more clearly formulated and operationalized. It could be that the insignificance of the personal characteristics in this study reflects this concern for the relationship between self-perceptions and the outcome characteristics - occupational achievement.

Relationship Among Significant Predictors

The relationship among the significant predictors of occupational status can best be observed from Table 50. The most influential characteristic is that of effort placed

in one's job search. However, its influence is in a negative direction as noted earlier in this Chapter. The relative influence of the other significant characteristics in decreasing order of magnitude are as follows - willingness to relocate, type of student teaching, the number of family contacts in the profession, and lastly, the specialization in the subject areas French and special education. The last two, however, are only significant at the .01 level while the others are significant at the .001 level. This is important in determining the relative effects each has on the dependent variable - employment status.

Practical Implications

The findings determined from this study have some practical implications for the congruity between training at Memorial's Faculty of Education and future labour market success. It also has certain practical implications for students who desire a career in the teaching profession. The empirical evidence on which these findings are founded can best be utilized to endorse policies that could create a better and more harmonious fit between the realms of teacher training and that of work.

It has been demonstrated that despite an overall teacher surplus, there is still a need in the Province for trained French and special education teachers. There is also a desire on the part of school board administrators to have student teachers spend more time on practical in-service

training, thereby creating a better balance between academic study and practical experience, prior to their entrance into the teaching profession. This is suggested by their greater willingness to hire student teachers who have completed the internship student teaching program which includes a greater length of time obtaining practical classroom experience.

At the level of the individual, it has been demonstrated that those students who plan a career in teaching must, during their first years in the profession, be willing to remain mobile and be willing to move to wherever the job openings become available. For the beginning teacher this usually means moving to a small, outport settlement, in order to obtain the experience necessary to compete on the labour market in the larger urban centers.

Besides endorsing these implications for teacher training at Memorial, this study also dispelled a number of beliefs that have been suggested in the past as influential factors operating in the transition from professional training to the teaching force. Included in these characteristics is the empirical finding that neither socioeconomic status nor academic achievement play an influential role in occupational attainment. Also surprising was the finding that, in a denominational system, religiosity does not have a significant influence upon occupational attainment for new teachers. Other factors that proved to be insignificant in the job attainment process for beginning teachers have been mentioned

earlier, such as the fact that neither age nor marital status is influential in job attainment.

The findings for each of these characteristics tell us something about the processes and the nature of the transition from training to work in the province's teaching profession. Although it is recognized that there remains a major residual factor in this research which has not been explained, including a large element of chance inherent in any job attainment process, this study has begun the work of explaining the intricate processes involved in the transition. Through this knowledge, it is believed that all parties involved in the transition of student teachers from training to the working environment will have a better understanding of the processes involved, and thus, be better prepared to cope with it.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

This study was primarily an attempt to identify and define the processes involved in the transition of education graduates at Memorial from the realm of academic training to that of the working environment during a period of teacher surplus. The nature of the study was such that there was little empirical literature or few research models from which this research could be fashioned. Therefore, the study was primarily exploratory in nature, with the characteristics included developed from a combination of other studies and conventional wisdom.

The research model was developed from these characteristics, which were clustered into three umbrella groupings for analytical purposes. These were ascriptive characteristics, achieved characteristics and personal or self-concept characteristics. A set of hypotheses was then constructed for each cluster. The set served as the theoretical framework for the subsequent analysis. The results of this research will be stated in the conclusions below.

Conclusions

This study found that, for beginning teachers who graduated in the 1978 convocation at Memorial University, the significant determinants of occupational attainment in the teaching profession, in descending order of magnitude

(as determined by the magnitude of the Beta), were as follows:

1. the degree of effort one places in their job search (a negative relationship, a possible explanation of which was included in the previous chapter);
2. the willingness of the individual to relocate;
3. the individual's participation in the internship, as opposed to the regular, student teaching program;
4. the number of family contacts already in the teaching profession;
5. the presence of qualifications enabling the individual to teach French;
6. the presence of qualifications enabling the individual to teach special education.

The remaining characteristics included in this study did not have a significant impact upon one's successful assimilation into the teaching profession. This could be because the literature supporting the influence of these characteristics is not relevant to the circumstances surrounding the teaching force in this province. Another explanation could be that the conventional wisdom, or beliefs, regarding the influences of these characteristics are not founded upon social reality. A third possible explanation could be in the nature of the study itself; that is, the usage of a cross-sectional as

opposed to a longitudinal study, in which both the substantiated and the unsubstantiated conclusions may best be labelled as "tentative". This type of design, which relies on static, statistical relationships, is vulnerable to the criticism that any finding may indeed be spurious, that is, a function of differences in a host of factors not included in the analysis even though the data were analyzed by the powerful statistical techniques of multiple linear regression. In this regard, the methodology employed in this research meets all the criteria (Astin, 1970) required in obtaining definitive results regarding occupational attainment status except one - longitudinal data.

Generalizability of Results

The generalization of research results involves "extrapolation into a realm not represented in one's sample" (Campbell and Stanley, 1963, p. 17). Bracht and Glass (1968) have identified two features of generalizability or external validity: population validity and ecological validity. The former is concerned with the identification of the population to which the results of the research are generalizable. Relevant to this problem is Kempthorn's (1961) distinction between the accessible population and the target population. The accessible population refers to the population of subjects that is accessible or available to the researcher for his study. The target population is the total group of subjects to whom he wants to apply the conclusions from his

findings. In this research, the accessible population was those student teachers graduating during the Spring Convocation, 1978, who attended Memorial University on a full-time basis during the previous semester, and who were intending to seek a teaching position for the 1978-79 school year. The target population was all beginning teacher graduates from Memorial's Faculty of Education.

