

A COMPARISON OF PERSONALITY  
CHARACTERISTICS OF PROSPECTIVE AND  
PRACTICING ELEMENTARY TEACHERS

by

Richard E. Tschritter

B.Sc., University of Victoria, 1967

A THESIS SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Faculty

of

Education

We accept this thesis as conforming  
to the required standard



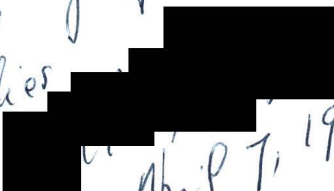
---

© RICHARD E. TSCHRITTER, 1970

UNIVERSITY OF VICTORIA

March, 1970

*Accepted for the  
Faculty of Graduate  
Studies*



*April 7, 1970*

UNIVERSITY OF VICTORIA  
LIBRARY  
Victoria, B. C.

## ABSTRACT

This study investigated the personality differences of three groups: first year education students, professional year students, and competent teachers. The persons who participated in this investigation were enrolled at the University of Victoria, planned to or had obtained a minimum of three years preparation including a professional year, and/or had taught five years or less in the public schools. The group of competent teachers was found to be significantly more introverted than the group of first year students on the extroversion-introversion scale of the Myers-Briggs Type Indicator. No other significant results were obtained. However several developmental trends were suggested. The three different groups involved in this investigation revealed a position of extroversion by the first year education students, a position of no decided preference for introversion or extroversion by the professional year students, to a position of introversion by the competent teachers. All three groups indicated a preference for feeling on the thinking-feeling scale. On the judging-perceiving scale the first year students indicated a preference for judging, while the professional year students and the competent teachers indicated a preference for perceiving.

A hypothetical description of the competent teacher was developed from a review of the literature and this description was compared to the profile of the competent teachers obtained by the MBTI. The responses of the

competent teachers agreed with the hypothetical description of the competent teachers on the thinking-feeling and judging-perceiving scales and differed on the extroversion-introversion and sensing-intuiting scales. [REDACTED]

Examiners: [REDACTED]

## TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION, PROBLEM, AND DEFINITIONS OF TERMS . . .	1
Introduction . . . . .	1
Problem . . . . .	2
Definition of Terms . . . . .	3
Personality . . . . .	3
Competent Teacher . . . . .	3
First Year Student . . . . .	4
Professional Year . . . . .	4
Professional Year Student . . . . .	4
II. REVIEW OF LITERATURE . . . . .	5
Personality Change in University . . . . .	5
Competent Teacher Profile . . . . .	7
Theory and Scales of Myers-Briggs Type Indicator .	10
III. HYPOTHESES . . . . .	15
IV. METHOD OF THE STUDY . . . . .	18
Experimental Design . . . . .	18
Subjects . . . . .	18
Procedure . . . . .	18
V. RESULTS AND DISCUSSION . . . . .	20
Limitations . . . . .	20
Implications for Future Research . . . . .	32
Conclusions . . . . .	33
REFERENCES . . . . .	35
APPENDICES . . . . .	38
APPENDIX A. Questionnaire and Personal Data . . . . .	39
APPENDIX B. Questionnaire . . . . .	40

## LIST OF TABLES

TABLE	PAGE
1. Mean and Standard Deviation Scores for Sample . . . . .	21
2. Analysis of Variance Between Groups 1, 2 and 3 on continuous Scores of MBTI . . . . .	22
3. Means and Standard Deviations of Preference Scores . .	26
4. Chi Square Test of Independence . . . . .	28
5. Intercorrelation Matrices of Long Island University Females, Pembroke College Women, and Population Samples . . . . .	31

## ACKNOWLEDGMENTS

The writer wishes to express his gratitude to the members of his committee: Dr. R.V. Peavy, W. Muir and Dr. D. Mitchell. The writer is particularly indebted to Dr. R.V. Peavy, for it was his interest and guidance which provided the motivation which was necessary for myself to enter graduate school and write this thesis. Similarly the guidance and encouragement of W. Muir and Dr. D. Mitchell have been very valuable in assisting the writer.

Recognition is due to Bev Cooknell who did such a proficient job in typing this thesis.

To my fellow graduate students and friends, I am deeply grateful for their suggestions and encouragement.

The writer is also indebted to his fiancée, Santosh Pallan, who so wonderfully put up with my moments of joy and despair in the preparation of this thesis.

## CHAPTER I

### INTRODUCTION

University teacher education programs are dedicated to the training of future teachers. Consequently, teacher education programs provide one or more years of academic training followed by a year of work which is directed towards teaching theory and practice in the schools. As a result of this training the "teacher" is expected to have attained sufficient intellectual and personal development to enable him to teach proficiently. While the intellectual attainment of the teacher is considered important, attention is now being given to the personal characteristics of the teacher (Heil, 1964). Considerable literature supports the idea that the personality characteristics of teachers are very important in the learning processes of students. Tyler (1960) suggests that personality traits are important as the teaching-learning process takes place in a social setting. Leiderman, Hilton and Lewin (1957) found a substantial relationship between the personality traits (warmth and friendliness) of teachers and the amount of self-initiated and required work the students performed. Swineford (1963) in a study of factors influencing teaching behavior suggests his data support the idea that the personality of the teacher, is more important in influencing his teaching behavior than are the influences from the school, administration and the community. Bowers and Soar (1962) also feel that teacher personality traits are important:

Personality traits condition, modulate, promote certain responses from pupils; they activate, direct, formulate pupil reactions in the classroom learning situation. They are basic to teachers and pupils working together successfully in some quest for knowledge, skills, understanding and attitudes (p. 302).

The identification of personality characteristics of competent teachers has led to much research. However, most of these studies have neglected the personality change of students who are involved in the various teacher education programs throughout North America. Ryans (1960) has suggested that there is a need for the investigation of different teacher education programs on the development of teacher characteristics. Similarly Aden and Crosthwait (1966) have suggested that more research is needed to determine if personality changes are evident in people who enter the teacher education program and are eventually successful or unsuccessful as teachers. Therefore, it appears that there is a need for research to identify personality changes which may occur in those persons who enter teacher education programs and eventually become competent teachers.

### Problem

The problem which was investigated in this thesis was the comparison of personality characteristics of three groups: "first year education students", second and third "professional year" students and practicing "competent teachers". These three groups were compared with each other on the four scales of the Myers-Briggs Type Indicator (MBTI) in order to identify personality changes as the student progressed through the different phases of the University teacher

education program and became a competent teacher. Similarly, a personality profile of the competent teacher was developed from a review of the literature and a descriptive comparison made with the actual personality profile obtained by the group of practicing "competent teachers" on the MBTI.

