# THE EFFECT OF ALIENATION ON THE PROFESSIONAL IDENTITY OF STUDENT TEACHERS

BY

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A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfilment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

Faculty of Education
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# THE EFFECT OF ALIENATION ON THE PROFESSIONAL IDENTITY OF STUDENT TEACHERS

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## ABSTRACT

The education reform movement has turned its attention to teacher education in recognition of the key role played by teachers. For any reform of teacher education to be successful, it must address the fundamental divisions between universities and schools and the sociological ambivalence emanating from these two conflicting sources of knowledge and authority for student teachers. Some student teachers are unable to resolve this inherent conflict of normative expectations in their professional socialization and may develop feelings of alienation as a consequence.

The role of sociological ambivalence and alienation in professional socialization and in the acquisition of professional identity is not well understood. This study was conducted to further our understanding of these processes and to provide a means of critically examining recommended teacher education reforms. A stratified random cluster sampling technique was used to select University of Manitoba Faculty of Education students from each year of the teacher education program. The data were collected in 1992 from the responses of 269 students to an instrument designed to test models and hypotheses related to student teachers' perceptions. Both qualitative and quantitative analyses were conducted on the data, including descriptive and multivariate analyses.

Four questions guided this study: 1) Are student teachers alienated? 2) What is the relationship between alienation and professional identity? 3) What is the effect of university and social background variables on alienation? 4) What are the effects of university background, social background, alienation, and student effort on grade point average and professional identity?

The study finds that, in answer to question one, to some degree student teachers are alienated along each of the five dimensions of alienation. Although many student teachers experience *meaninglessness* and *normlessness*, and some student teachers experience *powerlessness* and *self-estrangement*, fewer student teachers experience *social isolation*. Similarly, in answer to question two, alienation has an effect on *professional identity*, but the five dimensions of alienation do not equally affect professional identity. As expected, *social isolation* and *self-estrangement* have strong negative effects on *professional identity*, but, unexpectedly, *normlessness* has a strong positive effect.

In answer to question three, the effects of the university and social background variables on alienation are not very large and offer little by way of explanation for alienation in student teachers. Based on the findings, there is some support, in answer to question four, for the argument that some of the alienation variables affect student effort, especially the number of hours that student teachers study. None of the alienation variables have significant effects on *grade point average*. Not surprisingly, this study found that more successful student teachers are those who are mature, who have already earned a degree, and who plan their university work. The general hypothesis that alienation has a negative effect on professional identity was partially supported, but the anomalous finding that *normlessness* has a positive effect on *professional identity* suggests that it is, nevertheless, a complex relationship.

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# CHAPTER 1

## INTRODUCTION

There has been much heated discussion in the media recently about the mediocre academic performances of Canadian students on international tests of mathematics and science. These results fuel a continuing and sustained call for the reform of education in Canada (Barlowe & Robertson, 1994; Fennell, 1993; Orpwood & Lewington, 1993: Nikiforuk, 1993, 1994). Behind the current impetus for educational reform, according to Paquette (1995), is "the unquestioned need to become and remain competitive in the globalized information-age economy" (p. 21). The Economic Council of Canada (1992), for example, argues that education is the key to economic survival:

> Without special efforts to develop requisite skills, Canada's prosperity is in danger. We must forge strong links among stakeholders in our learning system, agree upon goals, and strive to achieve them. The need for action is urgent: change takes time, and we still have a lot to learn. (p. 34)

Although there may be considerable debate about what these goals should be and how they may be implemented to reform education, Raywid (1994) argues that,

> After more than a decade of effort aimed at improving schools, there is growing acknowledgment that in the final analysis it comes down to a matter of teachers, and how they perceive and understand and relate to the teaching task. (Proefriedt, 1994, p. vii)

The concern about improving the quality of education in schools has led researchers and the public to turn their attention to the reform of teacher education (Darling-Hammond,

1990, 1996; Keith, 1987; Kramer, 1991; Lanier & Little, 1986; National Commission on Teaching and America's Future, 1996; see Sikula, 1990). In a report to the Ontario government, Fullan and Connelly (1987), for example, explicitly link the reform of education in schools to their proposals about teacher education:

> ...the purpose of teacher education, and any reform of it, is to produce the highest possible quality education for the province's students... We believe, with many others, that the single most direct and influential force in the quality of schooling is the teacher who works in the schools. (p. 52)

Similarly, the National Commission on Teaching and America's Future (1996, p.35) concludes that a caring, competent, and qualified teacher for every child is the most important ingredient in education reform. In other words, teacher education is not only responsible for the preparation of teachers, but to a considerable degree it is also, indirectly responsible for the effectiveness of public schooling (see Enns, 1993, p.14).

The numerous obstacles that currently prevent teacher education programs from dealing effectively with these responsibilities detailed in recent commissions and reports in the United States and Canada (Carnegie Forum, 1986; Van Fossen, 1990; Fullan & Connelly, 1987; Holmes Group, 1986; National Commission for Excellence in Education, 1983; Government of Quebec, 1994; Begin, et al., 1994). Specifically, after reviewing teacher education programs in the United States, the National Commission for Excellence in Teacher Education, (1985) suggests that:

> ...every part of a teacher's education from the liberal arts programs of the prospective teacher to the continuing education of the veteran can be improved; even the best existing programs are not good enough. (p.1)

Based on their study of graduate's responses to their teacher education program at the University of British Columbia and their knowledge of other programs across the country, Housego and Badali (1996) suggest there are no grounds for the "complacent belief that we in Canada do not suffer the ills of many teacher education institutions in the United States" (p.391). Indeed, teacher education programs are considered by many academics to be weak and in need of improvements.

Criticisms of teacher education programs are not new, however. Indeed, as Keith (1987) points out, in an historical review, the three areas of concern raised by Mann's lecture in 1838 recur with frightening regularity, since "...there are only so many elements of a teacher preparation program to manipulate" (p. 21). These three elements are 1) the qualifications students need to enter and to exit; 2) the content of the program, both its liberal/general education and specialized pedagogical components; and 3) the structure of the program, including the amount of time student teachers spend in faculties of education and in schools.

Teacher education is criticised perhaps most severely for its low standards for admission and for graduation. Lanier and Little (1986) point out that "many students from the ranks of the least academically inclined...were allowed to enter and successfully exit from professional training programs for teachers" in the United States, and that this contributes to a general perception of "too many lows" in teacher education (p.540). In Canada, there are

generally more academically qualified candidates than available places in teacher training institutions (see Begin, et al., 1994) so that criticisms about the admission of students centre on the inability of teacher education programs to assess personal qualities accurately or to attract representative numbers of minority students. Although admission standards have been raised in the past few years, in both countries, Goodlad (1990, p. 201) points out that there continues to be "considerable contempt for the scholastic ability of teacher education students." The persistent perception that faculties of education have low standards for entry reinforces their relatively low status within the university (Doyle, 1986; Fullan & Connelly, 1987) and the relatively low status of the teaching profession in society (Lortie, 1975).

The charge of low standards has also been levelled against the content of teacher education programs, including both the course work related to the theory and practice of teaching and the student teaching experiences. Teachers who graduate from university-based teacher education programs complain that:

> ...education courses failed to prepare them for teaching. They lacked knowledge in essential functions such as maintaining discipline, guiding students over predictably difficult topics, inspiring student effort, and recognizing and responding to problems of students from varied social, economic and racial backgrounds. (Carnegie Forum, 1986, p.71)

Pedagogical preparation is criticised, in general, for having neither intellectual rigour nor for having a solid grounding in research and scholarship (see Goodlad, 1990; Holmes Group, 1986; Nikiforuk, 1994). In other words, student teachers are being asked to invest their energies in courses and experiences that appear impractical and irrelevant, and according to

Goodlad, (1990, p. 214) are widely perceived to be "Mickey Mouse" by student teachers and teachers in the field.

Recent reports and commissions, in both the United States and Canada (Carnegie Forum, 1986; Holmes Group, 1986; National Commission for Excellence, 1985; Government of Alberta, 1981; Fullan & Connelly, 1987; Hughes, 1993), suggest that there should be a comprehensive reform of the structure of teacher education. For instance, there appears to be a growing recognition that universities and faculties of education should be jointly planning the professional socialization of teachers more closely with the schools for which student teachers are being prepared to teach.

If steps toward structural reform seem to be hesitant at best, it is probably because faculties of education are not fully integrated into universities. This may be due to the relatively recent move of teacher preparation programs from normal schools and teachers' colleges to universities (Allison, 1995; Goodlad, 1990, p.73; Wilson et al., 1970, p.432), or may be the consequence of the low scholarly status of teacher education programs in universities (Lanier & Little, 1986; Schwebel, 1985). In any event, planning of teacher education programs tends to remain isolated in faculties of education and there is little evidence of any serious or coordinated efforts to involve other faculties of the university in the professional socialization of teachers. In fact, some recent reform proposals urge university presidents to take the lead in reducing the isolation of faculties of education from the rest of the university and in placing the education of teachers at the heart of the university's mission (see Lasley & Rogus, 1986, pp. 5-7). Reformers argue that teacher preparation programs should be the responsibility of the whole university, and that all of the

courses in which education students are enrolled should be reviewed and revised to ensure that they are appropriate for the professional socialization of teachers.

Not all agree, however, that universities are the most appropriate settings for teacher education programs. Journalists like Nikiforuk (1994) and Kramer (1991) question the high cost of educating teachers in universities and whether faculties of education serve teacher education well. Although a number of researchers (Doyle, 1986; Ducharme, 1985; Keith, 1987; Lanier & Little, 1986; Schwebel, 1985) have pointed out the long standing conflicts between the culture of the university and the culture of teacher education, John Goodlad (1990) argues that the solution still lies in major reform efforts rather than in separating programs of teacher education from the university. He states:

> Teacher education in the 1990's, ... is something not yet seriously attempted. The fact that it is not commonly *well* done in universities is not a convincing argument for taking it away from them... (p. 226)

It would appear that neither universities nor school systems seem eager to embrace faculties of education. School-based educators argue that university-based teacher training is out of touch with current practices in schools. They suggest that there is too much theory, too little practice, and not enough attention being paid in teacher education programs to the problems encountered by teachers in the field. As a university-based teacher educator, Proefriedt (1994) states:

> Pity us poor educators. At the university, we are seen by our colleagues as lacking a serious scholarly enterprise. If we turn to the schools for validation of the significance

> of our daily work, we find that teachers perceive us as irrelevant, trafficking in unworkable theories, and hopelessly cut off from the realities of school life. (p.131)

Like Janus, the Roman two-faced god of gates and thresholds, faculties of education present two opposing faces; one that faces the university and one that faces the schools. Unfortunately, these faces cannot see each other, and even worse, the two mouths speak different languages, one speaking the language of theory and the other speaking the language of practice. As Doyle (1986) states:

> ... the epicentre of teacher education lies somewhere between the university and the school systems, and at this point there is little glue to hold the components together. ...All university-based professional education is torn between the academy and the practitioner community. (p.7)

In the sociological literature, this type of inherent split is referred to by Merton and Barber (1963) as *sociological ambivalence* to characterize the "incompatible normative expectations of attitudes, beliefs, and behaviour assigned to a status or set of statuses in a society" (p.95). In fact, sociological ambivalence seems to be a defining characteristic of teacher education. This concept applies both to faculties of education, "torn between the demands of scholarship [theory] and those of the field [practice]" (Fullan & Connelly, 1987, p.6) as well as to the ambivalent status of student teacher and the conflicting roles that student teachers are expected to play in these two aspects of their programs.

The problem for student teachers is that the sociological ambivalence inherent in faculties of education and in the status of student teacher creates feelings of uncertainty and

anxiety as a consequence. Merton and Barber (1963) use the term *psychological ambivalence* to characterize the outcomes of sociological ambivalence:

> Individuals in a status or status-set that has a large measure of incompatibility in its social definition will tend to develop personal tendencies toward contradictory feelings, belief, and behaviour. (p. 95)

For their part, Robert Nisbet and Robert Perrin (1977) suggest that sociological ambivalence leads to *anomie* or normlessness, which they define as:

> ...behaviour characterized by tensions and distresses that arise from the effort of an individual to meet the obligations of two or more irreconcilable values. That is, they are irreconcilable *within the framework of response of the individual concerned.* (p. 242)

However, the argument that sociological ambivalence only leads to negative outcomes has been challenged by Rose Laub Coser (1975, 1990, 1991). She argues that sociological ambivalence is resolved in a positive manner for individuals who are able to negotiate the competing expectations of different members of their role set. A role-set consists of all of the role relationships a person has by virtue of occupying a certain status, such as the status of student teacher (Merton, 1968). The role-set of a student teacher includes, among others, professors, fellow students, school teachers, students in schools, and principals, some or all of whom may differ in their expectations owing to their differing positions in the social structure. Coser (1990, p.160) points out that the social structure not only provides constraints but it also provides opportunities for individuals to develop increased individuality and autonomy. Specifically, she (1975) states:

> It is in a differentiated social structure, where individuals are segmentally involved, where they are encouraged to take distance and to articulate their roles and their thoughts, that people are able to develop that degree of individuation that goes together with rationality and flexibility.....Complex role-sets and differentiated roles are not alienating restrictions on individuality, they are its basic precondition. (p.259)

In other words, if student teachers are able to articulate their roles through mechanisms available within the social structure, they will be able to reduce the effects of sociological ambivalence and thereby strengthen their individuality and their identities. Sociologists (see Merton, 1968; Coser, 1966, 1975, 1990, 1991) have identified a number of mechanisms for role articulation, including making the contradictions of role expectations manifest, organizing one's time and space to become insulated from observability, limiting the authority and interest of different role partners, and taking role distance.

Nevertheless, Merton et al., (1957, p. 380) also point out that these mechanisms may not be sufficient to reduce the burden of conflicting expectations. Coser (1966, p. 175) acknowledges that these mechanisms may not suffice and that they may not always operate, either because they are not firmly institutionalized, or because the structure inhibits their smooth operation. For instance, when a student teacher is expected to handle a class as if he or she were a real teacher while at the same time he or she is being evaluated as a university student by the same role partner, (eg., the cooperating classroom teacher or the visiting university professor) the student teacher may not be in a position to articulate competing roles. Coser (1975, p.242) links alienation to this position in stating that, "Persons who are

or feel alienated from their activities and relationships are those who are not in a position to articulate their roles in

relation to others". Student teachers who have the feeling that expectations are unclear or confusing, that they are torn between two opposing sources of knowledge (see Clifton, 1989), and between two competing sets of role expectations, may develop a variety of responses that can be best understood as variants of alienation (see Seeman, 1972, p. 473).

Student teachers who feel alienated are unlikely to invest the effort necessary to manage their time around academic pursuits, to study, to achieve academically, or to acquire a professional identity. Alienation describes feelings of estrangement from the social structure, from other people, or even from the self. In short, alienation signifies a "withdrawal of energy, of commitment, of affect" (Nisbet & Perrin, 1977, p.232). Student teachers may become alienated from faculties of education if they perceive that their academic and pedagogical roles are in conflict. If students perceive that too many of their experiences in either of their two competing roles are irrelevant, too easy, or too abstract to develop their competence as teachers, they may feel alienated from the intellectual roots of their profession. If students perceive that their educational experiences in schools do not facilitate social integration, they may feel alienated from others in the educational community. Furthermore, if students perceive that they are unable to realize their personal goals to become competent, effective teachers, they may even become alienated from themselves. This form of alienation is called self-estrangement.