The sample used in this study was 79 percent of the accessible population. Recognizing the possible biases that could be inherent due to the lack of responses from the remainder of the population, the results of this study can still be valued as representative of the total accessible population since there is no indication that the remaining 21 percent was not a random group. Thus, generalizing to this population presents no insurmountable difficulties.

The second stage of population validity is generalizing from the accessible population to the target population. This type of generalizing is somewhat risky and cannot be made with the same degree of confidence as the former. To make such an inference requires a thorough knowledge of the characteristics of both populations. However, as Campbell and Stanley (1968, p. 17) point out, there is a "general empirical law" which may be considered the "modern version of Mill's assumption as to the lawfulness of nature". This is the assumption that the closer two events are in time, space, and measured value on some dimensions, the more they

tend to follow the same law. However, because certain segments of the target population may vary substantially on some relevant characteristics, it is with extreme caution that generalizations could be made from the accessible population to the target population. Kempthorne (1961) suggests that is is better to have reliable knowledge about a more restricted population and to have the resulting uncertainty of extending this knowledge to the target population than to define the accessible populatic so broadly as to be uncertain about inferring from the sample to the accessible population.

The second type of external validity identified by Bracht and Glass (1968) - ecological validity - is when a researcher demonstrates that the results are independent of the particular setting in which the research was conducted. The representativeness of the setting is a factor which influences the extent to which the findings can be generalized. This research project provided data on beginning teacher employment status and processes in Newfoundland, during a period of declining enrollments and teacher surplus. Thus, the research findings could only be generalizable to these particular conditions.

Implications for the Future

While it is not the role of this thesis to be policy oriented, or to provide specific recommendations for future improvements in the links between training and work, some

practical suggestions are in order. Foremost, is the need for an organized approach to the provision of career information for both those students planning to enter the Faculty of Education at Memorial, as well as for those students already in the Faculty. During the past year, substantial progress has been made on compiling the necessary data needed to develop an information package dealing with these issues. Examples are the various reports of the Task Force on Education (1978-79), Dr. Philip Warren's study of Unemployed Teachers (1979), the Report of the Conference on Declining Enrollments (1979), as well as this thesis. The information provided by these studies could even be included as part of the teacher training program at Memorial University.

There is also a need to provide longitudinal data for the sample included in this research. Of particular interest would be to determine such information as the number of beginning teachers who remained in the teaching force, as well as the number who received appointments subsequent to the gathering of this data. What happened to those individuals who did not succeed in obtaining an appointment? What immediate effects did the recommendations of the Task Force on Education (e.g., the allocation of additional teachers to small schools) have on the number of student teachers in this sample that received appointments? All of these questions are valid issues of concern. To

provide a more comprehensive assessment of this research program, those questions are in need of an answer.

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APPENDIX A

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
St. John's, Newfoundland, Canada A1C 5S7

Department of Educational Foundations

Telex: 016-4101
Telephone: (709) 753-1200

March 23, 1978

Dear Graduating Student Teacher:

During the past year, there has been much discussion and public debate over the current state of the teaching profession, particularly in relation to the opportunities for new graduates in the province's teacher labour force. Yet, very little in-depth research has been carried out to determine the extent of this problem and the social and attitudinal factors which underlie it. Therefore, it is the intention of this research project to investigate the transitional processes presently occurring in the movement from teacher training to occupational attainment in the labour force. I ask for your full co-operation in this timely research study. As this year's teacher training graduates, who will be seeking positions in the school system for the 1978-79 school year, we expect that you, as well as future graduates of the Education Faculty, will have an interest in this study.

The questionnaire asks for your identification. Its purpose is solely to enable the researcher to contact you in August of this year in order to obtain additional information in relation to your degree of success in finding a teaching position. We guarantee that this information will be held in strictest confidence and that all identification will be destroyed once the second phase of the research project is completed. The information will then be coded and used for statistical analysis only. Upon the creation of the computer work cards, the questionnaires will also be destroyed. This study has the full support of Dr. Phil Warren who is engaged in a comprehensive analysis of teacher supply in the Province and Dr. Michael Jackson, Head of the Department of Educational Foundations at Memorial University. My supervisor is Dr. Michael Fagan.

We hope that you will agree to support us in this research endeavour. We thank you for your time and interest.

Sincerely,

Bill Clarke

BC/mk

CONFIDENTIAL

ALL INFORMATION WILL BE TREATED AS CONFIDENTIAL AND USED FOR STATISTICAL PURPOSES ONLY.

NAME: _____

STUDENT IDENTIFICATION NUMBER: _____

Where do you expect to be in August of this year (town) _____

Telephone number where you can be reached _____

1. Will you be attempting to find a teaching position in Newfoundland during the 1978-79 school year?

Yes ☐ No ☐

(b) Have you presently obtained a teaching position in Newfoundland for the 1978-79 school year?

Yes ☐ No ☐ Possibly ☐

2. Do you presently have any teaching experience other than student teaching?

Yes ☐ No ☐

(b) Other than substitute teaching?

Yes ☐ No ☐

3. Is this your first degree ever received?

Yes ☐ No ☐

If no, when did you receive your first degree (i.e., year) _____ ?

What area of specialization was this degree obtained _____ ?

4. What particular area of education will you be graduating in this Spring?

Physical Ed.	☐	B.A.(Ed.)	☐
Special Ed.	☐	B.A./B.Ed.	☐
Vocational Ed.	☐	Ed. Diploma	☐
Music Ed.	☐		

(b) What program is this degree in?