### Definitions

Personality. The MBTI (Myers, 1962) is a measure of the psychological functions of sensing, intuiting, feeling and thinking as described in Jung's theory of psychological types (Jung, 1923). Jung's theory is, basically, that much apparent inconsistent behavior is really quite consistent, and is due to certain basic differences in the way people prefer to use the psychological functions of thinking, feeling, perceiving and judging (Myers, 1962). Consequently, many people may differ systematically in the use of these functions, and as a result they may show differences in their behavior, interests, attitudes, values, needs, motivations and aptitudes. Personality, for the purposes of the investigation is defined as the configuration or profile of scores which are obtained on the scales of the MBTI. Personality difference refers to the difference in average scores of each dimension or scale on the MBTI between the three groups involved in this study.

Competent Teachers. Those teachers who were nominated by the participating school districts according to the following criteria: teachers who obtained their entire post-high school education at the University of Victoria; hold a standard teaching certificate (three

years of University training including a professional year) or higher; are less than 28 years of age; were registered in the Faculty of Education during their entire University training, and who possess average to outstanding teaching skills, professional and staff attitudes, and ability to relate to children.

First Year Students. A first year student is any student who has enrolled for the first time in the elementary teacher education program in 1968/69, is less than 21 years of age, has received no prior education at the University level, and received satisfactory standing at the end of the first year.

Professional Year. The term "professional year" refers to the year in which the main emphasis of the courses are directed at preparing the students for their teaching practica during the year and for employment in the public school system.

Professional Year Student. The professional year student is any student who has taken all of his education in the teacher education program at the University of Victoria and taken his professional year during the 1968/69 winter session and successfully completed the professional year.

## CHAPTER II

### REVIEW OF RELEVANT LITERATURE

#### Personality Change in University

There is much evidence in the investigation of college students that traits such as interests, attitudes, values, needs, and motivations do change and hence that the personalities of these college students change. Brookover, Gottlieb, Lehmann, Richards, Thaden, and Vener (1965) in a summary of investigations of college students found there were marked changes in attitudes, interests, values, etc. and consequently in personality. Further, they also found that the major personality changes take place in the first two years of college. Similarly Webster, Freedman, and Heist (1962) in their discussion of earlier and contemporary studies of college students have found that many college students experience significant changes in interests, attitudes, values, and consequently in their personalities. They say that, in studies of personality change at Vassar, Bennington and other colleges "...there are systematic personality changes going on, at least in college women, around the age of 17 or 18..." (p. 834).

Specifically, there are a number of studies identifying attitude changes among education students. Brim (1966) in a study of the effect of a teacher education program upon the attitudes of undergraduate students towards children found that: a) the attitudes of some teacher education students were changed while in the teacher

education program at the University of Denver, b) a significant change in attitudes towards a more "liberal" position toward children, and c) the direction of change in student attitude shifted to a position closer to that of the faculty. Pinckney (1962) in a study of student teacher attitudes toward childhood behavior problems, found that an introductory educational psychology course had a marked effect on the formulation of student teacher attitudes toward the ranking of the seriousness of behavior problems of children. Lantz (1964) in a study of changes in students' concepts of self and others concluded that student teaching experiences result in changes which can be measured in terms of skills and new understandings developed, and also in terms of qualitative changes related to the self-concept and concept of others. Kosier and De Vault (1967) in a study investigating the effects of three different instructional approaches in an educational psychology course; Rogerian, case-study, and traditional, suggest that their data support the hypothesis that different instructional methods produce certain differential personality changes in future teachers. Beery (1962) conducted a study to find out if fully certified teachers are more effective than those who are provisionally certified in their first year of teaching. Beery concluded that fully certified beginning teachers were consistently rated better than the provisionally certified beginning teachers. He found that this difference was due to the professional preparation rather than grades, amount of work in subject taught, interview scores, age, or recency of graduation.

Hinely et al (1966) investigated the relationship between selected personality and achievement predictors and teaching style. They concluded that their data supported the hypothesis that there are relationships between personality traits and teaching style (systematic, humanistic, and creative). In short, student attitudes can and do change as a result of teacher education programs.

#### Competent Teacher Profile

Much research has been done in the area of the measurement of personality characteristics of teachers using instruments such as the Minnesota Multi-Phasic Inventory, Minnesota Teacher Attitude Inventory, Edwards Personal Preference Scale, Guilford-Zimmerman Temperament Survey, Myers-Briggs Type Indicator and others (Gage, 1963). In a short summary of the traits of good teachers Chabassol (1967) says:

The good teacher it is felt, must be intelligent, well versed in his subject matter, possess a good voice, have an effective personality, be capable of explaining his material clearly (p. 327).

Ryans (1960) after an analysis of teacher behavior assessments identified three clusters of observable teacher behaviors: understanding, friendly versus aloof, egocentric restricted teacher behavior; responsible businesslike, systematic versus evading, unplanned, slipshod teacher behavior; and stimulating, imaginative, enthusiastic versus dull, routine teacher behavior. Ryans (1960) selected these dimensions from a number of observable teacher behaviors and these clusters were supported by later statistical analyses. These three clusters subsequently significantly

differentiated the "good" and "poor" groups of elementary teachers. Cook, Linden and McKay (1961) identify the personally desirable qualities of competent teachers as: liking to work with children; warm, outgoing personality; inspires emulation by children; emotionally mature; physically fit; patient; and understanding. Combs (1965), in his summary of literature dealing with the perceptual differences among "good" and "poor" professional workers in teaching, counseling, and the ministry, found the following results with respect to the beliefs "good" teachers have about people: their general frame of reference is internal, that is they are sensitive to and concerned about how things seem to others; they are concerned with people and their reactions rather than with objects and events; they are concerned with perceptual experience rather than with objective events; they perceive others as being friendly, enhancing, and worthy; they see people and their behavior as developing from within rather than as a product of external events; they see people as essentially trustworthy and dependable in a law abiding way; and they see people as being potentially fulfilling and enhancing to self rather than impeding or threatening. Combs (1965) also states that good teachers should be well informed, knowledgeable people, perceptive, effective in their communication, and morally sound.