Apart from the obvious personal and social costs to student teachers, there are costs to faculties of education when student teachers feel alienated. First, student teachers who feel

alienated often share their negative perceptions with other students. As a result, faculties of education may have more difficulty attracting more able students and in encouraging student teachers to persist in programs. Second, student teachers who feel alienated share their negative perceptions with friends, family, and the teachers they meet in schools. As a consequence of this multiplier effect of negative impressions among the public, faculties of education may have more difficulty garnering support in difficult economic times. Third, student teachers who feel alienated often contribute little to the improvement of courses and to the collegiality of the educational community. Indeed, student teachers who do not commit themselves to their professional identity as teachers are discouraging to faculty members, to fellow students, and to the teachers with whom they work in schools. Clearly, the issue of alienation in student teachers cannot be ignored and raises a number of questions for researchers.

As a consequence, the objective of this study is to theoretically and empirically examine four important questions: 1) *Are student teachers alienated?* 2) *What is the relationship between alienation and professional identity of student teachers?* 3) *What are the effects of university and background variables on alienation?* 4) *What are the effects of university and social background, alienation, and student effort on the grade point average and on the professional identity of student teachers?* The following discussion introduces the theoretical arguments that lead to these questions. Following that, the relevance and limitations of the study are discussed and, finally, an overview of the study is presented.

## THEORETICAL ARGUMENT

As suggested to this point, sociological ambivalence has been institutionalized into their social structure by faculties of education that try to incorporate the values, attitudes, and expectations of universities, on the one hand, and schools, on the other. Indeed, these two institutions represent two conflicting and competing sources of knowledge. Simply stated, universities represent *theory* and schools represent *practice* as the most important source of professional knowledge and understanding, and these perspectives often clash, resulting in the alienation of student teachers from faculties of education.

Student teachers and indeed faculties of education are ambivalent about whether the university or the school is or should be the source of their professional knowledge. Fullan and Connelly (1987, p. 47), for example, suggest that student teachers' perception that theory and practice are separate poses a fundamental problem in the preparation of teachers. In their opinion, student teachers need to think that the theory of education and the practice of teaching are meaningfully interconnected. The inability of student teachers to think that the theory of education and the practice of teaching are integrated and mutually reinforcing causes students to believe that there is little relationship between their courses and their experiences in schools. In other words, there are inherent conflicting expectations in teacher education that are patterned into the professional socialization of student teachers.

These conflicting expectations extend to the way in which students enrolled in faculties of education interpret their roles. The status of student teacher, after all, incorporates two roles, the role of *university student* and the role of *student teacher*. Student teachers are expected to integrate the expectations of these two roles as if the goals of each were identical,

mutually supportive, and equally important to them. However, the role of university student contains expectations that focus on personal cognitive and affective development whereas the role of student teacher contains expectations that focus on the cognitive and affective development of others. The university student role demands that time and energy be spent acquiring the knowledge and understanding of teachers whereas the student teacher role demands performance in classrooms that demonstrate mastery of the knowledge and understanding of practising teachers. Professors often expect students to adopt a critical stance concerning educational issues and to question current practices in schools but their cooperating teachers who supervise student teachers during their practice teaching often admonish them to forget everything they learned in the faculty of education (Greene & Campbell, 1993). As Taylor and Miller (1985, p. 118) point out, student teaching mainly serves to "introduce and initiate the prospective teacher into the conventional wisdom, procedures, and values of the existing approach" or in other words, to "learn the ropes" by following current practices uncritically. As previously stated, some student teachers may be unable to resolve this inherent conflict of normative expectations in their professional socialization and may develop alienation as a consequence.

Taking a social psychological approach to alienation that employs "subjective measures cast variously in terms of attitudes, values, sentiments, or expectancies" Seeman (1975, p. 93) has done much to clarify our understanding of such attitudes and behaviours. His treatment makes alienation more amenable to empirical investigation and it clarifies the variants by assigning them to five separate dimensions, *powerlessness, meaninglessness, normlessness, social isolation* and *self-estrangement. Powerlessness* (Seeman, 1959, p. 784)

is "the expectancy or probability held by the individual that his [sic] own behaviour cannot determine the occurrence of the outcomes, or reinforcements he [sic] seeks". *Meaninglessness* (Seeman, 1959, p. 786) is "characterized by a low expectancy that satisfactory predictions about future outcomes of behaviour can be made". *Normlessness* (Seeman, 1972, p. 472) is "characterised by a high expectancy that socially unapproved means are necessary to achieve given goals; the view that one is not bound by conventional standards in the pursuit of what be, after all, quite conventional goals (e.g., position, wealth)". *Social Isolation* (Seeman, 1975, p. 94) is "the sense of exclusion or rejection vs. social acceptance". *Self-estrangement* (Seeman, 1959, p. 790) is characterised by "the degree of dependence of the given behaviour upon anticipated future rewards."

In fact, three of the five dimensions of alienation (powerlessness, meaninglessness, and self-estrangement) were identified by Clifton, Mandzuk, and Roberts (1994a) in the responses of student teachers who completed a "request for comments" section in a recent study of student teachers in the Faculty of Education at the University of Manitoba. Specifically, powerlessness was revealed by comments about the lack of control that students had in the design of their programs, the impersonality of the faculty, and the sense that their evaluations had little impact on the improvement of teaching in the faculty. Students expressed meaninglessness in comments about low academic standards, irrelevant assignments, and poor teaching. Self-estrangement was illustrated by expressions of overall negative feelings about the faculty, by their continuation in the faculty only for external rewards, and their decisions not to pursue graduate studies despite earlier intentions, nor to recommend that other

students (in High School or in faculties of Arts or Sciences, for example) enter a faculty of education.

These comments suggest that alienation may be a significant problem in the professional socialization of teachers, at least for this program, and probably for many programs at other Canadian and American universities. In very general terms, Seeman (1972) links alienation to the professional identity of people, by stating:

> If one asks for the ideal-typical description of the unalienated man [sic] ...the image evoked bears a remarkable resemblance to what we mean when we speak of the professional. (p.520)

For teachers, the process of becoming a professional involves the efforts of both institutions and individuals in an interactive process (Zeichner & Gore, 1990, p. 341). The quality of these efforts determines the opportunities and the limitations of professional socialization (Greene & Campbell, 1993). In other words, not only must faculties of education offer appropriate academic and pedagogical opportunities and experiences, but student teachers, for their part, must also invest their energies in completing the courses in the programs that have been developed by faculties of education. It is student investment that translates university inputs (e.g., courses, requirements, library facilities, etc.) into student educational outputs (e.g., grades, professional identities) (Astin, 1984). Lack of investment by student teachers is an indication of alienation.

For Seeman (1972, p. 520), alienation is the obverse of five tasks that student teachers need to accomplish in their professional socialization. These tasks are: 1) becoming certifiably competent in a skill; 2) acquiring an intellectual understanding of a body of knowledge and

theory; 3) becoming able to regulate one's conduct according to the norms of the profession; 4) developing a sense of loyalty to others and the duty of professional exchange; and 5) committing oneself to work for its intrinsic rather than its extrinsic rewards;

If student teachers develop feelings of alienation within their faculty of education, from other students and from professors, from the schools in which they practice teach, and from themselves, they are unlikely to accomplish these five tasks. Specifically, this means that student teachers who feel powerless will not feel competent as teachers. Student teachers who have a sense of meaninglessness will be unable to discern the underlying knowledge and theory of their profession. Those who experience normlessness may not behave according to the norms and standards of the university or the teaching profession and those who feel a sense of social isolation will not become integrated with their peers. Finally, student teachers who have a sense of self-estrangement will not develop a commitment to teaching for its intrinsic rewards. In other words, in faculties of education in which sociological ambivalence is fostered, student teachers develop feelings of alienation and are unable or unwilling to accomplish the tasks of professional socialization. Conversely, in faculties of education in which sociological ambivalence is somehow mitigated, student teachers will accomplish the tasks of professional socialization and acquire a professional identity as teachers.

Acknowledgement of the importance of developing professional skills, attitudes, and behaviours has led recent reform proposals concerning teacher education to explicitly or implicitly link effective professional socialization with efforts to reduce sociological ambivalence in faculties of education. As an example, a report completed in the Faculty of Education at the University of Manitoba (Hughes, 1993) states:

> From the beginning of the program students will be asked to think of themselves as beginning professionals. The goals of the program reveal that we are looking for students who will be self-initiating and capable of reflection on their experiences both within the university and in the schools of the province. They will be required to make connections with their own backgrounds, their course work, and their experiences in schools. Professional behaviour, including decision making, problem solving, and reflection will be encouraged and supported in both years of the program. We believe that our program should provide students with the sense that they are a part of a community of scholars training to be teachers. (p. 44)

Reform proposals, such as those mentioned above, have moved beyond disconnected recommendations that simply prescribe, for example, more weeks of student teaching or fewer courses in pedagogy, to a broader understanding of the problem. There is growing recognition that teacher education must somehow mitigate the effects of sociological ambivalence and alienation while trying to foster commitment to the academic and teaching roles that underpin the professional identity of student teachers.

## RELEVANCE

Although alienation is receiving increasing attention in education literature (Clifton et al., 1994a, 1994b; Kalekin-Fishman, 1986; Neumann et al., 1990; Newmann, 1981; Newmann et al., 1989), it has not been determined whether alienation in student teachers is widespread and whether there is an empirical relationship between alienation and professional identity. This study addresses this gap in the literature in three ways. First, this study will determine whether or not alienation is widespread among student teachers. Although

alienation in student teachers has been identified in a qualitative study (Clifton, et al., 1994a), it is important to determine whether the alienation expressed by student teachers, in response to an open-ended question, is confined to those student teachers who responded or whether it is more widespread.

Second, this study is concerned with determining whether there is a relationship between alienation and professional identity in student teachers. The relationship between alienation and professional identity, in general, has been theoretically proposed by Seeman (1975), but the linkage for student teachers has not been tested. Furthermore, it is important to determine whether any independent variables influence the relationship between alienation and professional identity. In particular, independent variables such as program, years of university, number of credit hours, previous degree, gender, age, and parents' education that relate to student teachers' university and social background are included to determine the relative importance of these variables. The primary variables of interest, the variables that measure the alienation of student teachers and the effects of these variables on their professional identity, are examined in relation to independent variables. This study also examines whether variables that represent student teachers' behaviours, as measured by their efforts to manage their time, to study and to achieve academically, intervene in the relationship between alienation and professional identity.

Third, this study provides a theoretically based means of empirically measuring alienation in student teachers. The instrument used in this study was developed to measure each of the five dimensions of alienation described by Seeman (1959, 1975, 1983). Based on the outcome of this study, professors in faculties of education may be able to use this measure

of alienation as part of their course evaluation and development. As Keating (1987, p.407) suggests, "if course structure and interactional processes produce alienation, then we can also use the theory to alleviate the problem". These are the strengths of the study, but the study also has some limitations.

## LIMITATIONS

This study has at least three limitations that need to be taken into account. First, this study is based on data that were collected from students in the Faculty of Education at the University of Manitoba. The characteristics of this faculty may limit the generalizability of the results to other student teachers in other faculties of education in other universities and to other students in other professional faculties at the University of Manitoba or elsewhere. Further research on other groups of students in other faculties and programs is needed to determine the extent to which the results of this study may be generalized. An important first step, however, is to examine the data that has been collected from student teachers in one faculty of education and then to extend the research to other faculties.

Second, the study is based on cross-sectional sample of student teachers at a single point in time. It is recognized that to understand the socialization process as student teachers progress through their programs in faculties of education, it is preferable to observe changes over time, in more than one setting, and to control for the influence of numerous variables that influence the dependent variables. Although longitudinal data are often preferable to cross-sectional data, the time and expense involved in collecting such data mitigated against its use in this study. In any case, the collection and examination of cross-sectional data may

be considered as an appropriate first step in the process of measuring complex variables to test the relationships of interest in this study.

Third, the study is limited by the extent to which a model can adequately explain such complex processes as those influencing the development of professional identity. In a recent book on the sociology of education, Clifton and Roberts (1993, p. 108) distinguish between *sparse* and *dense* networks in discussing the differences between the models developed in the social sciences and the complex reality that people actually experience. A *sparse* network refers to the comparatively few variables that researchers can take into account in building and testing theoretical models. A *dense* network, on the other hand, refers to the multitude of variables that actually are involved in dynamic social psychological processes that operate in the real world. The model examined in this study is a sparse model since it only includes sixteen variables and these do not fully approximate the complexity of social reality that student teachers actually live in as they progress through their programs. The model is useful, however, for providing a systematic means of examining the relationships between alienation, student effort, academic achievement, and professional identity. Although there are only sixteen variables in the model, all research is based on sparse models and it is likely that the true relationship between alienation and professional identity is much more complex than suggested by the theoretical model proposed in the study. It is anticipated, however, that the study will contribute significantly to the literature on the impact of alienation on professional identity. The discussion of the study unfolds as outlined in the overview.

## OVERVIEW OF THE STUDY

As noted, the objective of this study is to theoretically and empirically examine the relationship between alienation and professional identity in student teachers. A review of the concerns about the professional socialization of teachers in faculties of education introduced this study in this chapter. An overarching concern is that professional socialization of teachers in faculties of education is characterised by conflicting normative expectations or *sociological ambivalence.* It was argued that sociological ambivalence creates feelings of alienation in student teachers and that alienation has a negative impact on their professional identity. The theoretical model that guides the study was summarized and the relevance and limitations of the study are described.

In Chapter 2, the sociological concepts that underpin the theoretical model are explored. First, the literature related to the professional socialization of student teachers is examined in greater detail. Professional socialization is the process by which student teachers internalize the values, beliefs, and attitudes of the teaching profession. Second, the concept of sociological ambivalence is examined in greater detail. Sociological ambivalence is viewed as a social context that patterns student teachers' experiences in faculties of education and in schools in which they practice teach. Third, the five dimensions of alienation are examined in greater detail. Fourth, alienation in student teachers is discussed in relation to the tasks of professional socialization, as briefly noted in this chapter. The professional socialization of student teachers involves the accomplishment of tasks that are the obverse of the five dimensions of alienation, powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement. Finally, the theoretical model that will be used to guide the empirical

analyses that follow in Chapters 3 and 4 is described. This theoretical model includes university and social background, alienation, student effort, academic achievement, and professional identity variables.

In Chapter 3, the methodology used in the study is described. First, the development of the questionnaire and the sample of university students at the University of Manitoba from whom the data were collected is described. Second, the sixteen variables that are used in this study, the operationalization of each variable and the descriptive statistics for each, are presented. Third, the statistical procedures used to analyse the variables in the theoretical model that is presented in Chapter 2 are described.

In Chapter 4, the empirical examination of the theoretical model and the four questions that this study seeks to answer are presented. First, the descriptive statistics for each of the alienation variables are discussed in answer to the question, *Are student teachers alienated?* Second, the results of a series of multivariate analyses are reported. These analyses offer an increasingly complex examination of the effects of the alienation variables on the professional identity of student teachers, in answer to the three questions, *What is the relationship between alienation and professional identity of student teachers? What are the effects of university and social background variables on alienation*? and *What are the effects of university, social background, alienation, and student effort on the grade point average and on the professional identity of student teachers?*

Finally, Chapter 5 concludes the study. First, a summary and discussion of the study is presented. Second, some implications of the research for policy and practice in the education of teachers are raised. Finally, some suggestions for further research are developed.