Primary ☐ Elementary ☐ High School ☐ Vocational ☐

5. Are you obtaining any other degrees concurrently with your Education Degree this Spring?

Yes ☐ No ☐

If yes, what is the area(s) of specialization

Major _____

Minor _____

6. Upon completion of your teacher training, what specific subject areas will you be qualified to teach? (Check as many as applicable)

English	☐	Biology	☐	Industrial Arts	☐
Mathematics	☐	Physics	☐	Music	☐
History	☐	Chemistry	☐	Art	☐
Social Studies	☐	General Science	☐	Religious Studies	☐
Geography	☐	Physical Ed.	☐	Business Ed.	☐
French	☐	Economics	☐	Home Economics	☐

Other(s) _____

7. Do you presently hold any certified qualifications obtained from other post secondary training schools or colleges.

Yes ☐ No ☐

If yes, please specify _____

8. Was your student teaching completed in the 1-credit or 5-credit program?

1-credit ☐ 5-credit ☐

9. Please indicate your teacher certification standing upon completing your teacher training

Grade IV ☐ Grade V ☐ Grade VI ☐

10. If you had previous work experience, what type(s) of work did you do:

1. _____ For how long _____

2. _____ " " " _____

3. _____ " " " _____

11. Are you willing and able to move anywhere in Newfoundland and Labrador in order to obtain a teaching position?

Yes ☐ No ☐

(b) If no, to what area (or areas) of the province are you restricted? Please specify _____

_____

(c) Please indicate why you are restricted to this/these area(s) _____

_____

12. Given the following methods of looking for a teaching position, please mark them in order of importance to you personally (Mark only one in each column)

	Order of Importance		
	1st	2nd	3rd
Through sponsorship of a university professor	☐	☐	☐
Canada Manpower Centre	☐	☐	☐
Through family, friends, or relatives	☐	☐	☐
Campus placement service or on-campus recruiting	☐	☐	☐
Newspapers or other advertisement	☐	☐	☐
Letters of application	☐	☐	☐
Private Employment agency	☐	☐	☐
Clergy	☐	☐	☐
Other (specify) _____	☐	☐	☐

13. What factors influenced your decision to enter the teacher training program? (Check according to the following scale)

A Most influential

B Second most influential

C Third most influential

	A	B	C
Immediate family	☐	☐	☐
Relatives	☐	☐	☐
Friends	☐	☐	☐
Contacts in the teaching profession	☐	☐	☐
Clergy	☐	☐	☐
Your own decision (made **before** starting university)	☐	☐	☐
Your own decision (made **since** starting university)	☐	☐	☐

(b) When you entered teacher training would you describe yourself as being:

Strongly desirous of becoming a school teacher ☐

Moderately desirous of becoming a school teacher ☐

Really desirous of entering some other occupation but trying to accommodate to family and other expectations ☐

Having no particular occupational preference ☐

14. In the following question, be as specific as you can:

What is your father's primary occupation _____

What is your mother's primary occupation _____

If married, what is your spouse's primary occupation _____

(b) What does he/she do (if applicable)?

Father _____

Mother _____

Spouse _____

(c) In what sort of place does he/she work (e.g., office, metal shop, etc.)?

Father _____

Mother _____

Spouse _____

(d) Which job on the list below is most like the kind of work your father, mother, or spouse does?

	Father	Mother	Spouse
Technician (e.g., draftsman or surveyor etc.)	☐	☐	☐
Independent Professional (e.g., doctor, lawyer, etc.)	☐	☐	☐
Dependent Professional (e.g., journalist, teacher, etc.)	☐	☐	☐
Service worker (e.g., taxi driver, mailman, etc.)	☐	☐	☐
Skilled Craftsman (e.g., carpenter, electrician, etc.)	☐	☐	☐
Farm Owner	☐	☐	☐
Inshore Fisherman	☐	☐	☐
Seaman	☐	☐	☐
Workman (e.g., labourer, longshoreman, logger, etc.)	☐	☐	☐
Machine Operator (e.g., factory worker)	☐	☐	☐
Office/Store Worker (e.g., bookkeeper, office clerk, etc.)	☐	☐	☐
Owner, Manager of Small Business (e.g., store, service station, restaurant, etc.)	☐	☐	☐
Salesman or Agent (e.g., insurance, real estate agent, purchasing agent, etc.)	☐	☐	☐
Owner, Manager, or Executive in large organization (e.g., in industry, bank, or government, etc.)	☐	☐	☐
Protection Service (e.g., policeman, fireman, etc.)	☐	☐	☐
Housewife		☐	☐
Other _____	☐	☐	☐

15. How much unemployment, if any, have the above experienced over the past three years?

	Father	Mother	Spouse
None at all	☐	☐	☐
Once or twice for short periods	☐	☐	☐
Frequently for short periods	☐	☐	☐
For long periods of time	☐	☐	☐
Most of the time	☐	☐	☐
Deceased	☐	☐	☐
Not applicable	☐	☐	☐

16. How far did your parents/spouse go in school?

	Father	Mother	Spouse
Grade five or less	☐	☐	☐
Grade nine or less	☐	☐	☐
Some high school	☐	☐	☐
Completed high school	☐	☐	☐

	Father	Mother	Spouse
Entered post-secondary training college (i.e., College of Trades & Technology, Trades School, College of Fisheries, etc.)	☐	☐	☐
Completed post-secondary training college	☐	☐	☐
Some university	☐	☐	☐
Graduated from university	☐	☐	☐
Acquired a post-graduate professional degree	☐	☐	☐

17. What community were you:

		Approximate present population
a.	Born in _____	_____
b.	Grew up in _____	_____
c.	Presently regard as home _____	_____

(If any of the above is OUTSIDE Newfoundland, please indicate the province, or, if outside Canada, the Country the community is in.)