The preceding characteristics of competent teachers apply equally well to elementary and secondary teachers. However, descriptions of elementary and secondary teachers emphasize different factors. (Ryans, 1960). Bown, Fuller and Richek (1967) describe the desirable personality traits of the elementary teachers as warm, has a helping

orientation, and a capacity for identification. The suggestion that the elementary teacher is more "people-oriented" or emotionally concerned and the secondary teacher more "intellectually oriented" is found in a number of studies (e.g. Lang, 1960; Levin, Hilton and Leiderman, 1957, and Levre, 1967).

It would appear that the hypothesized and measured personality traits for the competent teacher were found to be: a socially adequate warm, outgoing person; emotion-oriented rather than intellectually or achievement oriented; emotionally mature and understanding; imaginative, responsible and perceptive; and morally sound. Bown et al (1967) in a study attempting to differentiate between prospective elementary and secondary school teachers equated the warm, outgoing type of teacher with extroversion preference. MacKinnon (1962) in a study designed to identify persons with creativeness and imagination found the intuition preference of the sensing-intuiting scale to be one of the best indicators. He found that persons who were judged to be highly creative and imaginative by their peers indicated a very strong preference for intuition. That the competent elementary teacher is "feeling" and "people-oriented" (Lang, 1960; Levin et al, 1957; and Levre, 1967) would appear to correspond to the feeling preference on the thinking-feeling scale of the MBTI. Similarly, if the competent teacher is "open" to change and perceptive, it would appear that they would indicate a preference for perceiving rather than judging on the perceiving-judging scale of the MBTI. Consequently, it would seem that the competent female elementary teacher, as measured by the MBTI, would be extroverted, intuiting,

feeling and perceiving. Myers (1962) describes this type as the enthusiastic innovator, trying to understand people, hates uninspired routine, is versatile and concerned with people, and exhibit skill in handling them.

#### Theory and Scales of MBTI

Jung's theory of types (1923) offers an explanation of the apparent inconsistent random behavior displayed by human beings. Jung attributes the behavior differences among people to basic differences in their mental functioning. According to Myers (1962):

These basic differences (behavior differences) concern the way people prefer to use their minds, specifically the way they use perception and judgment. "Perception" is here understood to include the processes of becoming aware of things or people or occurrences or ideas, and "judgment" is understood to include the processes of coming-to-conclusions about what has been perceived. (p. 51).

Jung's personality theory (Myers, 1962) points out that man has two ways of perceiving and two ways of judging. The two ways in which man perceives are the process of sensing (using the five senses) and the process of intuition (perception by way of the unconscious, Laszlo, 1959). Similarly, there are two ways of judging; the use of thinking (a logical process, usually resulting in an impersonal finding) and the use of feeling (use of values a person experiences). Jung also identifies the extroversion-introversion dimension which indicates the person's orientation either in the outer world of people and things (extroversion) or in the inner world of concepts and ideas.

Jung recognized that these dimensions are not present in "all or none" quantities but people develop preferences for one or the other as so exemplify different combinations of these traits and different strengths of preferences and hence we have resulting differences in interests, attitudes, values, needs, and habits of mind. Myers (1962) in the construction of MBTI identified another dimension; the judgment-perception preference itself. The judgment preference consists of coming to conclusions about things and the perception preference consists of becoming aware of things.

The personality inventory used in this research is the MBTI (Myers, 1962). It is based largely upon Jung's theory of psychological functions and types. The inventory consists of four bipolar scales: extroversion-introversion; sensing-intuiting; thinking-feeling; and judgment-perception. Myers (1962) describes these scales as:

The EI index is designed to reflect whether the person is an extrovert or an introvert in the sense intended by Jung, who coined the terms. The extrovert is oriented primarily to the outer world, and thus tends to focus his perception and judgment upon people and things. The introvert is oriented primarily to the inner world postulated in Jungian theory, and thus tends to focus his perception and judgment upon concepts and ideas.

The SN index is designed to reflect the person's preference as between two opposite ways of perceiving, i.e., whether he relies primarily on the familiar process of sensing, by which he is made aware of things directly through one or another of his five senses, or primarily upon the less obvious process of intuition, which is understood as indirect perception by way of the unconscious with the emphasis upon ideas or associations which the unconscious tacks onto the outside things perceived.

The TF index is designed to reflect the person's preference as between two opposite ways of judging, i.e., whether he relies primarily upon thinking, which discriminates impersonally between true and false, or primarily upon feeling, which discriminates between valued and not-valued.

The JP index is designed to reflect whether the person relies primarily upon a judging process (T or F) or upon a perceptive process (S or N) in his dealings with the outer world (p. 1).

The main purpose of the MBTI is to reveal a person's preferences with respect to each of the four scales: EI, SN, TF, and JP (Myers, 1962). A person receives a raw score on both aspects of each of the four separate scales. The responses are awarded separate weights of 0, 1 or 2 enabling the preference in each direction to be separately summed. Persons who score higher on E than I are classified as extroverts; similarly those who score higher on I than E are classified as introverts. The strength of the preference is indicated by the difference of the EI scores and then transformed according to a prescribed formula to give a "preference score". The preference score is then added to or subtracted from 100, depending on the direction of the preference. Consequently, if the preference is in the direction of E, S, T, or J, the preference score is subtracted from 100; if the preference is in the direction of I, N, F, or P, the preference score is then added to 100. The scores resulting from these transformations are called the continuous scores.

Myers (1962), consistent with Jung's position (1923), exemplifies the four scales as habitual choice between opposites; that is EI means E or I. In other words according to Jungian theory "the preferences

are dichotomies based upon inner disposition (Myers, 1962, p. 3)". However, for the purposes of this investigation the scores were treated as continuous data.

The Indicator scale intercorrelations from several high school and college populations indicated that the EI, SN, and TF scales were independent of each other, but the JP scale was moderately related to the SN and TF scales (Stricker and Ross, 1963). Further, the internal-consistency reliability of the continuous scores was generally between .70 and .90 with the TF scale somewhat lower (Stricker and Ross, 1963). Similarly an investigation into the reliability of MBTI using the Spearman-Brown split-half method, revealed coefficients between .70 and .90 (Myers, 1962). In summary Stricker and Ross (1963) says:

...The Indicator, seems to have about the same reliability as better known personality inventories, such as the California Psychological Inventory...the Guilford-Zimmerman Temperament Survey...the 16 P.F. Test..., and the Minnesota Multiphasic Personality Inventory many of which employ longer scales (p. 291).