# CHAPTER 2

## REVIEW OF THE LITERATURE

This chapter reviews various theoretical perspectives underpinning the model that guides this study. The chapter is divided into five sections. The first section establishes professional identity as a key outcome in the professional socialization of student teachers. For student teachers, acquiring a professional identity means that they have accomplished five tasks of professional socialization and have internalized the values of professional teachers. The second section examines various sources of sociological ambivalence in the professional socialization of student teachers. The conflicting normative expectations that characterize sociological ambivalence emanate from faculties of education, on the one hand, and from the schools in which student teachers practice teach, on the other hand. The third section examines five dimensions of alienation that may result when these conflicting normative expectations remain unresolved. In this study, student teachers express alienation from their professional socialization, from their professors and from other students, and even from themselves. The fourth section explores the link between alienation in student teachers and the accomplishment of the five tasks of professional socialization. Student teachers who feel alienated are likely to have difficulties in accomplishing these tasks and, therefore, in acquiring a professional identity as teachers. Finally, the last section outlines a theoretical model that represents the relationships between alienation and professional identity. The model includes university and social background variables as exogenous variables, alienation variables, with student effort and academic achievement variables as intervening variables between alienation and professional identity.

## PROFESSIONAL IDENTITY

Nearly a century ago, John Dewey (1904/1965) argued that teachers are professionals and that the education of teachers should be studied as a process akin to training for other professions, such as law, medicine, and architecture:

> I doubt that we as educators, keep in mind with sufficient constancy, the fact that the problem of training teachers is one species of a more generic affair--that of training for professions. (p.144)

Robert Merton (1982, p. 114) noted that the professions, including teaching, are those occupations that are rooted in three human values: knowing, doing, and helping. *Knowing* refers to the value professionals place on having a systematic body of theoretically and empirically derived knowledge that is not readily available to the population at large. *Doing* refers to the value professionals assign to having a trained capacity and skill to apply their specialized knowledge to solve real problems that people experience. *Helping* refers to the value that guides professionals to place the needs of others before their self-interest. Although, debate about whether teaching is a profession has not completely abated (see Lanier & Little, 1986), teaching qualifies as a profession by virtue of its recognizable knowledge base, its emphasis on developing technical skills in teachers, and its commitment to altruism (Doyle, 1986; Goodlad, 1990).

The professional socialization of teachers is the process that takes place "both inside and outside the university, through which student teachers learn to function as effective teachers" (Clifton et al., 1994a, p. 179). It is the process by which student teachers are expected to incorporate the values of knowing, doing, and helping. As stated earlier, Melvin

Seeman (1972, p.520) suggests that professional socialization minimally involves the accomplishment of five tasks: 1) acquiring an intellectual understanding of a body of recognizable knowledge and theory, 2) becoming certifiably competent in a skill, 3) becoming able to regulate one's conduct according to the norms of the profession, 4) involving oneself in work for its intrinsic rather than its extrinsic rewards, and 5) developing a sense of loyalty to others and the duty of professional exchange. In order to develop the professional value of *knowing*, student teachers need to accomplish the first task, that is they need to learn the foundational theories and understandings that inform teaching and in the process become committed to life long learning. In order to develop the professional value of *doing*, student teachers not only need to accomplish the second task of learning and acquiring competencies in teaching but they must become committed to doing only those things that are recognized by the profession as being ethical. Finally, in order to develop the professional value of *helping*, student teachers need to accomplish both the fourth and fifth tasks that commit them to the altruistic and collegial values that are the hallmarks of professionalism. Student teachers are expected to be able to successfully accomplish these five important tasks as a result of the experiences and opportunities provided by institutions and by their own efforts to integrate these experiences. In other words, professional socialization is an interactive process in which both institutions and individuals share responsibility (Simpson, 1979; Mandzuk, 1994).

Institutions, such as faculties of education and the schools in which student teachers practice teach, are responsible for providing the experiences, opportunities, and human resources necessary to enable student teachers to accomplish the tasks associated with becoming professional teachers. The experiences that faculties of education offer include

university courses and practice teaching sessions in schools. Practical experiences tend to be structured so that student teachers have increasing opportunities to role play and to learn about the role of professional teacher. Human resources include professors in faculties of education, teachers in schools, and peers. Professors, teachers, and peers are *significant others* who influence the professional socialization of student teachers directly through teaching and modelling and indirectly by communicating their attitudes, values, and beliefs (Boldt, Lindquist, & Percival, 1976). Faculties of education may create structural mechanisms that support role articulation (see Coser, 1991) such as organizing peers into formal cohorts that take all of their courses together or encouraging the formation of informal peer networks that meet to study or to share teaching experiences.

Student teachers, for their part, are responsible for making the effort to interact with professors, teachers, and peers and for learning the role of professional teacher. These efforts may include planning and organizing their time around academic pursuits, studying, and trying to attain a higher grade point average. In addition, many student teachers may actively seek out others to share interests in education, make decisions on the basis of their involvement in teaching, and devote time to their teaching interests. In these ways, student teachers actively involve themselves in the process of professional socialization, and particularly in learning the role of professional teacher.

The professional role of teacher is, of course, not the only role that students enrolled in faculties of education are called upon to learn or to play. They have both the role of university student and student teacher at the same time and these two roles exist in a matrix of other roles, such as son or daughter, mother or father, friend, or tutor. However, the role

of university student, working under the direction of professors, and the role of student teacher, working in a classroom with pupils, are most salient for the professional teacher role and are therefore of primary interest here.

Learning the professional role of teacher, like learning any other role, involves learning "a behaviour pattern regulating the action of one status holder with another" (Webb & Sherman, 1989, p. 266). However, roles do not simply regulate external behaviour or actions, but they also significantly affect attitudes and emotions. Every role, including the role of professional teacher, has a certain identity attached to it that people internalize as they learn to play their roles. As Berger (1963, p. 120) points out,"every role has a world view dangling from its end." By playing the role of professional teacher, students enrolled in faculties of education come to feel and act increasingly like teachers "developing a teacher perspective in which situations are both seen and interpreted in a new way" (Lacey, 1977, p. 14).

The problem for student teachers is that they are expected to develop this *teacher perspective* or professional identity while playing two different, sometimes opposing roles, that of student and that of teacher. These two roles include normative expectations that are ambivalent, at the least, and at times these roles may even be conflicting and contradictory (see Coser, 1966, 1979, 1990). As Kleinman (1981, p.62) points out, "Those socialized find that different audiences expect them not only to *do* different things ("role conflict") but also to *be* different." For instance, the role of the university student includes expectations that the student has something to learn and that a student has the willingness to learn it and the role of teacher contains expectations that a teacher has something to teach and has the authority to teach it. Often it seems that student teachers feel confused as to whether to fulfil the

expectations of their professors in their role as university students or those of teachers in schools with whom they practice teach in their role as student teachers. This type of ambivalence has been described in the sociological literature as *sociological ambivalence* (Merton & Barber, 1968, p.96).

## SOCIOLOGICAL AMBIVALENCE

The term, "sociological ambivalence" characterizes the ambivalent social context that arises from incompatible normative expectations of attitudes, beliefs and behaviour that may be assigned to organizations or even to a single role of a single social status (Merton, 1968, p. 99). Organizations, such as faculties of education, that are rooted in such different institutions as universities and schools, incorporate potentially conflicting pairs of norms and potentially incompatible values. As stated earlier, Doyle (1986, p.7) suggests, ".. the epicenter of teacher education lies somewhere between the university and the school systems, and at this point there is little glue to hold the components together."

For student teachers, this lack of cohesion at the centre of their professional socialization means that they are confronted with conflicting values and expectations emanating from their academic and their professional roles (see Merton & Barber, 1968, p.103; Coser, 1966, p. 178). Examples of conflicting pairs of values include the academic value of *inquiring* and the professional value of *knowing*, the academic value of *thinking* and the professional value of *doing*, and the academic value of *achieving* and the professional value of *helping* (see Mandzuk, 1997). Stated differently, as university students, students enrolled in faculties of education are expected to freely explore the infinite complexity of knowledge (*inquiring*), but as student teachers, they are expected to master a body of

professional knowledge (*knowing*). As university students, they are expected to uncover the ideas and reflect on the issues that underlie problems (*thinking*), but as aspiring professionals, student teachers are expected to develop technical skills to solve these problems (*doing*). University students are expected to strive for originality and individual accomplishment (*achieving*), but student teachers are expected to develop concern for collegiality and altruism (*helping*).

While these pairs of values are certainly not mutually exclusive, they do represent two different sources of knowledge--*theory* and *practice*. That is, student teachers may be expected to choose between the authority of universities that provide opportunities to learn from theory, on the one hand, and the authority of schools that provide opportunities to learn from practice, on the other hand. Sanders and McPeck (1976, p.189) point out that if one pays attention to the way educators (and others) use the terms theory and practice, it is clear that the terms refer not only to separate enterprises but often to *mutually exclusive* enterprises. In fact, some people suggest that this antinomy of theory and practice is a source of sociological ambivalence that is a fundamental problem in the professional socialization of student teachers (Clifton, 1989; Fullan & Connelly, 1987, p.47).

It should be understood that in the context of professional socialization of teachers, *theory* refers to the content of university courses that focus on such topics as the teaching-learning process, the social functions of schooling, the philosophical basis of education while *practice* refers to the specific skills and competencies that characterize professional teachers in their classrooms. Since student teachers tend to classify courses as being *theoretical* and irrelevant or as *practical* and relevant (Goodlad, 1990, p.314), student teachers are in danger

of adopting an attitude of almost anti-intellectualism in which they reject theoretical orientations and the academic values of *inquiring, thinking, achieving,* and embrace only those pragmatic activities that develop their professional values of *knowing, doing,* and *helping* (Housego & Bidali, 1996; Sanders & McPeck, 1976).

A difficulty posed by this attitude is that student teachers are heir to a widely held belief that there are few underlying principles or norms to guide teaching practice. In the face of the uncertainty generated by this belief, student teachers become increasingly preoccupied with the pragmatic value of their program of studies and not with the theories that underlie them (Clifton, 1989; Taylor & Miller, 1985). It is not surprising, therefore, that a number of studies find that student teachers rank practice teaching and other practical things more positively than any other component of their professional education (Goodlad, 1990, p. 247; Silberman, 1971, p. 451; Wideen & Holborn, 1986, p. 574). The following comments are typical of those made by student teachers who completed a questionnaire in the Faculty of Education at the University of Manitoba upon which this study is based:

- Generally, I find everything I have learned or can actually apply to teaching, I have learned through my student teaching experiences. The courses in the Faculty of Education are a waste of time.
- I feel that there should be more emphasis on practical experience and covering all aspects of teaching areas.
- I find it difficult to transfer theory learnt [sic] in the faculty into the practical within the classroom. I believe that "connection" between the two should be emphasized more in the courses we take in the faculty.

The pragmatism of student teachers is at least partly attributable to the strong influence of anticipatory socialization on student teachers. Anticipatory socialization is the "acquisition of values and orientations found in statuses and groups in which one is not yet engaged, but which one is likely to enter" (Merton, 1968, 438-439). Lortie (1975) points out that the influence of being a pupil for thousands of hours of school attendance --at least 12,000 hours for the student teachers entering university from high school, means that prospective teachers have already served a long *apprenticeship of observation* that has a major, perhaps defining, influence in shaping their professional identities. To the extent that individuals become committed to their identity as teachers, often prior to their acceptance as students, the input of faculties of education in the socialization of student teachers is filtered through a highly interpretive lens (see Franks & Gecas, 1992, p.62). Consequently, anticipatory socialization can be expected to create feelings of ambivalence in student teachers toward their current roles as university students and student teachers (see Merton et al., 1957; Coser, 1966, p.184).

The university student role includes the normative expectation that concern be developed for theory and research. The university student role demands that student teachers spend time fulfilling course requirements, studying, and performing on exams. University students are expected to question, to debate, and to support their arguments with evidence. Such activities do not appear to relate directly to teaching, that is, getting into classrooms and teaching. In other words, when student teachers perceive that their identities as teachers are being formed mainly by the experiences they have in teaching situations in elementary or

secondary schools, they may feel ambivalent about committing themselves to their university student role and therefore to their identity as students (Clifton et al., 1994a).

Performance of the student teacher role, however, may be no more satisfying than the university student role for students enrolled in faculties of education. For instance, it is certainly not uncommon for pupils in a classroom to demonstrate that they do not accept student teachers as *real* teachers by misbehaving when their regular teacher is out of sight or by going to their regular teacher for any problem not related to the lesson being taught. In such situations student teachers may be expected not to perform to capacity since there are few mechanisms available to reduce the burden of conflicting expectations emanating from their role partners in the classroom (Coser, 1966, p. 177). For example, in a study of student teachers, Loosemore and Carlton (1977) observed that,

> ... what had been an orderly lesson involving apparently attentive and interested pupils changed to chaos when the teacher left the room for ten minutes. Pupils started talking to one another, showing complete disregard for the student-teacher's repeated efforts to capture their attention. Two boys began throwing a football around the room, and others left their seats. (p.420)

Student teachers lack authority and autonomy in such situations and this presents them with conflicting, contradictory, and often ambivalent expectations as they try to act like teachers without having the time, familiarity, and respect needed to develop or sustain their student teacher role (see Loosemore & Carlton, 1977). In fact, student teachers may be forced to conclude that they are really only visitors to schools and that their behaviours are strictly circumscribed by the rules, setting, and program that have already been developed by the

teacher and his or her class (Emerson, 1986, p.12). As a consequence, student teachers may feel ambivalent about their student teacher role and therefore about their identity as teachers.

Furthermore, students enrolled in faculties of education must cope with the problem that neither the role definition of university student nor that of student teacher fully constrains them nor is it clear, at times, which of these competing roles should have primacy (see Stryker, 1980, p. 32). Such ambivalence is evident in the comments of student teachers who made the following open-ended responses to the questionnaire previously mentioned:

- At this point in fourth year we could be treated more as ...*teachers* and not just as students.
- I often feel torn between the requirements of the faculty and the expectations I place on myself in the classroom.
- Some professors do not have good classroom management techniques (education students are just that--*students*). Therefore, it is hard to decide what our role is--teacher? student? child? learner? adult?

These comments reveal the concern and doubt that student teachers feel as a consequence of sociological ambivalence. Faced with a social context that incorporates conflicting norms and expectations, student teachers question what their role is and wonder how to manage the contradictory requirements and expectations of the faculty of education and the schools in which they practice teach. Coser (1991, p.25) points out that the stresses and strains of different expectations may be managed through mechanisms available in the social structure or through opportunities to make these mechanisms operable through individual initiative. However, when these conditions are inhibited or not operable, student

teachers may be expected to have difficulty integrating their academic and their professional roles.

Such integration is important for three reasons. First, the integration of student teachers in faculties of education and in the schools in which they practice teach is likely to be positively related to the development of professional behaviours and professional identities (Clifton et al., 1994a, p. 179). In other words, student teachers are likely to develop the academic value of *inquiring* and the professional value of *knowing* if they are able to develop a sense of competence in their abilities and a sense of control of both their learning and their teaching.

Second, the integration of student teachers is likely to be positively related to their sense of purpose and to their understanding of the goals of learning (Newmann, 1981, p. 548). Students enrolled in faculties of education who comprehend the relationship between theory and practice and the relationship between their roles as university students and student teachers are more likely to internalize the norms and standards of the profession of teaching. In other words, student teachers are likely to develop the academic value of *thinking* and the professional value of *doing* if they have a sense of comprehensibility about their professional socialization as teachers.