18. At the present time how many relatives or friends do you have in the teaching profession?

	None	One	Two	Three or more
Members of your immediate family	☐	☐	☐	☐
Other relatives	☐	☐	☐	☐
Friends of the family (excluding personal friends)	☐	☐	☐	☐
Close personal friends	☐	☐	☐	☐

19. What is your religious affiliation?

Anglican	☐	Salvation Army	☐
United Church	☐	Pentacostal	☐
Roman Catholic	☐	Seven-Day Adventist	☐
Jewish	☐	Other	☐

20. With what denominational school board do you prefer to work?

Roman Catholic	☐	Seven-Day Adventist	☐
Integrated	☐	Other (specify) _____	☐
Pentacostal	☐	Has no preference	☐

21. Please indicate your church attendance according to the following:

I attend church services:

Regularly (at least once a week)	☐
Semi-regularly (at least once a month)	☐
Occasionally	☐
Only on special occasions (i.e., Christmas, Easter, etc.)	☐
Do not attend church	☐

22. Please indicate your agreement or disagreement with each of the following statements according to the following scale:

A Definitely agree
B Probably agree
C Probably disagree
D Definitely disagree

	A	B	C	D
Everyone should believe in and practice some religion	☐	☐	☐	☐
The best way to foster the moral development of civilization is through organized religion	☐	☐	☐	☐
There should be stricter observance of the Sabbath, the religious day of rest	☐	☐	☐	☐
The world moves in an evolutionary process of unfolding rather than through divine guidance	☐	☐	☐	☐
There is an almighty God who watches over us	☐	☐	☐	☐
There is a life after death	☐	☐	☐	☐

23. Do you believe there is currently a surplus of qualified teachers in Newfoundland?

There definitely is not ☐
There probably is not ☐
There probably is ☐
There definitely is ☐

(b) Please indicate your source(s) of information regarding this perception from among:

Family members ☐
Friends ☐
Public school teachers and administrators ☐
University faculty and staff ☐
Published articles (from a reliable source) ☐
Government officials ☐
News reports or editorials ☐
General gossip ☐
Other (specify) _____ ☐

24. Please indicate the extent to which you agree with each of the following statements according to this scale:

A Strongly agree
B Agree
C Disagree
D Strongly disagree

	A	B	C	D
Knowing the right people is important in deciding whether a person will get ahead	☐	☐	☐	☐
When I make plans I am almost certain that I can make them work	☐	☐	☐	☐
Becoming a success is a matter of hard work, luck has little or nothing to do with it	☐	☐	☐	☐
As far as world affairs are concerned, most of us are victims of forces we can niether understand nor control	☐	☐	☐	☐
There will always be wars, no matter how hard people try to prevent them	☐	☐	☐	☐
The world is run by the few people in power and there is not much the little guy can do about it	☐	☐	☐	☐

25. Do you presently owe any money obtained for purposes of completing teacher training, including Canada Student Loans?

Yes ☐ No ☐

(b) If yes, please indicate the approximate amount according to the categories below:

$ 500 or under	☐	$3501 – 4000	☐
$ 501 – 1000	☐	$4001 – 4500	☐
$1001 – 1500	☐	$4501 – 5000	☐
$1501 – 2000	☐	$5001 – 5500	☐
$2001 – 2500	☐	$5501 – 6000	☐
$2501 – 3000	☐	Over $6000	☐
$3001 – 3500	☐		

26. The following is a list of worries that many people have when they try to find a job. Indicate how worried you are about each of them according to the following scale:

A Quite worried
B A little bit worried
C Not at all worried

	A	B	C
The possibility of being turned down	☐	☐	☐
My personality or appearance	☐	☐	☐
Getting good references	☐	☐	☐
The number of other people trying for the job	☐	☐	☐
My lack of experience	☐	☐	☐
Getting a job I like	☐	☐	☐
The possibility of being away from home	☐	☐	☐
Having the right connections	☐	☐	☐
Knowing where to look and what to do to find a job	☐	☐	☐
Getting a teaching job for which I have been specifically trained	☐	☐	☐

27. Where do you think you stand intellectually in relation to the other students in teacher training?

a. Definitely above average ☐

b. Slightly above average ☐

c. Average ☐

d. Slightly below average ☐

e. Definitely below average ☐

28. Even with a good education, a person like me will have a tough time getting the job I want:

a. Strongly agree ☐

b. Agree ☐

c. Disagree ☐

d. Strongly disagree ☐

29. How did you feel, or are presently feeling about your experiences as a student teacher?

I really enjoy it ☐

I somewhat enjoy it ☐

I tolerate it ☐

I definitely dislike it ☐

30. Please answer the following statements regarding teaching according to the degree of difficulty you experienced in student teaching. Use the following scale:

A I found it very difficult

B I found it somewhat difficult

C I didn't find it difficult at all

	A	B	C
Lecturing	☐	☐	☐
Asking-Answering Questions	☐	☐	☐
Maintaining classroom discipline	☐	☐	☐
Conducting formal discussions with calss	☐	☐	☐
Conversing informally with students	☐	☐	☐
Preparing lessons	☐	☐	☐
Associating with school staff	☐	☐	☐
Motivating students to learn	☐	☐	☐

31. After four or more years of teacher training how would you rate your teaching ability in relation to the other student teachers you know?