Similarly, Ross (1966) using the principal axis factor analysis found that the EI, SN, TF scales were mutually orthogonal, but the JP scale was somewhat related to the other three scales. Further, in Ross' (1966) discussion of the characteristics of the MBTI he says that his results are consistent with Myers' (1962) theoretical position that the scales are fundamental and connected with many aspects of personality, cognition, and behavior.

The MBTI manual (1962), in summarizing a study by Stricker and

Ross (1962) which compared the MBTI to the Gray-Wheelwright Psychological Type Questionnaire (an indicator which was also designed to identify EI, SN, and TF scales according to Jungian philosophy) conclude that both instruments are reflecting essentially the same things (JP scale was not developed in the Grey-Wheelwright production).

## CHAPTER III

### HYPOTHESES

The review of the literature has revealed numerous studies which support the hypothesis that the personalities of students at universities do change; Webster et al. (1962), Brookover, et al. (1965), Heath (1968), Madison (1969) represent some of the investigations in personality change at university. Similarly many other studies of specific personality traits have also revealed numerous studies which support the hypothesis of personality change in university; Brim (1966), Pinckney (1962), Lantz (1964), Kosier and De Vault (1967), Beery (1962) represent investigations in this specific area of personality change.

Brookover et al. (1965) found that the major personality changes take place during the first two years of college. Further, the studies of Lantz (1964), Beery (1962) and work of such persons as Goodlad (1965), Denemarck and Macdonald (1967), Purpel (1967) and Steeves (1965) indicate that the professional year resulted in changes of self-concept and concept of others; that professional preparation does make a difference in teaching effectiveness; and that the professional year does have an important effect upon the development of teachers. Hence, it would seem to be reasonable to assume that after the student teacher has experienced 2-4 years of actual professional teaching (has put his ideals and accumulated theory into prolonged practice) that significant differences will exist

between competent teachers ( $EI_C$ ) and professional year students ( $EI_P$ ), who have undergone 2-3 years of University experience including one month of student teaching, on the different scales of the MBTI.

That is:

$$\text{Hypothesis I} \quad EI_C = EI_P$$

$$\text{Hypothesis II} \quad SN_C = SN_P$$

$$\text{Hypothesis III} \quad TF_C = TF_P$$

$$\text{Hypothesis IV} \quad JP_C = JP_P$$

Brookover et al (1965) found marked changes in the personalities of college students and furthermore that the major personality changes took place in the first two years of college. Hence, it would seem reasonable to expect significant personality differences between the competent teachers ( $EI_C$ ) and the first year education students. That is:

$$\text{Hypothesis V} \quad EI_C = EI_S$$

$$\text{Hypothesis VI} \quad SN_C = SN_S$$

$$\text{Hypothesis VII} \quad TF_C = TF_S$$

$$\text{Hypothesis VIII} \quad JP_C = JP_S$$

Further, Lantz (1964) in his study of 36 elementary students involved in student teaching found that the student teaching experience resulted in changes related to the self-concept and concept of others. Beery (1962) in a study to determine whether or not professional preparation does make a difference in teaching effectiveness, found that the fully certified and beginning teachers were consistently

and significantly rated better than the provisionally certified beginning teachers, and that this difference was due to professional preparation rather than grades, amount of work in subject taught, interview scores, age, or recency of graduation. That student teaching does have an important effect upon the development of teachers is also supported by many others such as Goodlad (1965), Denmark and Macdonald (1967), Purpel (1967) and Steeves (1965). Therefore, it is hypothesized that significant differences in personality as measured by the MBTI scales, will occur between first year education students ( $EI_S$ ) and the professional year students ( $EI_P$ ). That is:

Hypothesis IX  $EI_S = EI_P$

Hypothesis X  $SN_S = SN_P$

Hypothesis XI  $TF_S = TF_P$

Hypothesis XII  $JP_S = JP_P$

## CHAPTER IV

### METHOD OF THE STUDY

#### Experimental Design

Subjects. Twenty-two female students were randomly selected from the "first year education students" who met the stipulations denoted earlier. These persons constituted the sample of "first year education students". Twenty-two female students were also randomly selected from among the elementary "professional year" students who met the stipulations presented earlier. This sample constituted the "professional year" students. The sample of "competent teachers" who were identified by the various school districts also numbers twenty-two. Five teachers who were identified as "competent teachers" failed to participate in this study.

Procedure. The Myers-Briggs Type Indicator and an accompanying questionnaire (Appendix A) were administered to the first year education students in the latter part of 1968 and early 1969, during one of the seminar classes which is required of all first year education students. Similarly the MBTI and an accompanying questionnaire (Appendix A) were administered to all second and third professional year students, in February and March of 1969.

The MBTI and an accompanying brief information sheet (Appendix B) were administered during spring and summer of 1969 to the practicing competent teachers. The results of each MBTI along with a brief description of the personality types was returned to each student on

request and to each teacher who participated in this study.

#### Limitations of this Investigation

The design used in this investigation is basically a pre-experimental design of the static-group comparison or cross-sectional type (Campbell & Stanley, 1968). As a result experimental mortality must be considered as a confounding variable as well as the different selection procedures which have been in operation at the University of Victoria.

The selection of competent teachers by the various school districts which contributed to this investigation may well be a further limiting factor. Different school districts employed different persons in the task of selecting these teachers and although a standard description was given to each school district there was no assurance that this was the sole criterion applied for the selection of these teachers.

The sample of students and teachers which were used in this investigation were students who attended only the University of Victoria, including senior matriculation and above, and who were enrolled in the faculty of education during their attendance at university. Consequently, this sample is not representative of all education students who have attended or who are presently attending the University of Victoria and registered in the faculty of education. Furthermore, only female subjects were included in this study.

## CHAPTER V

### RESULTS AND DISCUSSION

The dependent variables measured in this study were the several dimensions of personality defined as the configuration of scores which were obtained on the scales of the MBTI.

Table 1 presents the mean and standard deviation scores for each of the four scales of the MBTI obtained from the three groups which were involved in this investigation.

The assumption of homogeneity of variance, which is necessary for the analysis of variance, was met in all cases.

Table 2 presents the analysis of variance between the three groups on the continuous scores of the four scales of the MBTI. There was a significant difference on only the EI continuous scores. In addition to the analysis of variance, a Newman-Keuls comparison between ordered means (Winer, 1962) was carried out for the EI scale. The results revealed a significant difference ( $p < .05$ ) between groups 1 (competent teachers) and 3 (first year students). Thus hypothesis V was rejected.