Third, the integration of student teachers is likely to be positively related to the sense of social support or the "feeling that the group is an extension of himself [sic] and that he [sic] is an extension of the group" (Kanter, 1972, p.66). When student teachers feel supported by their professors, the teachers with whom they practice teach, and their peers, they are more likely to internalize the standards of the teaching profession (Clifton et. al, 1994a, 1994b). In

other words, student teachers who consider professors, peers, and the teachers, with whom they practice teach, as models or mentors are likely to develop the academic value of *achieving* and the professional value of *helping* as well as a sense of community belonging.

The integration of student teachers in faculties of education and the schools in which they student teach helps them to develop a sense of control, a sense of comprehensibility, and a sense of community. Seeman (1983, p.182) notes that these ideas are brought together under the rubric of alienation "...as questions about the sense of control (powerlessness) in social relations, about the incomprehensibility (meaninglessness) of the actor's world, and about the sense of community (or social isolation) that is sustained in it".

## ALIENATION

Although alienation is often treated in the literature as if it were a unitary construct, Seeman (1983, p.181) argues persuasively that it is "a domain of investigation--a sensitizing construct whose dimensions are to be measured". Drawing on historical, sociological, psychological, and economic conceptualizations, Seeman (1959) identifies five dimensions of alienation; powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement.

Seeman (1959, p. 784) characterizes powerlessness as "the expectancy or probability held by the individual that his own behaviour cannot determine the occurrence of the outcomes or reinforcements he seeks". In other words, student teachers who feel powerless attribute their success to chance or fate rather than to personal effort. Powerlessness is essentially similar, according to Seeman (1983), to such terms as locus of control, reification, learned helplessness, system blame, self-efficacy, and control ideology, although the similarity

is not generally acknowledged. Seeman (1972) notes that powerlessness is negatively related to learning relevant information that concerns personal control and achievement.

In a qualitative study of education students, Clifton et al. (1994a) suggest that student teachers reveal a sense of powerlessness in their comments about the design of their programs, the impersonality of the faculty, and the sense that their evaluations had little impact on the improvement of teaching in the faculty. The sociological ambivalence inherent in the roles of university student and student teacher contributes to feelings of powerlessness since student teachers find it difficult to know whether they should seek professional guidance from their university professors or from teachers in the schools. Student teachers in this situation do not know who to trust. They are unable to judge whether they should give primacy to their university student role or to their student teacher role. The following open-ended comments, indicate that student teachers who responded to the questionnaire quoted earlier are experiencing feelings of powerlessness:

- I have learned far more from teachers I have been placed with or teachers I am friends with than I have from faculty classes. The information I have gained is invaluable. (I wish I could say the same for the faculty.) Very few of the teachers or principles [sic] have confidence in the faculty. Many feel that the program should be updated, revamped, or even lengthened.
- When I think of teaching in the future, I become very apprehensive because I do not feel that I am fully prepared to handle all aspects of my teachable subjects.

Seeman (1959, p.786) characterizes meaninglessness as "a low expectancy that satisfactory predictions about future outcomes of behaviour can be made". Student teachers who have a sense of meaninglessness are unable to make meaningful connections between their professional socialization and what they will be doing as teachers in classrooms.

Clifton, et al. (1994a) conclude that comments about low academic standards, irrelevant assignments, and poor teaching by student teachers in their study indicate a sense of meaninglessness. The sociological ambivalence created by competing theoretical and practical sources of knowledge contributes to student teachers' views that university courses serve little purpose and that assignments in faculties of education are largely busywork. The following responses to the open-ended question from the survey of student teachers quoted earlier, reveal meaninglessness:

- For the first three years of the program, you "hammer out" assignments of little value to yourself or your prospective profession.
- When I speak to many people about the Faculty of Education, they laugh and say that it is a big joke. They say that the courses cannot be compared to eg. Science courses. What can we do to change this? It is outrageous that we are looked down upon by other faculties [sic]. I try to "stand up" for the Faculty, but I know I am fighting for a cause I don't believe in. Now if I, a Faculty of Education student, do not believe in the faculty, how is anyone else?

Seeman (1972, p. 472) characterizes normlessness as "a high expectancy that socially unapproved means are necessary to achieve given goals; the view that one is not bound by conventional standards in the pursuit of what may be, after all, quite conventional goals (e.g.,

position, wealth)". Seeman's treatment of normlessness distinguishes between norms that no longer govern behaviour (however clear they may be) and the question of whether norms are unclear or confusing (meaninglessness).

In response to the sociological ambivalence that patterns their professional socialization, education students may develop a sense of normlessness in which they perceive that the *ends* of becoming a teacher justify any *means* of achieving their goal. If student teachers perceive that certification is the most important aspect of teacher education, they may justify such behaviours as "telling professors what they want to hear" or "doing whatever it takes" to get an "A". They may not look forward or enjoy their courses but exert just enough effort to complete them in order to achieve necessary credits. The following open-ended responses of student teachers to the survey that has already been quoted, reveal a sense of normlessness:

- Most professors don't really care what the students think. They just want to hear, from the students, a reflection of what they personally believe. For example, this year I wrote two essays so far. The first essay I did by writing down what I thought...When I got the essay back, I had received a B-, not bad but the prof's comments were something like "very good arguments, good reasoning but I disagree with some of your arguments". For the second essay, I wised up. I wrote a bunch of crap I thought the teacher wanted to hear. I got an A, Go figure!
- I find that a lot of students in this faculty do not have a love or passion for what they're planning to teach. Most seem so lethargic or uninterested in

regards to school. I enjoy my courses outside the Faculty of Education more than the courses within because I find them a lot more stimulating for my mind. They are more challenging and often the professors in these subjects seem to love that subject more.

Seeman (1975, p. 94) characterizes social isolation, as "the sense of exclusion or rejection vs social acceptance". Education students who are confused by the sociological ambivalence of their university student role and their student teacher role may feel low social support from other university students and from educators in the practitioner community (Ziller, 1974, p.314). The social isolation of teachers has long been lamented (see Lortie, 1975, p.73), but more recently, low peer influence and social isolation among student teachers have also been identified as a problem. Goodlad (1990, p. 209), for example, suggests "... our overall impression was that students in teacher training programs lack a sense of cohesiveness that would encourage close bonds of friendship." The following comments of student teachers, in response to the open-ended question in a survey of education previously mentioned, indicate that student teachers reveal feelings of social isolation:

- Unfortunately, first year students like myself spend little time in the Education building itself and are thus forced to wander about this cold, uncomfortable campus feeling as if I don't really belong. The first year is in my opinion the most crucial for students and every effort should be made in order to make first year students feel more welcome and more comfortable.
- Part of this alienation feeling is because first year students are hardly ever 'physically' in the faculty. I bought a locker here thinking

> "Well, of course I need a locker and of course I'm in the Faculty of Education so I'd better buy one here." Wrong. I never use it but I'd would really love one in the science complex tunnels.

Finally, Seeman (1959, p. 790) characterizes self-estrangement as "the degree of dependence of the given behaviour upon anticipated future rewards". Seeman (1983) argues that many contemporary studies of work experience dealing with intrinsic satisfaction and pride in task performance and the importance of self-directed, complex and engaging work are actually studies of self-estrangement. The *detached* worker is one who is engaged in work that is not intrinsically rewarding but which is undertaken to satisfy basic needs such as earning money to pay for food and lodging. The student teacher who engages in activities that are not intrinsically rewarding, but are undertaken in anticipation of grades or certification may develop feelings of self-estrangement.

Clifton et al. (1994a) suggest that student teachers' comments reveal a sense of self-estrangement in overall negative feelings about the faculty, by their continuation in the faculty only for external rewards, and their decisions not to pursue graduate studies despite earlier intentions nor to recommend the faculty to people who have indicated that they would like to be teachers. The sociological ambivalence inherent in the roles student teachers play may lead to feelings of detachment from the faculty of education, other students and the process of socialization into the teaching profession. In response to the open-ended question in the survey quoted earlier, student teachers made the following comments that reveal a sense of self-estrangement:

- Sometimes I find myself driven by marks not the personal feeling of accomplishment--getting the work done on time is the most important goal--quality is second...My experience in this faculty has been horrible, I detest the place! I have a physical education degree and people think "we" are all stupid, but coming into this faculty has opened my eyes. Never have I been so bombarded with so much busywork.
- As many of us in this class are in the "final stretch" towards graduation, we are feeling, as a group, quite pessimistic about our futures. In some ways, we feel that the program has let us down and has not realistically prepared us for the teaching profession.

Based on the foregoing discussion of powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement, alienation may be a significant problem for student teachers. What student teachers think and feel affects their behaviour and role-related choices. Astin (1984) points out that it is student effort that translates university inputs (courses, requirements, library facilities, etc.) into student educational outcomes, (grades, educational aspirations, professional identities). Clearly, student teachers who are alienated are unlikely to make the effort necessary to translate the inputs of faculties of education and the schools in which they practice teach into educational outcomes such as academic achievement and professional identity. In other words, student teachers who are alienated, are unlikely to assume their full share of responsibility for their professional socialization.

## ALIENATION AND PROFESSIONAL SOCIALIZATION

The link between alienation and professional socialization is made explicit by Seeman (1972, p. 520). He argues that the five varieties of alienation: powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement are the obverse of each of the tasks of professional socialization. As stated earlier, the five tasks of professional socialization include: 1) acquiring an intellectual understanding of a body of recognizable knowledge and theory, 2) becoming certifiably competent in a skill, 3) becoming able to regulate one's conduct according to the norms of the profession, 4) involving oneself in work for its intrinsic rather than its extrinsic rewards, and 5) developing a sense of loyalty to others and the duty of professional exchange.

First, the sense of powerlessness stands opposite to the sense of competence, mastery, and autonomy that characterize the professional. Although Seeman (1972, p. 521) concedes that *sense* of control is not the same as *level* of skill or competence, he points out that the process of professional socialization is directed at the development of a sense of competence--both as a matter of professional behaviour and of professional attitudes. Feelings of powerlessness in student teachers include the sense of ambivalence about one's ability to control events, rewards or being able to count on, trust, or to get help from others. Powerlessness can be expected to have a negative effect on academic achievement and to have a negative effect on professional identity.

Second, meaninglessness is the obverse of having the intellectual understanding of a recognized body of theory and knowledge of the professional (Seeman, 1972, p. 521). Student teachers who are unable to integrate theory and practice are less likely to develop

professional understanding and a sense of meaninglessness. Feelings of meaninglessness in student teachers include a sense of ambivalence about what they will do in the future. Meaninglessness can be expected to have a negative effect on academic achievement and to have a negative effect on professional identity.

Third, the sense of normlessness stands in direct contrast to the internalized ethical codes and standards that constrain professionals to use his or her talents in a socially responsible manner. Student teachers who develop a sense of normlessness are ambivalent about the ethical standards of the teaching profession. Feelings of normlessness are evident when student teachers justify telling professor whatever they want to hear, doing whatever it takes to get good grades, and completing certification requirements by whatever route is necessary. Normlessness can be expected to have a negative impact on academic achievement and a negative impact on professional identity.

Fourth, feelings of social isolation are the obverse of professional collegiality in which individuals share their expertise freely with other professionals and provide support to other members of the profession. Student teachers feel ambivalent about their relationships with professors and peers are unlikely to develop a sense of community belonging with members of their profession. Social isolation can be expected to have a negative effect on academic achievement and a negative effect on professional identity.

Fifth, self-estrangement stands opposite to the professional's intrinsic work orientation. Lacey (1977) distinguishes between people who have intrinsic motivation and who are committed to the teaching profession and those who view learning to teach as a means of achieving some other goal. Self-estrangement in student teachers includes

ambivalence about teaching and feelings of worry, restlessness, and depression. Self-estrangement can be expected to have a negative impact on academic achievement and a negative impact on professional identity.

In counterpoising the five dimensions of alienation with the five tasks of professional socialization, Seeman (1972) reveals the importance of including alienation in any discussion of professional socialization in student teachers. Based on the foregoing discussion, it is expected that in those faculties of education in which sociological ambivalence fosters feelings of alienation in student teachers, the process of professional socialization may have negative consequences for academic achievement and professional identity. In such cases, the process of professional socialization may serve to weaken student teachers' sense of competence, mastery, and autonomy rather than to strengthen it, may limit intellectual understanding rather than expand it, may block internalization of ethical codes and standards rather than promote it, may prevent the emergence of collegiality rather than encourage it, and may impede an intrinsic orientation to teaching rather than foster it.

Conversely, one might expect that in faculties of education in which sociological ambivalence is somehow mitigated, that the process of professional socialization reduces alienation among student teachers. In such cases, student teachers internalize the professional values of knowing, doing, and helping as well as the academic values of inquiring, thinking, and achieving in accomplishing the five tasks of professional socialization.

The relationship of alienation to professional socialization is not well understood. Although alienation is evident in over 90 percent of the comments of student teachers in response to an open-ended question in a study of education students at the University of

Manitoba, it is not known whether these comments are representative (Clifton et al., 1994a). The fact that there was such a high proportion of comments indicating alienation in student teachers however, prompted the present study and raises important questions for the professional identity of student teachers. In particular, the present study seeks to answer the following questions: 1) *Are student teachers alienated?* 2) *What is the relationship between alienation and the professional identity of student teachers?* 3) *What are the effects of university and background variables on alienation?* and finally, 4) *What are the effects of university and social background, alienation, and student effort on the grade point average and on the professional identity of student teachers?*

The experiences of student teachers in faculties of education and in the schools in which they student teach are patterned by sociological ambivalence. The conflicting normative expectations emanating from such experiences contribute to feelings of alienation in student teachers. This study proposes that sociological ambivalence produces alienation in student teachers and that alienation negatively influences the educational outcomes of professional socialization, academic achievement and professional identity By testing a model that controls for university and social background differences and includes student effort and academic achievement variables, the impact of alienation on professional identity can be estimated. The development and testing of the model is an attempt to answer the questions posed above and to clarify the relationships between variables of interest.