Definitely above average ☐

Slightly above average ☐

Average ☐

Slightly below average ☐

Definitely below average ☐

32. If offered another position similar in pay and status as teaching, would you:

Decline and continue to seek a teaching position ☐

Accept, but continue to seek a teaching position ☐

Accept, and forget about the possibility of teaching ☐

Uncertain ☐

33. Do you perceive teaching as:

a. A long-term career investment ☐

b. A short-term means to some other career interest ☐

c. Uncertain ☐

34. If you cannot obtain a teaching position for the school year beginning September, 1978, do you intend to:

Continue seeking a teaching position ☐

Seek an occupation other than teaching ☐

Seek an occupation other than teaching, but continue to seek a teaching position also ☐

Return to university for further training ☐

Leave the province ☐

Other (please specify) _____ ☐

35. Please answer the questions below as follows:

A Strongly agree
B Agree with reservations
C Uncertain
D Disagree with reservations
E Strongly disagree

	A	B	C	D	E
Students enter the education faculty primarily for occupational reasons	☐	☐	☐	☐	☐
There is not enough counselling of education students in terms of what is needed (i.e., kind of teachers) in the education system in Newfoundland	☐	☐	☐	☐	☐
Memorial's open door policy for admitting students into the Education faculty is a good policy and should be maintained	☐	☐	☐	☐	☐
Teacher training is an escape route for many graduates who cannot find work in other fields	☐	☐	☐	☐	☐
The "high pay" attracts graduates from other disciplines into teaching	☐	☐	☐	☐	☐

APPENDIX B

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
St. John's, Newfoundland, Canada A1C 5S7

tment of Educational Foundations

Telex: 016-4101
Telephone: (709) 753-1200

August 25, 1978

Dear Teacher:

During the past Spring and/or Summer each graduating student from the Faculty of Education, Memorial University, has completed a questionnaire related to their occupational attainment prospects for the coming school year (1978-79). This questionnaire was Phase I of the two phase teacher supply study, as it relates to this year's graduating student teachers. It is now necessary to seek additional information in order to determine the degree to which your earlier stated occupational expectations have been met. Phase II of this study is as important as Phase I and without it the earlier gathered information would be meaningless. Therefore, we again seek your full co-operation and participation. The second phase is much shorter than its earlier counterpart and will take only a few minutes of your time. Please complete the questionnaire and return it in the self-addressed and self-stamped envelope provided as soon as possible.

As stated in the earlier questionnaire, all information will be held in the strictest confidence. As soon as all the data is collected, the questionnaire will be destroyed, and the information used for statistical analysis only. If you need additional information regarding this study, it can be obtained from either Dr. Philip Warren or Jeff Bulcock of the Education Faculty, or Dr. Mike Fagan of the Institute for Educational Research and Development.

We hope that you will again agree to support us in this research endeavor. We thank you for your time and interest.

Sincerely,

William Clarke

WC/mk

CONFIDENTIAL

ALL INFORMATION WILL BE TREATED AS CONFIDENTIAL AND USED FOR STATISTICAL PURPOSES ONLY.

NAME: _____

STUDENT IDENTIFICATION NUMBER: _____

AGE: _____ MARITAL STATUS: _____

1. Do you have a FULL-TIME teaching position in Newfoundland for the coming school year?

Yes ☐ No ☐

IF YES: (In No. 1)

(a) Where is it located (town) _____ Approximate size _____

(b) Is this in a geographic area of Newfoundland where you would prefer to be?

Yes ☐ No ☐

(c) Are you teaching in a subject/subjects area in which you were trained to teach?

Yes ☐ No ☐

(d) Specifically, what subjects will you be teaching?

English	☐	Biology	☐	Industrial Arts	☐
Mathematics	☐	Physics	☐	Music	☐
History	☐	Chemistry	☐	Art	☐
Social Studies	☐	General Science	☐	Religious Studies	☐
Geography	☐	Physical Ed.	☐	Business Ed	☐
French	☐	Economics	☐	Home Economics	☐
Special Education	☐				

Other(s) _____

(e) What grade(s) will you be required to teach?

Kindergarten	☐	Grade V	☐	Grade X	☐
Grade I	☐	Grade VI	☐	Grade XI	☐
Grade II	☐	Grade VII	☐	Post Secondary	☐
Grade III	☐	Grade VIII	☐		
Grade IV	☐	Grade IX	☐		

(f) Which school board will you be working for?

Roman Catholic ☐

Integrated ☐

Pentecostal ☐

Seven-Day Adventist ☐

Other (please specify) _____

2. IF NO, (In No. 1)

(a) Have you placed/or will you place your name on a substitute teaching list for the coming school year?

Yes ☐ No ☐

IF YES, please identify location (town) _____

(b) If no, what are your immediate occupational or career plans?

_____

_____

_____

_____

4. FOR BOTH YES AND NO IN 1 ABOVE:

During the past Spring and Summer please state the number of times you performed the following in your attempts to secure a teaching position.

Sought sponsorship of a university professor _____

Checked with the Canada Manpower Centre _____

Checked with the Campus Placement Service _____

Sought sponsership from family, friends, or relatives _____

Replied to specific newspaper or other advertisements _____

Sent general letters of application to various school boards _____

Sought sponsership of a member of the clergy _____

Other (please specify) _____

APPENDIX C

This paper was initially prepared for the Conference on Declining Enrollments, Faculty of Education, Memorial University of Newfoundland, March 1979. It contains the descriptive statistics for this study.