As can be seen from Table 2 no significant differences were obtained for the comparisons between groups 3 (first year students), 2 (professional year students), and 1 (competent teachers) on the SN, TF, and JP scales. However, the F score for the JP scale did approach significance ( $p < .10$ ).

TABLE 1

## Mean and Standard Deviation Scores of Groups

EI Scale (Continuous scores)	Number	Mean	S.D.
Group			
1 (competent teachers)	22	107.55	27.09
2 (professional year students)	22	99.18	26.43
3 (first year students)	22	84.91	27.36
Total	66	97.21	27.95
SN Scale (Continuous scores)	Number	Mean	S.D.
Group			
1 (competent teachers)	22	91.09	26.60
2 (professional year students)	22	97.55	27.97
3 (first year students)	22	100.00	23.63
Total	66	96.21	25.81
TF Scale (Continuous scores)	Number	Mean	S.D.
Group			
1 (competent teachers)	22	111.73	14.95
2 (professional year students)	22	117.55	14.46
3 (first year students)	22	115.00	21.63
Total	66	114.76	17.09
JP Scale (Continuous scores)	Number	Mean	S.D.
Group			
1 (competent teachers)	22	105.00	30.88
2 (professional year students)	22	109.00	32.71
3 (first year students)	22	90.00	25.01
Total	66	101.33	30.16

TABLE 2

Analysis of Variance Between Groups 1, 2 and 3 on Continuous Scores of MBTI

1. EI Scale	SS	df	MS	F	P
<b>Sources of Variation</b>					
Groups	5764.38	2	2882.19	3.96	0.024
Error	45796.69	63	726.93		
Total	51561.07	65			
2. SN Scale	SS	df	MS	F	P
<b>Sources of Variation</b>					
Groups	931.75	2	465.88	0.68	0.509
Error	43019.38	63	682.85		
Total	43951.13	65			
3. TF Scale	SS	df	MS	F	P
<b>Sources of Variation</b>					
Groups	374.31	2	187.16	0.62	0.539
Error	18909.88	63	300.16		
Total	19284.19	65			
4. JP Scale	SS	df	MS	F	P
<b>Sources of Variation</b>					
Groups	4414.69	2	2207.34	2.50	0.090
Error	55630.00	63	883.02		
Total	60044.69	65			

The results of the Newman-Keuls comparison of ordered means reported above indicated no significant differences between groups 2 and 3, nor between groups 2 and 1, but that group 3 received a significantly ( $p < .05$ ) lower score on the EI scale than group 1. That is, the first year students as a group indicated their preference for extroversion while the group of competent teachers indicated their preference for introversion. According to Jungian typology the first year students therefore, would appear to be more oriented to the outer world of people and things. They would be more likely interested in people than in things, probably make friends more easily, more likely to enjoy and engage in social activities than the group of competent teachers. The group of competent teachers would appear to be more oriented to the inner world of concepts and ideas. They would be more likely to direct their perception and judgment upon concepts and ideas.

No significant differences were observed between the three groups investigated in this study on the SN and TF scales of the MBTI.

The F ratio on the analysis of variance for the JP scale ( $F = 2.50, p < .10$ ) however did approach significance and deserves comment. Upon inspection of the means of the three groups there appears to be a separation of the professional year students and competent teachers from the first year education students. Consequently, it is apparent that the group of first year students has indicated a decided preference for judging as opposed to perceiving. That is

they probably rely primarily upon a judging process, they tend to form conclusions rather rapidly in terms of agreeing or disagreeing. They temporarily shut off perception and often form conclusions before all the evidence is obtained or examined. A decision is made, the situation is "summed up" and generally acted upon. Whereas the group of teachers and professional year students have indicated their preference for perceiving. That is, they prefer the process of becoming aware of things rather than coming to conclusions about things which have been perceived. They temporarily shut off judgment, the evidence is not yet accumulated, new events may occur, it is too early to form conclusions and act, they remain "open". They remain open in situations and hence are changeable rather than being relatively fixed. They probably are more likely to leave situations free for changing, they like to adapt to changing situations, they have trouble making decisions, and probably postpone unpleasant jobs more so than the group of first year students.

While the continuous scores of the four scales of the MBTI were appropriate for the statistical analysis using the analysis of variance, the group means of the continuous scores do not clearly reveal the frequency and strength of the indicated preference. Consequently it seemed appropriate to present an analysis of the frequency and mean raw score of each of the individual preferences for the MBTI as shown in Table 3. That is, for those persons who preferred E, a mean raw score and standard deviation is presented; and similarly for those who chose I, a mean raw score and standard deviation is

presented, as well as the frequency of choice between E or I.

The data in Table 3 support the results obtained by the analysis of variance on the continuous scores on the EI scale. That is, group 1 indicated a lower frequency rate (10 persons) as well as a lower mean raw score for extroversion than either groups 2 or 3. Group 2 indicated a greater frequency rate (12 persons) and larger mean raw score than group 1, but a smaller frequency rate and mean rate score than group 3. The frequency rate and mean raw score for introversion is in the opposite direction as that for extroversion.

Similarly, there was not a significant F score on the analysis of variance of the TF scale. Moreover the three groups in this study exhibited similar scores in that they preferred feeling to thinking. The data in Table 3 support this statement in that 82% of the persons in each group indicated a preference for feeling as opposed to thinking.

The F ratio on the analysis of variance for the JP scale did approach significance ( $p < .10$ ). The data in Table 3 appears to support the statement that the group of competent teachers and professional year students seem to be separated from the group of first year education students. While the group of professional year students were equally divided as to their choice of J or P, those who did prefer perceiving indicated a strong raw score ( $\bar{X} = 36.6$ ) for this function. The group of competent teachers indicated a larger number of persons ( $N = 13$ ) who preferred perceiving to judging, but the average strength of this score (25.5) was considerably less than that of the professional year students. The group of first year education

TABLE 3

## Means and Standard Deviations of Preference Scores

EI Scale	Group 1		Group 2		Group 3	
	E	I	E	I	E	I
$\bar{N}$	10	12	12	10	16	6
$\bar{X}$	17.6	28.5	21.5	23.5	28.0	19.3
Sx	9.4	16.6	15.4	10.6	16.7	25.8

SN Scale	Group 1		Group 2		Group 3	
	S	N	S	N	S	N
$\bar{N}$	12	10	12	10	12	10
$\bar{X}$	29.3	14.6	22.8	22.0	17.5	21.0
Sx	20.3	9.7	15.6	17.7	14.3	12.4

TF Scale	Group 1		Group 2		Group 3	
	T	F	T	F	T	F
$\bar{N}$	4	18	3	19	4	18
$\bar{X}$	9.5	16.4	2.3	20.8	19.5	22.7
Sx	8.7	11.3	2.4	12.0	12.0	14.4

JP Scale	Group 1		Group 2		Group 3	
	J	P	J	P	J	P
$\bar{N}$	9	13	11	11	15	7
$\bar{X}$	28.8	25.5	18.6	36.6	23.3	18.4
Sx	13.4	16.3	13.0	20.1	15.9	14.6

students indicated a decided preference for judging (N = 15) as opposed to perceiving (N = 7).