## THEORETICAL MODEL

This study proposes that there is a relationship between alienation in student teachers and the ability of student teachers to acquire a professional identity as teachers. As previously

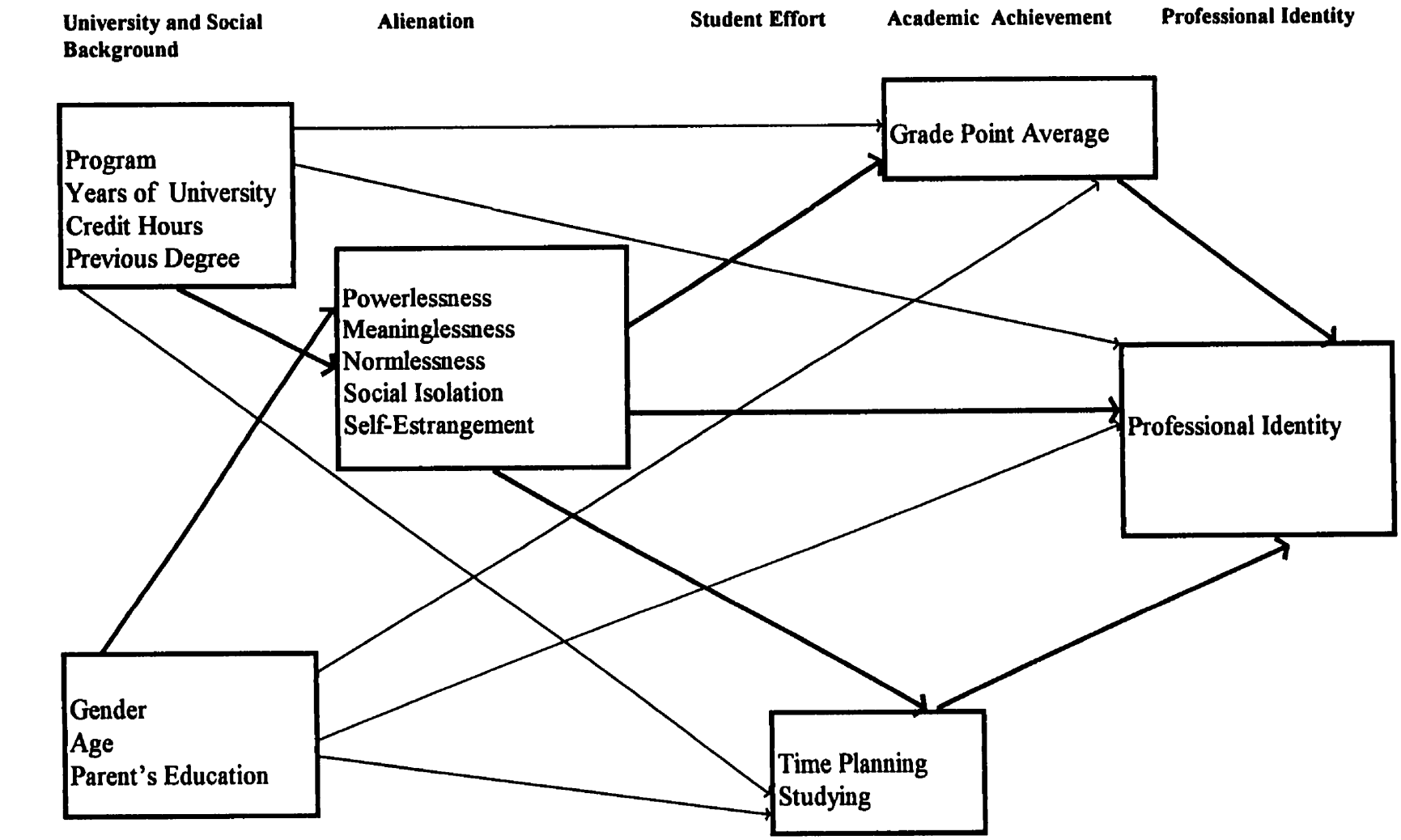


Figure 1. Theoretical Model

stated, professional identity is acquired through a process of professional socialization that actively involves both institutions and individuals. Institutions, such as faculties of education and the schools in which student teachers practice teach, provide the social structure within which student teachers are expected to accomplish the tasks of professional socialization and to acquire a professional identity as teachers. Individual student teachers may respond to the sociological ambivalence of the social structure by failing to make the effort necessary to accomplish the tasks of professional socialization. The alienation of student teachers that prevents them from making these necessary efforts links the social structure of professional socialization to the behaviour of student teachers. This argument is consistent with Seeman's (1972, p. 469) treatment of alienation as an intervening variable that is produced by the social structure and that produces behavioral consequences. Although a considerable amount of professional socialization literature has identified that both institutional and individual factors are important in the educational process (see for example, Astin, 1993; Becker, 1961; Coleman. 1990; Merton, 1982, Pascarella & Terenzini, 1991; Simpson, 1979; Weidman, 1989; Zeichner & Gore, 1990), few researchers have empirically tested relationships between these factors. In this study, alienation in student teachers provides limited but meaningful measures of the sociological ambivalence inherent in teacher education and links it to the behaviour of individuals.

A theoretical model, based on the review of the literature, guides the examination of the relationships between alienation, student effort, and professional identity. More specifically, it is an educational attainment model, that includes university background and social background variables, alienation variables, student effort variables, and measures of

academic achievement and professional identity. The model consists of these five groups of variables which are hypothesized to be related to one another, as shown in Figure 1.

Reading Figure 1 from left to right, university and social background variables represent the first group of variables. Considerable research specifies that background variables should be included in models like this one, in order to account for factors, other than those of primary interest, that may influence educational outcomes (Bidwell, 1989). That is, university background variables, *program*, *years of university*, *credit hours* and *previous degree* and social background variables, *gender*, *age*, and *parents' education* are included because it is likely that these variables are correlated with other variables in the model.

Previous research (Clifton & Roberts, 1993; Etcheverry et al., 1993; Mandzuk, 1994) examined the influence of background variables in models of the quality of life of students, professional socialization, and time use. Based on this literature, university background characteristics, such as *program*, *years of university*, *number of credit hours*, and having a *previous degree*, are hypothesized to have effects on the dependent variables, academic achievement, professional identity, and on the relationship between alienation variables and these dependent variables. The university background variables are included because they relate to differences in student teachers' involvement in the social structure of the university. Differences among student teachers with respect to the amount and type of university experiences are likely to influence the way students experience their university education (Bank et al., 1990; Tinto, 1988; Weidman, 1989). In particular, student teachers enrolled in the elementary program within the faculty of education in this study, form a cohort that takes education and elective courses together whereas student teachers in the secondary program

major in diverse programs offered by other faculties until their final year. Consequently, student teachers enrolled in the secondary program typically take fewer courses together than their elementary program counterparts.

The social background variables that are included, *gender*, *age*, and *parents' education*, relate to certain characteristics of individual student teachers that may influence student teachers' responses to sociological ambivalence and the degree to which alienation affects their behaviour. Research on gender, age, and socioeconomic status suggests that social group membership may have important effects on the relationship between alienation in student teachers and professional identity. Literature related to alienation suggests that females are less likely than males to experience alienation and that females are more likely than males to become committed to their professional identity. Some research (see Kasworm & Pike, 1994, p. 693) suggests that older and younger students experience university in significantly different ways. Younger students are likely to be more socially integrated in the university than older students, but may be less able to understand how to benefit from their academic experiences in the institution. Parents' education may have an effect on alienation in student teachers if students are influenced to achieve similar levels of education as their parents or if students are influenced positively or negatively by their parents' attitudes to the teaching profession.

The second group of variables include five alienation variables, powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement. These are hypothesized to be the most important explanatory variables in the model. The five dimensions of alienation relate to the student teachers' sense of powerlessness to influence

their experiences in university, their sense of meaninglessness, their sense of normlessness, their sense of social isolation from professors and other students, and their sense of self-estrangement. Lack of effort and involvement, reduced learning, lower academic performance, and lower educational expectations are associated with alienation (see Newmann, 1981; Newmann et al., 1989; Otto & Featherman, 1975). Therefore, it is proposed that alienation has a negative effect on student effort, on academic achievement, and on professional identity.

The third group of variables measures student effort with respect to the way that they manage their time. Student effort variables include measures of time planning and the number of hours student teachers devote to studying and related activities. Student teachers who organize their time and set their priorities around their academic pursuits are demonstrating personal control over their own learning (see Etcheverry, 1995). In fact, Britton and Tesser, (1991) suggest that time planning may be a stronger predictor of college grades than academic achievement. Student teachers who become more involved in teaching-related activities, in planning their work and in spending time studying may reduce alienation by their efforts and concomitantly increase their opportunities to acquire a professional identity as teachers. The location of the student effort variables in the model reflects the notion that student effort may mediate the effects of alienation on academic achievement and professional identity. By including student effort variables as intervening variables it may be possible to better estimate the effects of alienation on professional identity.

Academic achievement, measured by grade point average, is placed next in the model. In university life, academic achievement assumes a place of great importance to student

teachers. Grades provide them with feedback on their performance and represent the currency of the academic world, conferring status, privilege, reward, and increased career opportunities on those who perform well. Academic achievement is related to student effort, and as previously mentioned, student teachers who feel alienated are unlikely to organize their time around academic pursuits or to spend time studying in order to achieve well academically.

Professional identity, the primary dependent variable in the model, is placed last. It is a measure of the degree of commitment student teachers develop toward the profession of teaching, and represents a key educational outcome of the professional socialization of student teachers. Student teachers acquire a professional identity by accomplishing the five tasks of professional socialization identified earlier. Student teachers who feel alienated are unlikely to make the effort necessary to accomplish the tasks of professional socialization. Failure to accomplish the tasks for whatever reasons means that student teachers are unlikely to internalize the values, altitudes, or behaviours of professional teachers.

The next chapter, Chapter 3, provides the methodology for the study. First, the background of the study and a description of the sample of students who participated in the study and the survey instrument is presented. Following the background information, the variables used in the study are described in some detail. Finally, the procedures that will be used to analyze the data and to examine the theoretical model are presented.

# CHAPTER 3

# METHODOLOGY

In this chapter, the methodology for this study is presented in three sections. The first section presents the background of the study, describes the sample of students from whom data are collected and the survey instrument. The second section describes the sixteen variables that are used in this study. The operationalization, measurement, and descriptive statistics for each variable is presented. The third section describes the statistical procedures used to test the four questions posed in this study. Of course, the structural equation modelling techniques used to analyse three of these questions are guided by the theoretical model presented in Chapter 2.

## SAMPLE AND SURVEY INSTRUMENT

The study, from which the data used in this research were obtained, was conducted in 1992 in the Faculty of Education at the University of Manitoba in response to a request by the Dean of Education, Dr. John Stapleton. The study was co-directed by Dr. R. A. Clifton, Educational Administration and Foundations, and Dr. Lance W. Roberts, Department of Sociology. Other members of the research team included Dr. James C. Welsh, Curriculum: Mathematics and Natural Sciences, graduate students, Emily Etcheverry, Shelley Hasinoff, and David Mandzuk, and four research assistants, Bob DeBrouwere, Alison Elliot, Barbara Fuller, and Barbara Vuketz.

A major part of the study involved the administration of a survey instrument to undergraduate students. Based on the results of research that accumulated from an earlier study (see Clifton et al., 1987) and in order to test some new hypotheses, the original

instrument was revised to reflect a few minor changes in some scales and to add the alienation and time management scales. The revised survey instrument for this study was approved by a Faculty of Education ethics review committee in December 1991. The approved instrument was administered in February, 1992.

A stratified random cluster sampling technique was used to select the sample of undergraduate education students for this study. This procedure involved identifying the mandatory courses in each year of both the B.Ed. and B.Ed./After Degree programs and then selecting a random sample of classes from these programs. Twenty-seven classes, representing approximately 20 percent of the student population within each academic year, were selected to complete the survey. Survey instruments were administered to 363 students during regular instructional time in the month of February, 1992. The surveys took approximately 25 minutes to complete. In total, 269 surveys were completed, providing a response rate of approximately 74 percent. Surveys were not completed by students who chose not to participate, who were absent, or who were enrolled in more than one of the classes of students that was sampled. However, non-response is mainly due to the fact that some students are enroled in more than one of the classes that were selected to complete the survey but they are counted as part of the total number of students who received surveys in each class. That is, the response rate is probably an under representation and it is higher. Table 1 is a summary of sample and the return rates by year of enrolment.

**Table 1**
Sample and Return Rates for Undergraduate Students

| Year | Sample Size | Surveys Returned | Response Rate |
|---|---|---|---|
| 1 | 72 | 60 | 83.3 |
| 2 | 113 | 89 | 78.8 |
| 3 | 73 | 59 | 80.8 |
| 4 | 105 | 61 | 58.1 |
| Total | 363 | 269 | 74.1 |

This study is based on data gathered using selected parts of the survey instrument that is reported in full in the Appendix. Part 1 and Part 2 of the survey include items that address the quality of life of students. Part 3 includes four sections that examine social psychological dispositions, including professional identity, alienation, self-concept of ability, and effort. Part 4 asks for factual information about students' social background, including gender, age, ethnic origin, and parents' education and occupation. Part 5 asks students about their university education. Finally, Part 6 consists of an open ended section in which students were invited to share their comments or suggestions about the faculty. The comments reported throughout the dissertation are quoted from student teachers' responses to this part of the survey instrument.

## MEASUREMENT OF THE VARIABLES

As noted in the previous chapter, the theoretical model (Figure 1) that guides the analyses is comprised of five groups of variables, university and social background variables, alienation variables, student effort variables, an academic achievement variable, and a professional identity variable. In this section, the measurement of the variables are presented

in the same order as in the theoretical model, from left to right. Since the descriptive statistics of the alienation variables will be fully described in the first section of Chapter 4 in answer to the first question posed in the study, they are only briefly described here in order to justify their inclusion in the structural equation analyses used to examine the remaining three questions.

Some of the variables described in this section are measured by a single item and others are measured by scales composed of a number of items. The operationalization of each variable is indicated along with the response rate from the sample surveyed in this study. In addition, descriptive statistics are presented that indicate that all variables are normally distributed. Any recoding that has been done is noted in the text and/or on the frequency tables. Inter-item correlations and factor analyses are reported for variables composed of a number of items. Each variable is labelled with an abbreviation, that will be used throughout the dissertation and in all statistical tables, for ease of identification.

University and Social Background Variables

Four questions are posed in this study. Three of these questions arise from the theoretical model in which the primary variables of interest are the alienation and professional identity variables. As argued in Chapter 2, it is important to take into account factors other than alienation that may influence professional identity. Therefore this study includes university and social background variables that are often associated with educational attainment.

Four university background variables are included, *program*, *years of university*, *credit hours*, and *previous degree*. *Program* is a measure of the type of program in which

students are enroled, that is whether they are enrolled in the program to prepare elementary or secondary school teachers. *Years of university* is a measure of the number of years of experience that student teachers have completed and *credit hours* is a measure of the amount of course work student teachers are taking. *Previous degree* is a measure of whether student teachers have already completed a degree. Three social background variables are included, *gender, age*, and *parents' education. Gender* and *age* measure student characteristics and *parents' education* measures the highest level of education of student teachers' parents.

Program (PROG). Question 5 of Part V of the questionnaire asks *From which undergraduate Faculty of Education program do you intend to graduate?* Response choices include undecided, coded as 4, *elementary*, coded as 3, *secondary*, coded as 2, and none, coded as 1. In order to retain as much data as possible, the 13 responses of undecided and none are recoded to create a dichotomous variable that reflects the two basic programs -- *elementary*, coded as 3, and *secondary*, coded as 2. To apportion these 13 responses fairly to either the elementary and secondary program, they are first classified by gender and then, based on the percentage of each gender in the sample in each program, they are randomly assigned to each program. As a result, a total of 125 respondents (48 percent) are classified as being in the elementary program and 136 respondents (52 percent) are classified as being in the secondary program. Data are missing for 8 respondents.

Years of University (YEAR). Question 3 of Part V of the questionnaire asks *How many years of university have you completed?* (If you have been a part-time student, then estimate the number of equivalent full-time years). The range of university experience is from 0 to 8 years. The mean number of years of university reported is 2.6 and the median is 2

years. Frequencies and percentages are presented in Table 2 and descriptive statistics for years of university are presented in Table 3. As the tables illustrate, the variable is close to being normally distributed. Data are missing for 8 respondents.