PREDICTORS OF EMPLOYMENT FOR THE 1977-78 TEACHER EDUCATION GRADUATING CLASS

by

M.J. Fagan
Institute for Educational Research and Development

and

W. Clarke
Department of Educational Foundations
Memorial University of Newfoundland

Perhaps the most general statement that can be made about the determinants of an individual's activity in the labour market is that it reflects an interaction between the characteristics of the individual and those of his environment. The salient environmental characteristics, as far as the young university graduate seeking a career in teaching is concerned, are the rapidly declining school enrolments, and the presence of a large reserve pool of qualified teachers. This study concentrated, however, on the supply side of the labour market, and sought to determine the characteristics of this University's graduates in education that are important in accounting for their success or lack of success in obtaining a teaching position.

Many of the factors associated with the labour market difficulties of the young are well documented: inadequate education, lack of skill and work experience, unawareness of available training and job opportunities. What is not known, however, is the interaction among the personal, economic, sociological and psychological characteristics that permit some members of a given group to experience "success" while others "fail" in their search for employment.

Last year's graduates in the faculty of education, i.e., those who graduated in the Spring '78 convocation, are one such group. Of those gradu-

ates who planned to enter the teaching force in September '78, approximately 50 percent got jobs in teaching, the remaining 50 percent did not.

The question that we have addressed is "What are the reasons for this?" Is it possible to identify the factors that led to success for one half of this group? They were all competing for a scarce resource. Are there any systematic differences between those who made it and those who did not?

Some of the factors we considered were suggested by conventional wisdom; others were suggested by the literature on occupational attainment.

It was hoped that an understanding of those factors that influence "success" in the labour market of prospective teachers would contribute to our understanding of the way in which the labour market operates and thus be useful for an assessment of the appropriateness of labour market policies.

I. RESEARCH DESIGN AND SAMPLE

This research dealt with the students in the Faculty of Education who were enrolled full-time during the winter semester 1978 and graduated in the spring convocation; there were 263 graduates. Of this group, 215, or 82 percent, completed a questionnaire in March 1978 which sought information such as the occupational plans and aspirations of the students, background information, and information on programs and subject taken.

Of the 215 who completed the questionnaire, 28 were eliminated from the sample because they did not intend to seek a teaching position for September 1979. This left a useable sample of 187 students. Two of those students failed to respond to a follow-up questionnaire in September 1979; the number on which this research report was based, then, was 185, or 79 percent of the total graduating class.

The follow-up questionnaire completed in mid-September provided information on the student's success in obtaining a teaching position, the kinds of attempts made to obtain a position, and the frequency of those attempts.

II. RESEARCH RESULTS

Of the 185 students who were seeking a teaching position for September 1978, 98, or 53 percent, were employed as teachers in mid-September, 1979; 47 percent were unemployed.

In an attempt to understand why those particular students were successful in obtaining a teaching position, two basic kinds of factors were considered: 1. ascribed characteristics, i.e., those that are conferred without reference to desire or accomplishment; the most important ascribed characteristics are usually fixed at birth. 2. achieved characteristics, i.e., those that result from meeting certain requirements.

Ascribed Characteristics

The following ascribed characteristics were considered:

Sex. The overall results were that 53 percent of the sample obtained a teaching position. As Table 1 indicates, 54 percent of the males and 52 percent of the females were employed. This means that sex is not an important factor in obtaining a teaching position. It should perhaps be pointed out from Table 1 that a slight majority of the sample (56 percent) were female.

Table 1

Sex

	Employed n	Employed %	Unemployed n	Unemployed %	N
Male	44	54	37	46	81
Female	54	52	50	48	104

The possibility that there might be an interaction involving sex and marital status influencing job attainment was examined. As Table 2 indicates, there were no differences in the success rates of the male and female unmarried students. However, of the married students, 62 percent of the males got jobs, but only 36 percent of the females.

Table 2

Sex by Marital Status

	Married				Single				
	Employed n	Employed %	Unemployed n	Unemployed %	Employed n	Employed %	Unemployed n	Unemployed %	N
Male	13	62	8	38	31	52	29	48	81
Female	5	36	9	64	49	54	41	46	104

Age. It might appear reasonable to expect that employers, i.e., school boards, are more inclined to hire the older, more mature graduates. Table 3 shows the age distribution of the students in the sample, and the proportion of each age group that obtained teaching positions; the conclusion that age is not an important factor in the employability of recent graduates in the Faculty of Education is clear. The majority of the sample (more than 80 percent) were less than 25 years old.

Table 3

Age of Graduates

Age	Employed n	%	Unemployed n	%	N
20 or less	7	50	7	50	74
21	32	58	23	42	55
22	24	56	19	44	43
23	10	50	10	50	20
24	11	50	11	50	22
25	4	40	6	60	10
26	2	50	2	50	4
27	1	33	2	66	3
28 or more	7	50	7	50	14

Community Size. Students in the Faculty of Education come from communities all across the Province - from small, remote fishing communities, medium-size towns, and the larger cities. The students in this sample who come from small communities had more success in obtaining a teaching position than those from the larger centres (see Table 4); 57 percent of the students from small communities got jobs, compared to 44 percent of the students from St. John's.

Table 4

Community Size

	Employed n	%	Unemployed n	%	N
Small Community	38	57	28	43	66
Regional Centres	38	55	31	45	69
St. John's	21	44	27	56	48

Religious Affiliation. The influence of organized religion on education in this Province is well recognized; despite the reorganization of the Department of Education along functional as opposed to denominational lines, the religious denomination of a teacher still appears to be an important matter.