After an inspection of the data it appeared appropriate to apply a chi square test of independence between the observed and theoretical frequency distribution on the dichotomous scales of the MBTI. The results are shown in Table 4.

The data presented in Table 4 do not indicate any significant differences between the observed and theoretical frequencies on the four scales of the MBTI. While one significant F ratio was obtained for the analysis of variance on the continuous scores of the EI scale, and one which approached significance (JP scale), this would appear to be due to the strength and direction of the continuous scores within each group as well as the number of people who indicated their preferences for the four dichotomous scales. Consequently the chi square tests of independence provide additional evidence for the findings of the analysis of variance, in that both the EI and JP scales on chi square findings, although not significant, are in the same direction as the data for the analysis of variance.

Earlier in this paper a description of the ideal teacher was given from a review of the literature and a resulting hypothetical description of this "teacher" was given in terms of the dimensions of the MBTI. It would seem appropriate at this point to consider that description in terms of scores received by the group of competent teachers on the MBTI scales. This group received the following scores:

TABLE 4

## Chi Square Test of Independence

		1	2	3	
EI	E	10	12	16	38
	I	12	10	6	28
		22	22	22	66
		$\chi^2 = 3.48 \quad df = 2 \quad P < .20$			
		1	2	3	
SN	S	12	12	12	36
	N	10	10	10	30
		22	22	22	66
		$\chi^2 = 0.0 \quad df = 2 \quad P = 1.00$			
		1	2	3	
TF	T	4	3	4	11
	F	18	19	18	55
		22	22	22	66
		$\chi^2 = 0.22 \quad df = 2 \quad P < .90$			
		1	2	3	
JP	J	9	11	15	35
	P	13	11	7	31
		22	22	22	66
		$\chi^2 = 3.41 \quad df = 2 \quad p < .20$			

TABLE 4

## Chi Square Test of Independence

		1	2	3	
EI	E	10	12	16	38
	I	12	10	6	28
		22	22	22	66
		$\chi^2 = 3.48$ df = 2 P < .20			
		1	2	3	
SN	S	12	12	12	36
	N	10	10	10	30
		22	22	22	66
		$\chi^2 = 0.0$ df = 2 P = 1.00			
		1	2	3	
TF	T	4	3	4	11
	F	18	19	18	55
		22	22	22	66
		$\chi^2 = 0.22$ df = 2 P < .90			
		1	2	3	
JP	J	9	11	15	35
	P	13	11	7	31
		22	22	22	66
		$\chi^2 = 3.41$ df = 2 p < .20			

EI scale = 107.5

SN scale = 91.1

TF scale = 111.7

JP scale = 105.0

Consequently the group of competent teachers would appear to be somewhat introverted, sensing, feeling and perceiving. Hence it would appear that this group differs from the hypothesized description of the competent teacher on two scales: EI and SN, and is similar on the JP and TF scales. If in fact this description is representative of competent teachers there appear to be a number of contradictions with the literature, both in terms of the competent teacher and of other studies which have identified "good" or "competent" teachers. That is in terms of the description of good elementary teachers by Ryans (1960) and the personally desirable qualities of good teachers by Cook, et al. (1961), and Combs (1965) it appears that the group of teachers in this study are more oriented to the inner world of concepts and ideas; less likely to enjoy and engage in social activities; and have more difficulty in making friends than as expected. Similarly they are probably more inclined to observe the events around and within themselves, to classify these observations in their minds rather than to record their observations in generalities or to rely upon perception by way of the unconscious. They are probably more inclined to dislike solving new problems and unlikely to become inspired, rather than to be inspiring and creative as would be expected from the review of the literature. However, this group of competent teachers did indicate a preference for feeling and perceiving on the

TF and JP scales respectively. In this regard, they do support the general description of "good" teachers presented by Ryans (1960), Cook, et al. (1961) and Combs (1965) which was presented earlier in this paper. That is they are likely to be aware of other people and their feelings and prefer to become-aware-of-things rather than coming-to-conclusions about things. They are likely to be tolerant with little desire to impress or dominate people. They are likely to work well at jobs which require feeling; to believe that the material rewards of their job are not enough, their work must contribute something to others.

The results of this investigation revealed only one significant difference (Hypothesis V was rejected  $p < .05$ ), however several possible trends were suggested by data. Consequently, there are implications which may support the studies of personality change in college by Brookover et al. (1965), Webster, et al. (1962); Heath (1968); and Madison (1969). However there were not strong results from this investigation which conclusively support the articles by the authors cited in the preceding statement. This may be due to the limitations involved in this investigation.

As was discussed earlier, Myers (1962) reported the intercorrelations of the MBTI continuous scores for several populations. Two of the reported intercorrelation matrices are pertinent to this investigation and are presented in Table 5.

The data in Table 5 indicate that the EI, SN, and TF scales are virtually independent of each other, but that the JP scale

TABLE 5

**Intercorrelations Matrices of Long Island University Females,  
Pembroke College Females, and Population Samples**

		SN	TF	JP			SN	TF	JP
<b>L.I.U.</b> N = 184	EI	-.14	.04	.01	<b>Pembroke</b> N = 280	EI	-.09	-.19	-.05
	SN	-	.06	.47		SN	-	.05	.39
	TF		-	.02		TF		-	.12
	JP			-		JP			-
-----									
		SN	TF	JP			SN	TF	JP
<b>Competent Teachers</b> N = 22	EI	-.27	.29	.04	<b>Professional Year Students</b> N = 22	EI	-.16	-.34	-.38
	SN	-	.09	.58*		SN	-	.32	.56*
	TF		-	.24		TF		-	.57*
	JP			-		JP			-
-----									
		SN	TF	JP			SN	TF	JP
<b>First Year Students</b> N = 22	EI	-.25	-.11	.33	<b>Total Sample</b> N = 66	EI	-.26*	-.07	.05
	SN	-	.06	.37		SN	-	.16	.49*
	TF		-	.25		TF		-	.34*
	JP			-		JP			-

\* significant at .01 level

correlates significantly with the SN scale for both college samples.