**Table 2**
Frequencies and Percentages for Years of University (YEAR)

| Years | Frequencies | Percentages |
|---|---|---|
| 0 | 34 | 13.0 |
| 1 | 57 | 21.8 |
| 2 | 44 | 16.9 |
| 3 | 44 | 16.9 |
| 4 | 39 | 14.9 |
| 5 | 23 | 8.8 |
| 6 | 12 | 4.6 |
| 7 | 7 | 2.7 |
| 8 | 1 | 0.4 |
| Total | 261 | 100.0 |

**Table 3**
Descriptive Statistics for Years of University (YEAR)

| | | | |
|---|---|---|---|
| Mean | 2.60 | Std. Dev. | 1.87 |
| Mode | 1.00 | Median | 15.00 |
| Kurtosis | -0.49 | Skewness | 0.49 |

Credit Hours (CRHRS). Question 4 of Part V of the questionnaire asks *How many credit hours of university work are you taking this academic year? (September to April).* Data are recoded to normalize the distribution for statistical purposes. The recoding collapses responses into 3 credit hour increments because this is the standard unit used in this Faculty of Education. Most student teachers take a standard full course load as illustrated by the

mode and median of 30 credit hours, which represents 5 full two-term or ten single-term courses (or some combination of these). The range is from 3 to 39 credit hours. Nearly 94 percent of the respondents are taking 18 or more credit hours. Frequencies and percentages are reported in Table 4 and descriptive statistics for the number of credit hours are presented in Table 5. As Table 5 illustrates, the variable is slightly leptokurtic and skewed to the left. Data are missing for 11 respondents.

**Table 4**
Frequencies for Credit Hours (CRHRS)

| Number of Credit | Frequencies | Percentages |
|---|---|---|
| 9 | 7 | 2.7 |
| 15 | 9 | 3.5 |
| 18 | 7 | 2.7 |
| 21 | 12 | 4.7 |
| 24 | 47 | 18.2 |
| 27 | 31 | 12.0 |
| 30 | 101 | 39.1 |
| 33 | 28 | 10.9 |
| 36 | 9 | 3.5 |
| 39 | 7 | 2.7 |
| Total | 258 | 100.0 |

***Recodes 9(3, 6);15 (12, 17);21 (20);24 (25);27 (26, 28); 30 (31); 33 (32); 36 (35); 39 (40, 57, 60, 63)**

**Table 5**
Descriptive Statistics for Credit Hours (CRHRS)

| | | | |
|---|---|---|---|
| Mean | 27.48 | Std. Dev. | 5.78 |
| Mode | 30.00 | Median | 30.00 |
| Kurtosis | 1.69 | Skewness | -1.03 |

Previous Degree (DEG). Question 1 of Part V of the questionnaire asks *Do you have an undergraduate university degree?* Nearly 82 percent of the respondents report having no previous degree, coded as 1, and slightly more than 18 percent report that they have a previous degree, coded as 2. No descriptive statistics are provided because dichotomous variables meet the assumption of normality. Data are missing for 9 students.

The university background variables have been discussed and now a discussion of the social background variables is in order.

Gender (GEN). Data on gender is provided by student self-reports to question 1 in Part IV of the questionnaire. The questionnaire asks *What gender are you?* Females are coded as 1 and males are coded as 2. Completed questionnaires were returned by 198 females, representing almost 75 percent of the sample, and 67 males, representing just over 25 percent of the sample. Based on the statistics published in the University of Manitoba Institutional Statistics Book (1992) the sample conforms well to the actual distribution of students by gender in undergraduate programs in the Faculty of Education in 1992 (74.8% female, 25.2% male). As noted previously, no descriptive statistics are provided for dichotomous variables because they meet the assumption of normality. Data are missing for 4 students.

Age (AGE). Question 2 of Part IV of the questionnaire asks *How old are you?* In order to normalize the distribution, responses of 32 years and over are recoded as 32. Nearly 75 percent of the sample are between the ages of 17 and 24, which is typical of full-time undergraduate students in Canada (Wigdor & Foot, 1988, p. 52). Table 6 presents the frequencies and percentages and Table 7 presents the descriptive statistics for the age of the

students. As Table 7 illustrates, the variable is slightly skewed to the right but is close to being normally distributed. Data are missing for 4 students.

**Table 6**
Frequencies and Percentages for Age (AGE)

| Age* | Frequencies | Percentages |
|---|---|---|
| 17 | 1 | 0.4 |
| 18 | 30 | 11.3 |
| 19 | 35 | 13.2 |
| 20 | 35 | 13.2 |
| 21 | 40 | 15.1 |
| 22 | 28 | 10.6 |
| 23 | 20 | 7.5 |
| 24 | 9 | 3.4 |
| 25 | 8 | 3.0 |
| 26 | 5 | 1.9 |
| 27 | 12 | 4.5 |
| 28 | 8 | 3.0 |
| 29 | 9 | 3.4 |
| 30 | 5 | 1.9 |
| 31 | 3 | 1.1 |
| 32 | 17 | 6.4 |
| Total | 265 | 100.0 |

***Recodes: 32 (34, 35, 36, 37, 38, 39, 40, 41, 42, 43)**

**Table 7**
Descriptive Statistics for Age (AGE)

| | | | |
|---|---|---|---|
| Mean | 22.57 | Std. Dev. | 4.09 |
| Mode | 21.00 | Median | 21.00 |
| Kurtosis | -0.06 | Skewness | 1.00 |

Parents' Education (PTED). Data on mother's and father's education are derived from students' self-reports to question 4 of Part IV of the questionnaire that asks *What is the highest level of education that your parents received?* There are nine response choices ranging from *elementary school*, coded as 1, to completed graduate degree, coded as 9. In order to create this variable, the responses for the highest level of education attained by mothers are added to the responses for highest level of education attained by fathers. The combined scores have a possible range of 2 to 18. Over 50 percent of students report that the combined education of their parents is less than completion of a bachelor's degree for each and just over 14 percent report that both their parents have some post-secondary education. Table 8 presents the frequencies and percentages for parents' education and Table 9 presents the descriptive statistics for this variable. As Table 9 illustrates, the variable is slightly platykurtic and slightly skewed to the right. Data are missing for 8 students.

**Table 8**
Frequencies and Percentages for Parents' Education (PTED)

| Levels | Frequencies | Percentages |
|---|---|---|
| 2 | 19 | 7.3 |
| 3 | 10 | 3.8 |
| 4 | 35 | 13.4 |
| 5 | 26 | 10.0 |
| 6 | 24 | 9.2 |
| 7 | 20 | 7.7 |
| 8 | 16 | 6.1 |
| 9 | 26 | 10.0 |
| 10 | 23 | 8.8 |
| 11 | 15 | 5.7 |
| 12 | 10 | 3.8 |
| 13 | 8 | 3.1 |
| 14 | 8 | 3.1 |
| 15 | 10 | 3.8 |
| 16 | 8 | 3.1 |
| 17 | 2 | 0.8 |
| 18 | 1 | 0.4 |
| Total | 261 | 100.0 |

**Table 9**
Descriptive Statistics for Parents' Education (PTED)

| | | | |
|---|---|---|---|
| Mean | 7.84 | Std. Dev. | 3.92 |
| Mode | 4.00 | Median | 7.00 |
| Kurtosis | 0.61 | Skewness | 0.48 |

Alienation Variables

In the first section of Chapter 4, the descriptive statistics of the alienation variables are presented more fully to answer the first question posed by this study, *Are student teachers alienated*? In this section the alienation variables are presented only to the degree that ensures that they are measured well enough to be used in the structural equation analyses. Five dimensions of alienation are included in this study: *powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement.* Three dimensions, powerlessness, meaninglessness, and normlessness are derived from items in Part III, Section II in the survey instrument and two dimensions, social isolation and self-estrangement are derived from items in Part I, Section I.

All five of the alienation scales presented were constructed using factor analysis. Factor analysis examines the patterns of covariation among the items in each dimension of a scale, and allows researchers to determine if the patterns are congruent with theoretically defined constructs (Kim & Mueller, 1978). First, Pearson Product Moment correlations are calculated. Second, the correlation matrix is factor analysed. Next, the factor loadings are examined to determine whether an underlying dimension has been identified. Kim and Mueller (1978, p.70) suggest that as a rule of thumb, factor loadings may be considered to be substantial if they are above 0.30, thus explaining approximately 10 percent of the variance in an item. Factor loadings, the eigenvalue and the percentage of variance explained are reported for each of the factors. Eigenvalues that exceed 1 are used as a guide for determining the number of factors that are present since "the variance that each standardized variable contributes to a principle components extraction is 1, an eigenvalue of less than 1 is

not important, from a variance perspective, as an observed variable" (Tabachnick & Fidell, 1989, p.634). The percentage of variance explained provides a means of evaluating the importance of a factor. Tabachnick & Fidell, (1989, p.639) state, "The percentage of variance explained accounted for by a factor is the amount of variance in the original variables (where each has contributed one unit of variance) that has been condensed into the factor".

The first three alienation scales, powerlessness, meaninglessness, normlessness are constructed from responses to statements derived from the Classroom Alienation Scale (Blumenkrantz & Tapp, 1977), modified slightly and reworded to be more applicable to a Faculty of Education. Students respond by choosing from a four point scale that ranges from strongly agree to strongly disagree.

Powerlessness (POWR). Seven items are recognizable as the dimension of *powerlessness* described by Seeman (1959). These items examine the extent to which students feel that they are unable to control their relationships with others, the decision-making process, their chances for success, and the way that the faculty functions. The 7 items measuring *powerlessness* (POWR) are:

1. *Too many people in this faculty are just out for themselves.*
2. *These days, students don't know who to count on.*
3. *There is no one in this faculty that students can really trust.*
4. *There is little use talking to professors because they are not interested in the problems of students.*
5. *There is not much chance students will do anything to make this faculty a better place to learn.*
6. *Success in this faculty is more dependent upon luck than on real ability.*
7. *In spite of what people say, the lot of the student is getting worse.*

Inter-item correlations and factor loadings are reported in Table 10. The inter-item

correlations range from 0.20 to 0.51 and the factor loadings range from 0.57 to 0.76. The eigenvalue is 2.96 and the percent of variance explained is 42.30. The relatively high factor loadings, eigenvalues, and percent of variance explained suggest that these items strongly relate to the factor. The scale has an alpha reliability coefficient of 0.77.

*Powerlessness* is a scale in which higher numbers represent greater feelings of powerlessness. The frequencies and percentages are reported in Table 11 and the descriptive statistics are reported in Table 12. Data are missing for 28 respondents.

**Table 10**
Inter-item Correlations and Factor Loadings for Powerlessness (POWR)

| Item | 1. | 2. | 3 | 4. | 5. | 6. | 7. | Factor Loadings |
|---|---|---|---|---|---|---|---|---|
| 1. | 1.00 | 0.51 | 0.44 | 0.31 | 0.34 | 0.34 | 0.41 | 0.76 |
| 2. | | 1.00 | 0.37 | 0.31 | 0.30 | 0.30 | 0.29 | 0.69 |
| 3. | | | 1.00 | 0.39 | 0.29 | 0.28 | 0.20 | 0.66 |
| 4. | | | | 1.00 | 0.43 | 0.26 | 0.30 | 0.66 |
| 5. | | | | | 1.00 | 0.26 | 0.20 | 0.61 |
| 6. | | | | | | 1.00 | 0.30 | 0.58 |
| 7. | | | | | | | 1.00 | 0.57 |
| | | | | | | | Eigenvalue = | 2.96 |
| | | | | | | | Percent of Common Variance= | 42.30 |

**Table 11**
Frequencies and Percentages for Powerlessness (POWR)

| Scale Scores* | Frequencies | Percentages |
|---|---|---|
| 9 | 2 | 0.8 |
| 11 | 5 | 2.1 |
| 12 | 15 | 6.2 |
| 13 | 19 | 7.9 |
| 14 | 36 | 14.9 |
| 15 | 45 | 18.7 |
| 16 | 40 | 16.6 |
| 17 | 23 | 9.5 |
| 18 | 18 | 7.5 |
| 19 | 9 | 3.7 |
| 20 | 9 | 3.7 |
| 21 | 7 | 2.9 |
| 22 | 6 | 2.5 |
| 23 | 3 | 1.2 |
| 24 | 4 | 1.7 |
| Total | 241 | 100.0 |

**Recodes: 24 (25, 26)**

**Table 12**
Descriptive Statistics for Powerlessness (POWR)

| | | | |
|---|---|---|---|
| Mean | 15.89 | Std. Dev. | 2.89 |
| Mode | 15.00 | Median | 15.00 |
| Kurtosis | 0.55 | Skewness | 0.69 |

Meaninglessness (MEAN). The items measuring meaninglessness tap the extent to which student teachers remain ambivalent about their future as teachers, indicating a sense of purposelessness and disconnectedness of student teachers from others in the faculty of education. The 3 items measuring *meaninglessness* are:

1. *Students are unhappy because they do not know what they want out of life.*
2. *There are many students who do not know what to do with their lives.*
3. *Many students in this faculty are lonely.*

The inter-item correlations, ranging from 0.32 to 054 and the factor loadings, ranging from 0.73 to 0.86, are reported in Table 13. The relatively high factor loadings, the eigenvalue of 1.89, and the percent of variance explained of 63 percent suggest that the items load on a single factor. The alpha reliability coefficient of 0.70 confirms that the variance in the items may be attributable to a common source.

*Meaninglessness* is a scale in which the higher the score, the greater the student teacher's sense of meaninglessness. The frequencies and percentages are reported in Table 14 and the descriptive statistics are reported in Table 15. Data are missing for 21 respondents.

**Table 13**
Inter-item Correlations and Factor Loadings for Meaninglessness (MEAN)

| Item | 1. | 2. | 3. | Factor Loadings |
|---|---|---|---|---|
| 1. | 1.00 | 0.54 | 0.46 | 0.86 |
| 2. | | 1.00 | 0.32 | 0.79 |
| 3. | | | 1.00 | 0.73 |
| | | | Eigenvalue= | 1.89 |
| | | | Percent of Common Variance= | 63.00 |

**Table 14**
Frequencies for Meaninglessness (MEAN)

| Scale Scores | Frequencies | Percentages |
|---|---|---|
| 3 | 2 | 0.8 |
| 4 | 2 | 0.8 |
| 5 | 5 | 2.0 |
| 6 | 22 | 8.9 |
| 7 | 49 | 19.8 |
| 8 | 58 | 23.4 |
| 9 | 58 | 23.4 |
| 10 | 30 | 12.1 |
| 11 | 16 | 6.5 |
| 12 | 6 | 2.4 |
| Total | 248 | 100.0 |

**Table 15**
Descriptive Statistics for Meaninglessness (MEAN)

| | | | |
|---|---|---|---|
| Mean | 8.23 | Std. Dev. | 1.64 |
| Mode | 8.00 | Median | 8.00 |
| Kurtosis | 0.29 | Skewness | -0.13 |

Normlessness (NORM). Agreement with the items measuring normlessness suggest that student teachers feel that completion of courses and certification requirements, by any route, is justified. One item, *The grades students receive will be an accurate reflection of their ability,* is reverse coded so that agreement indicates a sense that students are not necessarily rewarded for their ability alone. The 5 items measuring normlessness are:

1. *Few students look forward to their course work.*
2. *It is really best to tell your professors what they want to hear.*
3. *Students will do almost anything to get good grades.*
4. *Most students do not enjoy their courses but do the work in order to get the things they want.*
5. *The grades students receive will be an accurate reflection of their ability.* (reverse scored)

The inter-item correlations, ranging from 0.04 to 0.39 and the factor loadings ranging from 0.46 to 0.79 are reported in Table 16. The factor loadings, the eigenvalue of 1.86 and the percent of variance explained, 37.3, suggest that the items relate well to the factor. The alpha reliability coefficient of 0.56, the lowest for all of the scales, is still within the acceptable range for research purposes (Smith & Glass, 1987, p.106).

*Normlessness* is a scale in which higher scores indicate a greater sense of normlessness. The frequencies and percentages are reported in Table 17 and the descriptive statistics are reported in Table 18. Data are missing for 12 students.