Table 5

Religious Affiliation

	Employed		Unemployed		
	n	%	n	%	N
Integrated	59	56	47	44	106
Roman Catholic	34	46	39	54	73
Other	5	83	1	17	6

The different denominational groups of students (Table 5) experienced different rates of success in obtaining a teaching position: only 46 percent of the Roman Catholic students got jobs; this compares with 56 percent of those whose denominations are represented in the integrated school boards, and 83 percent of those who reported their denominational affiliation as Seventh Day Adventist or Pentecostal.

Socio-Economic Status. Socio-economic status of the family of origin has been well established in the sociological literature as a predictor of occupational success; i.e., the higher the SES of the family, the greather the occupational success. However, as Table 6 indicates, the students in this sample whose fathers worked in low-SES jobs had greater success in obtaining a teaching position than those whose fathers worked in middle- or high-SES jobs.

Table 6

Socio-Economic Status

	Employed		Unemployed		
	n	%	n	%	N
Low (unskilled workers)	32	54	27	46	59
Middle (craftsmen)	39	51	38	49	77
High (white collar)	11	42	15	58	26

This apparently anomalous situation may perhaps be due to the fact that many of the students from higher-SES families are from the larger communities, and students from the larger communities had more difficulty getting a teaching position than those from the smaller communities (see Table 4).

Family Contacts. Having some members of one's immediate family already in the teaching profession appears to improve one's chances of obtaining a teaching position. More than 80 percent of those who had three or more family members in the teaching profession got jobs, while only 46 percent of those who had no family contacts in the profession got jobs (see Table 7).

Table 7

Family Members in the Teaching Profession

Number of Members	Employed		Unemployed		
	n	%	n	%	N
0	49	46	58	54	107
1	27	61	17	44	44
2	7	64	4	36	11
3	13	81	3	19	16

Achieved Characteristics

The following achieved characteristics were considered:

Marital Status. The married and single students appeared to have about the same success in obtaining a teaching position; 53 percent of the single students and 51 percent of those who were married were employed as teachers when contacted in mid-September (Table 8). The majority of the students in the sample, more than 80 percent, were single.

Table 8

Marital Status

	Employed		Unemployed		
	n	%	n	%	N
Single	80	53	70	47	150
Married	18	51	17	49	35

Level of Specialization. The teacher-training program at Memorial University has three levels: primary, elementary, and high school. There is very little overlap in the methods components of these three levels, i.e., a student who does the high school program is generally not considered qualified to teach at the primary level, and vice versa. The possibility, then, that the supply-demand match is different for different levels of specialization was considered.

Table 9

Level of Specialization

Program	Employed		Unemployed		
	n	%	n	%	N
Primary	26	60	17	40	43
Elementary	32	53	28	47	60
Secondary	39	48	42	52	81

While the total numbers in primary and elementary programs combined are more than those in the secondary programs, they are also having the most success in finding employment (Table 9). Thus, in a relative perspective the job market for teachers is most restricted at the secondary level. However, what is most surprising is that the differences are not as large as many people generally believed to be the case. The long-term career interests of the professional elementary or primary school teacher may be a major factor in this relationship.

Area of Specialization. Primary and elementary teachers are generally expected to teach in all areas of the academic curriculum. This characteristic, then, has been considered only with respect to those who did the high school program. The success of these students in obtaining a teaching position, according to the subject(s) they are qualified to teach, is shown in Table 10.

Table 10

Subject Specialization in High School Program

	Employed		Unemployed		
	n	%	n	%	N
Special Education	2	100	-	-	2
French	6	66	3	33	9
Physical Education	10	5[illegible]	7	41	[illegible]7
Religious Education		53	8	47	17
Mathematics	12	50	12	50	24
English	23	49	24	51	49
Pure Science	22	41	31	59	53
Social Science	26	40	38	60	64

As Table 10 indicates, the specialist areas of Special Education, French, and Physical Education, are still in demand relative to the other subject areas. Religious Studies, Mathematics, and English majors managed to get approximately one-half their numbers into the teaching profession. The subject specializations that were least marketable were the sciences, both pure and social sciences, which had approximately a 60% unemployment rate in September, 1978.

Certification Level. Upgrading one's qualifications to a higher certification level has been an important issue in teacher education for a number of reasons: it increases the content knowledge of the areas they teach; it is generally thought of as increasing their professional status in the occupation; most recently, in light of declining demands for new teachers, it is thought of as increasing one's chances of obtaining a position; it also places teachers in a higher salary bracket. Table 11 indicates Grade V is the most populated of the three certification levels investigated in this study, with one-half of the total sample. It is also the level that has had the most success in occupational attainment. Thus, while the trend towards upgrading, or getting a higher certification level, increases one's chances of obtaining employment between Grades IV and V, the situation reverses itself between Grades V and VI.

Table 11

Level of Teaching Certificate Attained

Teaching Certificate	Employed n	Employed %	Unemployed n	Unemployed %	N
Grade IV	39	49	40	51	79
Grade V	53	57	40	43	93
Grade VI	6	46	7	54	13

However, the small number of students in the sample who had a Grade VI certificate make it impossible to tell if this is a trend toward unemployability for those beyond the Grade V level. It is entirely possible that a number of those 13 students who have a grade VI teaching certificate have some other characteristic(s) (e.g., unwilling to relocate) that cause difficulty in obtaining a teaching position. This possibility was not investigated.