The information supplied by Ross (1966) using principal axes factor analysis indicated that the EI, SN, and TF scales were mutually orthogonal, but the JP scale was somewhat related to the other three scales.

Four intercorrelation matrices were developed from the data obtained in this investigation: total sample, competent teachers, professional year students and first year students. The data for these intercorrelations matrices is presented in Table 5.

It would appear that the data in Table 5 generally support the data presented by Myers (1962). That is the JP scale is consistently correlated to the SN scale and the TF scale, as well as giving several high correlations with the EI scale. However the correlations of the JP and EI scales are positive in one and negative in the other and appear to cancel out when pooled to give the total sample matrix. Consequently it would appear that the JP scale is related somewhat to the EI, SN, and TF scales and that there is also marked correlations between the EI and SN scales. However, in general the results of this data support those reported by Myers (1962).

#### Implications for Future Research

The results of this investigation suggest several trends of personality development among education students who attend the University of Victoria and eventually become "successful" teachers. While several of the trends suggested do not coincide with the

description of the competent teacher as described in the literature, the trend suggested on the JP scale does support the hypothetical description of the competent teacher on this scale of the MBTI. While no trend was suggested on the TF scale, all three groups did indicate a preference for feeling, which agrees with the hypothetical description of the competent teacher as described by the MBTI. Consequently it would seem that more research is warranted in the area of personality development of education students; both in the specific areas of identifying causal factors and of comparisons with other faculties and control groups outside the University. However, it would be suggested from the results of the present investigation that these studies be of a longitudinal nature, that the investigators have some degree of control over identifying the "competent teachers", and that specific factors of personality be identified which are considered to be necessary qualities of successful teachers, and several independent measures be used as well as a general personality inventory to measure changes in these areas of personality.

### Conclusions

The problem which was investigated in this thesis was the comparison of personality characteristics of three groups: first year education students, second and third professional year students and practicing competent teachers. It was found that the first year students were significantly different ( $p < .05$ ) from the competent teachers on the EI scale of the MBTI. No other significant differences were found. However several trends were suggested by the data on the

EI and JP scales. That is, it was found on the EI scale that while the teachers preferred introversion, the professional year students indicated an almost equal facility for extroversion and introversion, and that the first year students preferred extroversion. On the JP scale it was found that the teachers and professional year students preferred feeling, while the first year students preferred thinking. However, any inferences which may be drawn from the above data should be viewed very cautiously since only one significant difference between two of the three groups on the EI scale was found in this study. It would appear that the results of this investigation do not support the research of Brookover et al. (1965), and Webster et al. (1962) in which marked changes of personality among college students were found. Generally, the results of this investigation were inconclusive.

The inconclusive results obtained may reflect a lack of sensitivity of the MBTI in determining personality under the conditions of this study. Too, the limitations of this study may have contributed to the inconclusive results. Further investigations into personality differences among prospective teachers may find more conclusive results by using longitudinal rather than cross-sectional designs as well as employing several methods of measuring specific variables rather than relying on the single method employed in this study.

REFERENCES

- Aden, R.C. & Crosthwait, C. Teaching field choice and student teacher personality. The Journal of Educational Research, 1966, 59, 291-3.
- Beery, J.R. Does professional preparation make a difference? The Journal of Teacher Education, 1962, 13, 386-395.
- Bowers, N.D. & Sear, R.S. The influence of teacher personality on classroom interaction. Journal of Experimental Education, 1962, 30, 309-11.
- Bown, O.H., Fuller, F.F. & Richek, H.G. A comparison of self-perceptions of prospective elementary and secondary school teachers. Psychology in the Schools, 1967, 4, 21-24.
- Brim, B.J. Attitude changes in teacher education students. Journal of Educational Research, 1966, 59, 441-445.
- Brookover, W.B., Gottlieb, D., Lehmann, I.J., Richards, R., Thaden, J.F., & Vener, A.M. The College Student. New York: The Center for Applied Research in Education, Inc., 1965.
- Chabassol, D. A comparison of variables which predict success in male teachers at the elementary and secondary levels. Canadian Education and Research Digest, 1967, 7, 327-33.
- Combs, A.W. The professional education of teachers. Boston: Allyn & Bacon, 1965.
- Cook, D.L., Linden, J.D. & McKay, H.E. A factor analysis of teacher trainee responses to selected personality inventories. Educational and Psychological Measurement, 1961, 21, 865-72.
- De Laszlo, V.S. The basic writings of C.G. Jung. New York: The Modern Library, 1959.
- Denemark, G.W. & Macdonald, J.B. Preservice and inservice education of teachers. Review of Educational Research, 1967, 37, 237-241.
- Gage, N.L. Handbook of research on teaching. Chicago: Rand McNally, 1963.
- Getzels, J.W. & Jackson, P.W. The teacher's personality and characteristics. In N.L. Gage (Ed.) Handbook of research on teaching. Chicago: Rand McNally, 1963.
- Gillis, J. Personality needs of future teachers. Educational and Psychological Measurement, 1964, 24, 589-600.

- Goodlad, J.I. An analysis of professional laboratory experiences in the education of teachers. The Journal of Teacher Education, 1965, 16, 263-7.
- Heath, D.H. Growing up in college. San Francisco: Jossey-Bass Inc., 1968.
- Heil, L.M. & Washburne, C. What characteristics of teachers affect children's growth? The School Review, 1960, 68, 420-428.
- Heil, L.M. Personality variables. Theory into Practice. 1964, 3, 12-20.
- Hinely, R.T., Galloway, C.M., Coody, B.E. & Sandefur, W.S. An exploratory study of teacher styles. The Journal of Experimental Education, 1966, 35, 30-35.
- Jung, C.G. Psychological types. London: Rutledge & Kegan Paul, 1923.
- Kenney, J.B. & White, W.F. Sex characteristics in personality patterns of elementary school teachers. Perceptual and Motor Skills, 1966, 16, 17-18.
- Kosier, K.P. & De Vault, M.V. Differential effects of three college instructional approaches on personality traits of beginning elementary teachers. The Journal of Experimental Education, 1967, 35, 19-27.
- Lang, G. Motives in selecting elementary and secondary school teaching. Journal of Experimental Education, 1960, 29, 101-3.
- Lantz, D.L. Changes in student teachers' concepts of self and others. The Journal of Teacher Education, 1964, 15, 200-203.
- Levin, H., Hilton, T.L. & Leiderman, G.F. Studies of Teacher Behavior. Journal of Experimental Education, 1957, 26, 81-93.
- LeFevre, C. Teacher characteristics and careers. Review of Educational Research, 1967, 37, 433-47.
- MacKinnon, D.W. The nature and nurture of creative talent. American Psychologist, 1962, 17, 484-495.
- Madison, Peter. Personality development in college. London, Ontario: Addison-Wesley Publishing Company, 1969.
- Myers, I.B. The Myers-Briggs type of indicator. Princeton: Educational Testing Service, 1962.