**Table 16**
Inter-item Correlations and Factor Loadings for Normlessness (NORM)

| Item | 1. | 2. | 3. | 4. | 5. | Factor Loadings |
|---|---|---|---|---|---|---|
| 1. | 1.00 | 0.33 | 0.39 | 0.24 | 0.25 | 0.79 |
| 2. | | 1.00 | 0.13 | 0.23 | 0.18 | 0.63 |
| 3. | | | 1.00 | 0.15 | 0.04 | 0.57 |
| 4. | | | | 1.00 | 0.12 | 0.55 |
| 5. | | | | | 1.00 | 0.46 |
| | | | | | Eigenvalue = | 1.86 |
| | | | | | Percent of Common Variance = | 37.20 |

**Table 17**
Frequencies and Percentages for Normlessness (NORM)

| Scale Scores | Frequencies | Percentages |
|---|---|---|
| 9 | 1 | 0.4 |
| 10 | 3 | 1.2 |
| 11 | 17 | 6.6 |
| 12 | 38 | 14.8 |
| 13 | 49 | 19.1 |
| 14 | 47 | 18.3 |
| 15 | 51 | 19.8 |
| 16 | 23 | 8.9 |
| 17 | 16 | 6.2 |
| 18 | 6 | 2.3 |
| 19 | 2 | 0.8 |
| 20 | 4 | 1.6 |
| Total | 257 | 100.0 |

**Table 18**
Descriptive Statistics for Normlessness (NORM)

| | | | |
|---|---|---|---|
| Mean | 14.04 | Std. Dev. | 1.99 |
| Mode | 15.00 | Median | 14.00 |
| Kurtosis | 0.34 | Skewness | 0.47 |

Social Isolation (ISO). The items that measure social isolation are in Part I of the survey and follow a common stem, *The Faculty of Education is a place where....* Student teachers are asked to rate the items on a four point scale ranging from strongly disagree to strongly agree. For this study, disagreement with the items indicated that student teachers experienced social isolation. The items form a unidimensional scale that includes perceptions of students' interactions with professors, peers, and others and a measure of the support students gain from relationships with others (see Mandzuk, 1994, p.9). Lack of such supportive relationships indicate feelings of social isolation. The 13 items (reverse scored) measuring *social isolation* are:

1. *Professors help me to do my best.*
2. *Professors listen to what I have to say.*
3. *I am treated with respect.*
4. *Professors treat me fairly.*
5. *People care about what I think.*
6. *Professors are fair and just.*
7. *Professors take a personal interest in helping me with my work.*
8. *Professors give me the marks I deserve.*
9. *People think a lot of me.*
10. *Mixing with other people helps me to understand myself.*
11. *Other students accept me as I am.*
12. *I get along well with the other students in my class.*
13. *I find it easy to get to know other people.*

**Table 19**
Inter-item Correlations and Factor Loadings for Social Isolation (ISO)

| Item | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | Factor Loadings |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1.00 | 0.47 | 0.35 | 0.39 | 0.33 | 0.48 | 0.68 | 0.38 | 0.20 | 0.18 | 0.15 | 0.11 | 0.00 | 0.68 |
| 2. | | 1.00 | 0.35 | 0.39 | 0.46 | 0.42 | 0.36 | 0.25 | 0.22 | 0.21 | 0.27 | 0.20 | 0.08 | 0.66 |
| 3. | | | 1.00 | 0.42 | 0.43 | 0.29 | 0.41 | 0.29 | 0.33 | 0.23 | 0.22 | 0.16 | 0.25 | 0.65 |
| 4. | | | | 1.00 | 0.26 | 0.54 | 0.29 | 0.47 | 0.22 | 0.21 | 0.15 | 0.19 | 0.10 | 0.65 |
| 5. | | | | | 1.00 | 0.23 | 0.36 | 0.25 | 0.37 | 0.34 | 0.25 | 0.20 | 0.30 | 0.65 |
| 6. | | | | | | 1.00 | 0.31 | 0.61 | 0.09 | 0.16 | 0.17 | 0.20 | 0.06 | 0.65 |
| 7. | | | | | | | 1.00 | 0.29 | 0.25 | 0.21 | 0.04 | 0.07 | 0.09 | 0.62 |
| 8. | | | | | | | | 1.00 | 0.06 | 0.13 | 0.23 | 0.06 | 0.01 | 0.57 |
| 9. | | | | | | | | | 1.00 | 0.39 | 0.19 | 0.38 | 0.33 | 0.51 |
| 10. | | | | | | | | | | 1.00 | 0.29 | 0.36 | 0.32 | 0.50 |
| 11. | | | | | | | | | | | 1.00 | 0.47 | 0.27 | 0.45 |
| 12. | | | | | | | | | | | | 1.00 | 0.39 | 0.45 |
| 13. | | | | | | | | | | | | | 1.00 | 0.36 |
| | | | | | | | | | | | | | Eigenvalue = | 4.33 |
| | | | | | | | | | | | | | Percent of Common Variance = | 33.33 |

**Table 20**
Frequencies and Percentages for Social Isolation (ISO)

| Scale Scores* | Frequencies | Percentages |
|---|---|---|
| 17 | 2 | 0.8 |
| 19 | 2 | 0.8 |
| 20 | 5 | 2.0 |
| 21 | 9 | 3.6 |
| 22 | 9 | 3.6 |
| 23 | 19 | 7.7 |
| 24 | 13 | 5.3 |
| 25 | 17 | 6.9 |
| 26 | 30 | 12.1 |
| 27 | 24 | 9.7 |
| 28 | 23 | 9.3 |
| 29 | 27 | 10.9 |
| 30 | 20 | 8.1 |
| 31 | 15 | 6.1 |
| 32 | 11 | 4.5 |
| 33 | 6 | 2.4 |
| 34 | 10 | 4.0 |
| 35 | 3 | 1.2 |
| 37 | 2 | 0.8 |
| Total | 247 | 100.0 |

**Recodes: 51 (37)**

The inter-item correlations, ranging from 0.01 to 0.68 and factor loadings ranging from 0.36 to 0.68 are reported in Table 19 indicate that the these items are strongly related to the factor. The alpha reliability coefficient for this scale is 0.82.

*Social isolation* is a scale composed of 13 items that are reverse scored so that the higher the score, the greater the student teacher's sense of social isolation. The frequencies and percentages are presented in Table 20 and the descriptive statistics for social isolation are reported in Table 21. Data are missing for 22 students.

**Table 21**
Descriptive Statistics for Social Isolation (ISO)

| | | | |
|---|---|---|---|
| Mean | 27.22 | Std.Dev. | 3.81 |
| Mode | 6.00 | Median | 27.00 |
| Kurtosis | -0.24 | Skewness | -0.03 |

Self-Estrangement (SELF). The items that measure self-estrangement are in Part I of the survey that asks students to rate items on a four point scale ranging from strongly agree to strongly disagree. Agreement with these items suggests that student teachers lack positive feelings of involvement in the faculty of education. The four items measuring *self-estrangement* are:

1. *I feel depressed.*
2. *I get upset.*
3. *I feel worried*
4. *I feel restless.*

The inter-item correlations, ranging from 0.30 to 0.49 and the factor loadings, ranging from 0.72 to 0.79 are presented in Table 22. The high factor loadings, an eigenvalue of 2.27, and the percent of variance explained of 56.90 indicate that the items are strongly related to the factor. The alpha reliability coefficient for this scale is 0.75.

**Table 22**
Inter-item Correlations and Factor Loadings for Self-Estrangement (SELF)

| Item | 1. | 2. | 3. | 4. | Factor Loadings |
|---|---|---|---|---|---|
| 1. | 1.00 | 0.46 | 0.44 | 0.49 | 0.79 |
| 2. | | 1.00 | 0.49 | 0.40 | 0.79 |
| 3. | | | 1.00 | 0.30 | 0.72 |
| 4. | | | | 1.00 | 0.72 |
| | | | | Eigenvalue = | 2.27 |
| | | | | Percent of Common Variance = | 56.90 |

**Table 23**
Frequencies and Percentages for Self-Estrangement (SELF)

| Scale Scores | Frequencies | Percentages |
|---|---|---|
| 4 | 4 | 1.6 |
| 5 | 13 | 5.1 |
| 6 | 12 | 4.7 |
| 7 | 31 | 12.2 |
| 8 | 57 | 22.4 |
| 9 | 43 | 16.9 |
| 10 | 40 | 15.7 |
| 11 | 18 | 7.1 |
| 12 | 19 | 7.5 |
| 13 | 11 | 4.3 |
| 14 | 5 | 2.0 |
| 16 | 1 | 0.4 |
| Total | 254 | 100.0 |

*Self-estrangement* is a scale in which higher scores indicate greater self-estrangement. The frequencies and percentages are presented in Table 23 and the descriptive statistics are presented in Table 24. Data are missing for 15 respondents.

**Table 24**
Descriptive Statistics for Self-Estrangement (SELF)

| | | | |
|---|---|---|---|
| Mean | 8.93 | Std. Dev. | 2.20 |
| Mode | 8.00 | Median | 9.00 |
| Kurtosis | 0.00 | Skewness | 0.25 |

Student Effort Variables

There are two variables that relate to student effort. One of the variables is a six item scale that relates to time planning attitudes and the other is based on a single item that asks student teachers to report how much time they spend in studying and related activities.

Time Planning *(PLAN)*. Questions 7 to 19 of Part III, Section 4 of the survey asks students to rate their strategies for managing their time on a five point scale ranging from always to never. The items are derived from a time management questionnaire developed by Britton and Tesser (1991). The following are the six items used in this study that measure *time planning:*

1. *Do you make a schedule of the activities you have to do on work days?*
2. *Do you make a list of the things you have to do each day?*
3. *Do you spend time each day planning?*
4. *Do you plan your day before you start it?*
5. *Do you write a set of goals for yourself each day?*
6. *Do you have a clear idea of what you want to accomplish during the next week?*

The inter-item correlations, ranging from 0.36 to 0.69 and the factor loadings, ranging from 0.60 to 0.85, are reported in Table 25. The high factor loadings, eigenvalue of 3.62, and the percent of variance explained of 60.40 suggest that these items are strongly related to the factor. The alpha reliability coefficient is 0.87 for this scale.

**Table 25**
Inter-item Correlations and Factor Loadings for Time Planning (PLAN)

| Item | 1. | 2. | 3. | 4. | 5. | 6. | Factor Loadings |
|---|---|---|---|---|---|---|---|
| 1. | 1.00 | 0.69 | 0.63 | 0.61 | 0.61 | 0.36 | 0.85 |
| 2. | | 1.00 | 0.57 | 0.57 | 0.58 | 0.44 | 0.84 |
| 3. | | | 1.00 | 0.56 | 0.56 | 0.38 | 0.81 |
| 4. | | | | 1.00 | 0.44 | 0.38 | 0.77 |
| 5. | | | | | 1.00 | 0.37 | 0.77 |
| 6. | | | | | | 1.00 | 0.60 |
| | | | | | | Eigenvalue = | 3.62 |
| | | | | | | Percent of Common Variance = | 60.40 |

Possible scores in the time planning scale range from 6 to 30, with higher scores representing more positive time planning skills. Reported scores also range from 6 to 30. The mean of 19.96 and the mode of 24.00 and the median of 20.00 suggest that student teachers in this sample tend to have positive time planning behaviour. The frequencies and percentages are reported in Table 26. The descriptive statistics for *time planning* are reported in Table 27 and are nearly normally distributed. Data are missing for 14 students.

**Table 26**
Frequencies and Percentages for Time Planning (PLAN)

| Scale Scores | Frequencies | Percentages |
|---|---|---|
| 6 | 1 | 0.4 |
| 8 | 1 | 0.4 |
| 9 | 4 | 1.6 |
| 10 | 7 | 2.7 |
| 11 | 2 | 0.8 |
| 12 | 6 | 2.4 |
| 13 | 4 | 1.6 |
| 14 | 10 | 3.9 |
| 15 | 11 | 4.3 |
| 16 | 15 | 5.9 |
| 17 | 6 | 2.4 |
| 18 | 22 | 8.6 |
| 19 | 21 | 8.2 |
| 20 | 24 | 9.4 |
| 21 | 20 | 7.8 |
| 22 | 19 | 7.5 |
| 23 | 16 | 6.3 |
| 24 | 25 | 9.8 |
| 25 | 14 | 5.5 |
| 26 | 9 | 3.5 |
| 27 | 7 | 2.7 |
| 28 | 2 | 0.8 |
| 29 | 3 | 1.2 |
| 30 | 6 | 2.4 |
| Total | 255 | 100.0 |

**Table 27**
Descriptive Statistics for Time Planning (PLAN)

| | | | |
|---|---|---|---|
| Mean | 19.96 | Std. Dev. | 4.83 |
| Mode | 24.00 | Median | 20.00 |
| Kurtosis | -0.14 | Skewness | -0.33 |

Studying (STUD). Question 3 in Part III, Section 4, of the survey asks students to estimate, for the term, the average number of hours per week they spend studying (including preparing for assignments, reading, reviewing notes, discussing content with professors, and other related activities). Data are recoded into blocks of 5 hours to summarize students' estimates and to normalize the distribution of responses. Possible responses range from 5 to 35 hours per week and reported scores also range from 5 to 35 hours per week. Approximately 75 percent of the respondents report that they study 20 hours or less while 25% report studying more than 20 hours per week. The frequencies and percentages are reported in Table 28 and the descriptive statistics are reported in Table 29. As Table 29 illustrates, the variable is slightly leptokurtic and slightly skewed to the right. Data are missing for 9 students.

**Table 28**
Frequencies and Percentages for Studying (STUD)

| Hours per Week* | Frequencies | Percentages |
|---|---|---|
| 5 | 46 | 17.7 |
| 10 | 63 | 24.2 |
| 15 | 51 | 19.6 |
| 20 | 37 | 14.2 |
| 25 | 25 | 9.6 |
| 30 | 17 | 6.5 |
| 35 | 21 | 8.1 |
| Total | 260 | 100.0 |

**Recodes: 5 (0, 1, 2, 3, 4); 10 (6, 7, 8, 9); 15 (11, 12, 13, 14); 20 (16, 17, 18); 25 (21, 22, 24); 30 (27, 28); 35 (32, 33, 34, 35, 37, 38, 40, 45, 50, 76)**

**Table 29**
Descriptive Statistics for Studying (STUD)

| | | | |
|---|---|---|---|
| Mean | 16.29 | Std. Dev. | 10.00 |
| Mode | 15.00 | Median | 9.09 |
| Kurtosis | 0.62 | Skewness | 0.61 |

Academic Achievement Variable

Performance in university is often measured by grades. Academic achievement is measured in this study by one variable, grade point average.

Grade Point Average (GPA). Question 6 in Part V of the questionnaire asks students to indicate their grade point average. There are eight response categories, each representing a range of grade point averages. There are only 4 cases in the first three categories, representing grade point averages ranging from 0 to 1.9. In order to normalize the distribution, these four responses are recoded as belonging to the fourth category, which

includes grade point averages ranging from 2.0 to 2.4. Seventy percent of the student teachers in this study had grade point averages of 3.0 or higher which is comparable to the nearly sixty-nine percent of education students reported to have grade point averages of 3.0 or higher in the University of Manitoba Institutional Statistics Book (1992). Frequencies and percentages are reported in Table 30 and descriptive statistics for grade point average are reported in Table 31. As these tables illustrate, the distribution for this variable is close to being normal. Data are missing for 12 students.