Student Teaching. At Memorial there are primarily two types of student teaching that teacher trainees can follow. The first is the regular one-semester course, combined within a two-week concentration block in the spring of each year. The other is the 5-credit internship program in which a student spends an entire semester working in the school on a regular basis. The majority of students in education follow the first route. However, many believe that the second route, which gives the student a great deal more time in a practical teaching situation (i.e., more teaching experience), may lead to greater employment opportunities upon graduation.

Table 12 suggests that, while following the internship program does not guarantee placement in a teaching position, those who did follow this program were more successful than those who did the 1-credit type of student teaching. The deferred in this Table refers to those who had their student-teaching requirements waived for some reason; the most frequent reason was that they had already had some teaching experience.

Table 12

Type of Student Teaching

Type of Student Teaching	Employed n	Employed %	Unemployed n	Unemployed %	N
1-credit	71	48	78	52	149
Internship (5-credit)	16	66	8	33	24
Deferred	6	86	1	14	7

Academic Achievement. In any occupational group it is generally believed that the efforts of employers in hiring practices are to select the best qualified candidates available. Education is no exception. It is believed that educational administrators, in selecting beginning teachers, take into account one's academic achievement record while attending Memorial University. Not only is it an indication of one's knowledge gained while in the teacher-training program, but also, it is an indication of more general character traits such as commitment, effort to master the material, diligence, etc.

Table 13

Academic Achievement at Memorial

Grade-Point Average	Employed n	Employed %	Unemployed n	Unemployed %	T
1.00-1.5	16	46	19	54	35
1.51-2.0	50	52	46	48	96
2.01-2.5	27	60	18	40	45
2.51-3.0	5	56	4	44	9

Table 13 suggests that there is a trend towards greater employability for the higher-achieving students. The apparently anomalous situation, in which only 56 percent of the very highest achievers got jobs, is difficult to interpret. This is a finding similar to the findings with respect to teaching certificate level (Table 9). Because of the small number of students in this category (9 students had G.P.A. greater than 2.5), this cannot be taken as a tendency for the very high achievers to experience greater difficulty in finding a teaching position.

Willingness to relocate. The willingness of a person to relocate, i.e., to leave his/her home community to take a position elsewhere in the Province is likely to be a factor in the employability of members of most occupational groups. This factor has been offered as an explanation for the existence of a large "reserve pool" of unemployed teachers in St. John's and other large centres in the Province.

Table 14 suggests that those recent graduates in the Faculty of Education who were willing to relocate were more successful in obtaining a teaching position than those who were not willing to relocate. Only 38 percent of those who reported that they were not willing to relocate were able to get jobs; this compares with 58 percent of those who were willing to relocate.

Table 14

Willingness to Relocate

Relocate	Employed n	Employed %	Unemployed n	Unemployed %	N
Yes	81	58	59	42	140
No	17	38	28	62	49

Effort. The degree of effort the students in the sample directed towards obtaining a teaching position is difficult to assess from a questionnaire. However, what is available, and reported in Table 15, is the frequency with which students reported taking certain actions in their search for a job, and the proportion of those taking each route who were successful.

Table 15

Effort

	Employed			Unemployed			
	f*	n	%	f	n	%	N
Sponsorship of clergy	1.3	29	76	.7	9	24	38
Sponsorship of relative, friend	1.5	43	74	.8	15	26	58
Sponsorship of University professor	1.6	42	51	1.5	40	49	103
Reply to specific newspaper ad	10.6	70	49	12.4	74	51	144
General letter of application	14.1	52	44	13.4	65	56	117
Canada Manpower Centre	3.3	44	43	7.1	59	57	103
Campus Placement Centre	1.2	18	33	2.5	36	66	54

*f = average number of times students in each category took this action in an attempt to obtain a teaching position.

Note: The actions taken by students are listed in this table in descending order of success, e.g., sponsorship of clergy - 76% successful, sponsorship of relative or friend, next most successful - 74%.

As Table 15 suggests, those who sought the sponsorship of a member of the clergy were the most successful in obtaining a teaching position - 76 percent of them had a job when contacted in mid-September. This is followed closely by those who obtained the sponsorship of a relative or friend. The relative lack of success of those who made application through the Canada Manpower Centre (43 percent got jobs) and the Student Placement Centre (33 percent) suggests that those agencies are not very effective in placing new teachers.

III. CONCLUSION

In conclusion, it can be stated that the presence or absence of certain ascribed and achieved characteristics of new graduates in the Faculty of Education can be associated with their success in obtaining teaching positions in this Province, at least in the present context. This research has no evidence to infer that these characteristics are, in fact, causes or determinants of success; a measure of the accuracy with which those characteristics could predict occupational attainment is likewise unavailable. However, there are certain traits that were more frequently associated with those who got jobs than with those who did not; those traits, in descending order of the success of those having those traits, are:

1. Teaching experience.
2. Affiliated with a minor religious denomination.
3. Obtained sponsorship of clergy.
4. Obtained sponsorship of family or friend.
5. Member of immediate family in teaching profession.
6. Participated in internship program.
7. Specialized in Special Education, French, or Physical Education.
8. Did the Primary Education Program.
9. A married male.
10. Willing to relocate.
11. From a small community.

This research could perhaps be regarded as a first step in an attempt to understand the processes that intervene between the training of teachers and the eventual placement of those teachers in the schools. However, a more complete answer than that provided here would require the follow-up of those students beyond the mid-September cut-off date imposed

by this study to determine if more of them, in fact, were able to obtain teaching positions, and how those teaching positions were obtained. Of interest, as well, is what eventually happens to those who did not get a job.

A more rigorous analysis of the data presently in hand from this research could also yield some information not apparent from the analysis reported here; such an analysis is presently being carried out and will soon be reported.