- Pinckney, G.A. Changes in student teacher's attitudes toward childhood behavior problems. Journal of Educational Psychology, 1962, 53, 275-278.
- Purpel, D.E. Student teaching. The Journal of Teacher Education, 1967, 18, 20-23.
- Ross, J. The relationship between a Jungian personality inventory and tests of ability, personality and interest. Australian Journal of Psychology, 1966, 18, 1-18.
- Ryans, D.G. Characteristics of teachers. Washington: American Council on Education, 1960.
- Steeves, F.L. Crucial issues in student teaching. The Journal of Teacher Education, 1965, 16, 307-310.
- Stricker, E.J. & Ross, J. A description and evaluation of the Myers-Briggs Type Indicator, Research Bulletin, 62-6. Princeton, N.J. Educational Testing Service, 1962. Cited by I.B. Myers, Myers-Briggs Type Indicator. Princeton: Educational Testing Service, 1962.
- Stricker, L.J. & Ross, J. Intercorrelations and reliability of the Myers-Briggs Type Indicator scales. Psychological Reports, 1963, 12, 287-293.
- Swineford, E.J. A study of factors that affect teaching behavior. California Journal of Educational Research, 1963, 14, 214-224.
- Tyler, F.T. Teachers' personalities and teaching competencies. The School Review, 1960, 68, 429-449.
- Webster, H., Freedman, M. & Heist, P. Personality change in college students. In N. Sanford (Ed.), The American College. New York: John Wiley & Sons, Inc., 1962.
- Winer, B.J. Statistical principles in experimental design. New York: McGraw-Hill Book Company, Inc., 1962.

APPENDICES

## APPENDIX A

## Questionnaire and Personnel Data

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

1. What year of Education are you enrolled in? (Circle one)  
(a) 1st (b) 2nd (c) 3rd (d) 4th (e) other.
2. What year did you begin your University (Education Faculty) training in?  
(a) 1965-66 (b) 1966-67 (c) 1967-68 (d) 1968-69 (e) other.
3. Have you attended another University or College other than U. Vic?  
(a) yes (b) no
4. Did you receive your Senior Matriculation at University of Victoria?  
(a) yes (b) no

If not at U.Vic. state where \_\_\_\_\_

5. Upon beginning your education at U.Vic., have you attended each succeeding winter session?  
(a) yes (b) no

If not, what session did you not attend? \_\_\_\_\_

6. Do you intend to obtain a 4 year degree or a 5 year degree before going out to teach?  
(a) yes (b) no

If no, how many years will you obtain before going out to teach? \_\_\_\_\_

7. Do you intend to go out teaching full-time in 1969-70?  
(a) Yes (b) No

8. What are your major areas or areas of specialization on your program?  
\_\_\_\_\_

APPENDIX B  
Questionnaire

Name \_\_\_\_\_ Age \_\_\_\_\_ Marital Status \_\_\_\_\_

1. When did you first enter University?

Month \_\_\_\_\_ Year \_\_\_\_\_

2. Were you enrolled in the Faculty of Education during your entire attendance at the University of Victoria?

Yes \_\_\_\_\_ No \_\_\_\_\_

If no how many years were you enrolled in the Education Faculty? \_\_\_\_\_

3. Upon beginning your education at the University of Victoria did you attend each succeeding year, until you decided to go out and teach?

Yes \_\_\_\_\_ No \_\_\_\_\_

4. Do you plan to continue teaching for 2 or more years?

Yes \_\_\_\_\_ No \_\_\_\_\_

5. What was your major area of specialization at University?

\_\_\_\_\_

6. Have you attended (1 year or more) at any University or College other than University of Victoria?

Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, which University \_\_\_\_\_

7. What teaching certificate do you presently hold?

EB      EA      PC      PB      PA

VITA

Surname: TSCHRITTER Given Names: RICHARD EMIL

Place of Birth: VICTORIA, B.C. Date of Birth: JUNE 23, 1943

Educational Institutions Attended, with Dates of Entering and Leaving:

VICTORIA COLLEGE, VICTORIA, B.C. 1962 to 1963

UNIVERSITY OF VICTORIA, VICTORIA, B.C. 1963 to 1964

UNIVERSITY OF VICTORIA, VICTORIA, B.C. 1965 to 1968

\_\_\_\_\_ to \_\_\_\_\_

Degrees, Diplomas, Etc., Awarded, with Dates and Names of Institutions:

B.Sc. (Mathematics) 1967 University of Victoria, Victoria, B.C.

Faculty of Education 1968 University of Victoria, Victoria, B.C.  
Diploma

\_\_\_\_\_  
\_\_\_\_\_

Honors and Awards:

Government of British Columbia Scholarship, 1966/67.

British Columbia Hydro and Power Authority Scholarship, 1966/67.

University of Victoria Scholarship, 1969/70.

\_\_\_\_\_  
\_\_\_\_\_

Publications:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PARTIAL COPYRIGHT LICENSE

I hereby grant to the University of Victoria the right to lend my thesis or dissertation (the title of which is shown below) to users in the University of Victoria Library, and to make single copies only in response to a written request from the library of any other university, or similar institution, on its own behalf or for one of its users. For this service, a fee may be collected by the University of Victoria to cover the bare costs of reproduction. It is expressly understood that there will be no multiple copying, nor will any copies be sold at a profit. This license will continue in effect until further notice from me.

Title of Thesis/Dissertation:

"A comparison of personality characteristics of prospective  
and practicing elementary teachers"

Author:

(signature)

Richard Emil TSCHRITTER

(name)

(date)

RECEIVED

FACULTY OF  
GRADUATE STUDIES