**Table 30**
Frequencies and Percentages for Grade Point Average (GPA)

| Code | Grade Point Average | Frequencies | Percentages |
|---|---|---|---|
| 4 | 0.0-2.4 | 20 | 7.8 |
| 5 | 2.5-2.9 | 57 | 22.2 |
| 6 | 3.0-3.4 | 108 | 42.0 |
| 7 | 3.5-3.9 | 64 | 24.9 |
| 8 | 4.0-4.5 | 8 | 3.1 |
| Total | | 257 | 100.0 |

**Table 31**
Descriptive Statistics for Grade Point Average (GPA)

| | | | |
|---|---|---|---|
| Mean | 5.90 | Std.Dev. | 0.95 |
| Median | 6.00 | Mode | 6.00 |
| Kurtosis | -0.35 | Skewness | -0.20 |

Professional Identity Variable

Professional Identity (PROFID). Items in Part III, Section I, ask students to respond to 23 true or false statements concerning their commitment to teaching. The scale used in this study was modified from the instrument developed by Santee and Jackson's (1979) so that it would be applicable to student teachers. For half of the items, agreement reflects commitment to teaching and for the other half, disagreement reflects commitment. The items are recoded in the direction of commitment by recoding the negative items and a total score was then obtained for each student teacher by summing across all responses. The twenty-three items measuring professional identity are:

1. *When people are discussing the topic of teaching I probably will listen and/or join in the conversation.*
2. *If I come across an article related to teaching, I probably will read it with interest.*
3. *If problems develop in my life, I try to think them through as they will affect my teaching.*
4. *With respect to teaching, I don't care if I make mistakes. (reverse scored)*
5. *During the past week, I have had no conversations about teaching (reverse scored)*
6. *During the past week, I have made 10 or more decisions in which my interest in teaching has influenced the decision process.*
7. *I rarely or never think about how I can become a better teacher.(reverse scored)*
8. *Compared to other concerns, I worry little about how good a teacher I will be.(reverse scored)*
9. *If I had to give up something, becoming a teacher is the last thing I would give up.*
10. *When I am involved in activities related to teaching, I usually feel indifferent.* (reverse scored)
11. *If I become a better teacher than everyone else, it would make little difference to me. (reverse scored)*
12. *When I can, I seek out situations in which I can express myself as a teacher.*
13. *Being a teacher is not important to me. (reverse scored)*
14. *I feel bad when I think I am not going to be a good teacher.*
15. *I rarely devote much time to my teaching interests.* (reverse scored)

16. *When I meet new people, it is important to me that they know I will be a teacher.*
17. *I typically organize my day so that I can work toward my goals that are related to teaching.*
18. *Being a teacher is of little value to me. (reverse scored)*
19. *Being a teacher will have no effect on my life. (reverse scored)*
20. *I enjoy it when people encourage me to become a teacher.*
21. *I would feel a great sense of loss if suddenly I were unable to be a teacher.*
22. *I am strongly committed to being a good teacher.*
23. *If people could know only one thing about me, I would want them to know I will be a teacher.*

When this scale was previously analysed by Mandzuk, (1994, p.112) Kuder-Richardson coefficients were obtained of 0.74 and 0.85, indicating internal consistency. Possible scores for this scale range from 0 to 23, with higher scores indicating greater commitment by student teachers to their professional identity as teachers. Reported scores range from 4 to 23 but the two lowest scores of 4 are recoded to 7 to normalize the distribution. The frequencies and percentages are reported in Table 32 and the descriptive statistics are reported in Table 33. As these tables illustrate, the variable is slightly leptokurtic and skewed to the left. Data are missing for 26 students.

**Table 32**
Frequencies and Percentages for Professional Identity (PROFID)

| Scale Scores* | Frequencies | Percentages |
|---|---|---|
| 7 | 2 | 0.8 |
| 8 | 1 | 0.4 |
| 9 | 2 | 0.8 |
| 10 | 1 | 0.4 |
| 11 | 5 | 2.1 |
| 12 | 3 | 1.2 |
| 13 | 4 | 1.6 |
| 14 | 10 | 4.1 |
| 15 | 13 | 5.3 |
| 16 | 21 | 8.6 |
| 17 | 27 | 11.1 |
| 18 | 41 | 16.9 |
| 19 | 38 | 15.6 |
| 20 | 33 | 13.6 |
| 21 | 22 | 9.1 |
| 22 | 18 | 7.4 |
| 23 | 2 | 0.8 |
| Total | 243 | 100.0 |

**Recodes: 7 (4)**

**Table 33**
Descriptive Statistics for Professional Identity (PROFID)

| | | | |
|---|---|---|---|
| Mean | 17.89 | Std. Dev. | 2.95 |
| Mode | 18.00 | Median | 18.00 |
| Kurtosis | 1.63 | Skewness | -1.08 |

## PROCEDURES

As previously noted, this study is guided by four questions. The first question will be answered by analyzing the descriptive statistics and histograms of the alienation variables. The remaining three questions will be answered by testing the theoretical model using structural equation modelling procedures. This technique involves the use of multiple regression analysis to examine the relationships suggested by the theoretical model. The theoretical model, as presented in Chapter 2, outlines the hypothesized relationships between the sixteen variables included in the model and provides a guide for the analyses that are used.

Causal models, such as the model used in this study, are generated from theory that is derived independently from the data that one is proposing to analyse. In a causal model, distinctions are made between independent and dependent variables. The independent variables are those variables whose variability is determined by causes outside the model. In this study, the university and social background variables are considered to be the independent variables. Consistent with structural equation modelling, no attempt will be made to explain the variability in the independent variables or the relationships between the independent variables. The dependent variables are those variables whose variation is explained by either the independent or other dependent variables in the model. In this study, alienation, student effort, academic achievement and professional identity are dependent variables.

The first step in answering the questions generated by the model is to calculate the Pearson Product Moment correlations between all variables in the model. Second, regression coefficients are calculated between the independent and the dependent variables and these are used to estimate the magnitude of relationships when other variables are controlled. All of the

variables, except gender and program, are measured at least at the ordinal level and display appropriate variability to be used in these modelling procedures. As explained earlier in this chapter, both gender and program are nominal variables but are recoded so they can be used as dummy variables in the analyses.

Although some sources indicate that only data measured at the interval or ratio level should be used in regression analysis, variables measured at the ordinal level, as long as they are close to being normally distributed, are often used in these procedures because regression analyses are robust enough for this type of data (Asher, 1976; Bohrnstedt & Carter, 1971; Pedhazur, 1982). As shown in the appropriate tables, the sixteen variables used in the model are either normally distributed or close to being normally distributed, and they meet the univariate assumptions underlying multiple regression analysis.

Both standardized and unstandardized regression coefficients are computed to estimate the effects of independent variables, net of the other variables, on dependent variables. Standardized and unstandardized regression coefficients indicate the amount of change in an dependent variable, in standard deviations, in relation to a one-unit change in an independent variable, when other variables are controlled. Standardized regression coefficients are computed from variables that have been standardized so that the mean is 0 and the standard deviation is 1. Unstandardized regression coefficients are computed from the raw data. The use of standardized regression coefficients is most appropriate for comparing the effects of different variables within a theoretical model, such as the one in this study. Unstandardized regression coefficients, in turn, are most appropriate for testing the same model using different populations. That is, standardized and unstandardized regression coefficients allow

different interpretations of the effects of independent variables and intervening variables on dependent variables. Both are presented in this study so that the effect parameters of the variables in this study can be compared, at some future date, with the results of similar studies.

## SUMMARY

In summary, this chapter presents three aspects of the methodology used in this study. The first section describes the background to the study, including the sample of students from whom data were collected and the survey instrument. Responses to selected parts of the survey instrument, that was administered to a stratified random cluster sample of undergraduate students from the Faculty of Education at the University of Manitoba, provide the data for this study. The second section presents the sixteen variables used in this study. Included in this section is the measurement of each of the variables and descriptive statistics for the 16 variables used in the study. The third section describes the procedures used to analyse these data. Descriptive statistics and structural equation modelling procedures are used to answer the questions posed by this study. The next chapter presents the results of the empirical examination of the model.

# CHAPTER 4

# RESULTS

In this chapter, two types of analyses, descriptive and multivariate, are reported to examine the four questions that arise from the review of the literature. First, descriptive statistics are reported for the alienation variables to answer the question, 1) *Are student teachers alienated?* Second, a series of multivariate analyses, that examine the interrelationships between the variables in the model, are reported. These analyses provide answers to the three questions: 2) *What is the relationship between alienation and professional identity of student teachers? 3) What are the effects of university and social background variables on alienation*? *4) What are the effects of university and social background variables, alienation, and student effort on the grade point average and on the professional identity of student teachers?* In the fourth question, the model that is examined assumes that the alienation variables and student effort variables are mediating variables between the university and social background variables and grade point average and professional identity. All of the relationships implicit in these three questions are outlined in the theoretical model, which was presented in Chapter 2.

## DESCRIPTIVE ANALYSES

Descriptive statistics for each of the alienation variables, *powerlessness, meaninglessness*, *normlessness*, *social isolation,* and *self-estrangement* have been briefly described in Chapter 3. In this section of Chapter 4, each of the alienation variables will be more fully examined and described. The alienation variables are derived from scales that were developed through factor analysis of responses to items in a survey of education students, as

described earlier. The score that student teachers obtain on each alienation scale is the sum of their responses to the scale items. Each item for each of the five dimensions of alienation has four possible responses that are scored from 1 to 4, in which higher scores indicate that student teachers have greater degrees of alienation.

Along with a discussion of the descriptive statistics, a histogram, with a normal curve superimposed, is presented for each of the alienation variables. The alienation variables are described in terms of the *location*, *spread*, and *shape* (Hartwig & Dearing, 1979, p. 13). The *location* refers to the point at which a distribution is anchored along a continuum and is often measured by the mean, median, and mode. The *spread* of the distribution refers to its dispersion or variability and is described by the standard deviation. Finally, the *shape* refers to the type of distribution, whether it is bell-shaped, symmetrical, skewed, uni or bi-modal, and whether it has outliers at the extremes, or gaps in the middle. In addition to examining these descriptive statistics, the theoretical midpoint is calculated and reported for each dimension of alienation to provide a point that is theoretically halfway between the lowest possible score and the highest possible score. Using this theoretical midpoint as a rough gauge, the percentage of cases that fall above and below it are examined. If a small percentage of cases lie above the theoretical midpoint, that is an indication that few student teachers experience alienation on that dimension. If, on the other hand, a large percentage of cases lie above the theoretical midpoint, that is an indication that many student teachers experience alienation on that dimension. The five dimensions of alienation that are described on these three criteria are *powerlessness*, *meaninglessness*, *normlessness*, *social isolation*, and *self-estrangement*.

Powerlessness

Figure 2 represents the data for the *powerlessness* scale. Possible scores for the *powerlessness* scale range from 7 to 28. However, reported scores range from 9 to 26 and to normalize the distribution, responses of 24, 25, and 26 were recoded as 24. As indicated in the percentages column of Table 11 of Chapter 3, approximately 76.7 percent of student teachers have scores below the theoretical midpoint of 17.5 whereas 23.3 percent have scores above it. The location of the *powerlessness* variable is indicated by a mean of 15.9, and both a median and a mode of 15.0, all of which are below the theoretical midpoint of 17.5.

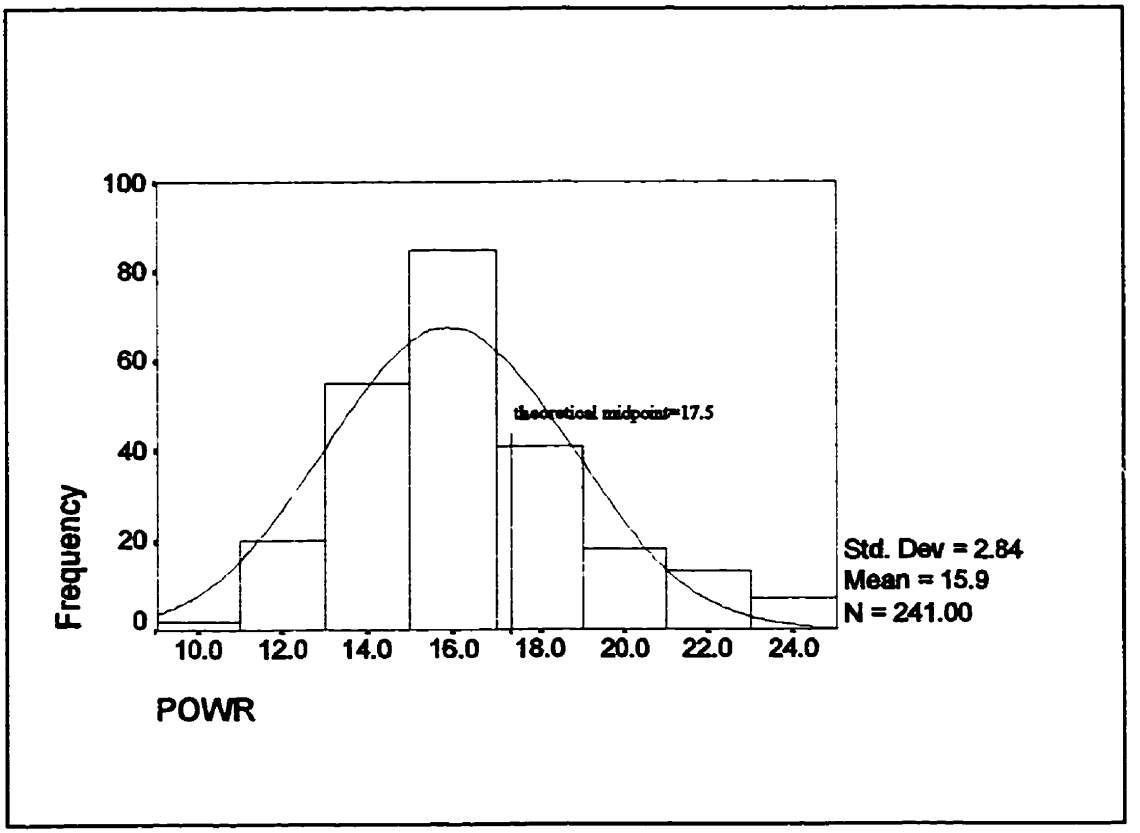


Figure 2. Histogram for Powerlessness (POWR)

These data indicate that although the majority of student teachers in this study do not seem to experience powerlessness, a considerable number do. Specifically, nearly one-quarter of the student teachers are in doubt about who they can count on or who they can trust; they feel that many people are just out for themselves; that luck is more important than real ability; that they do not make a difference in the faculty; and that the lot of the average student is getting worse. As Figure 2 also illustrates, and as reported in Chapter 3, the variable is slightly leptokurtic and slightly skewed to the right.

Meaninglessness

*Meaninglessness* is a dimension of alienation with a range of possible scores from 3 to 12, and reported scores also range from 3 to 12. Figure 3 represents the data for the *meaninglessness* scale. As indicated in the percentages column in Table 14 of Chapter 3, 33.3 percent of student teachers have scores below the theoretical midpoint of 7.5 whereas 66.7 percent student teachers have scores above the theoretical midpoint. That is, more than two-thirds of the student teachers, in this study, experience some degree of meaninglessness in their lives. Recalling that *meaninglessness* is a measure of ambivalence about the future, these data suggest that student teachers do not feel generally integrated into a larger community of student teachers and they do not generally feel a connection between the activities in which they are involved and their future as teachers. As Figure 3 illustrates, the variable is nearly normally distributed.

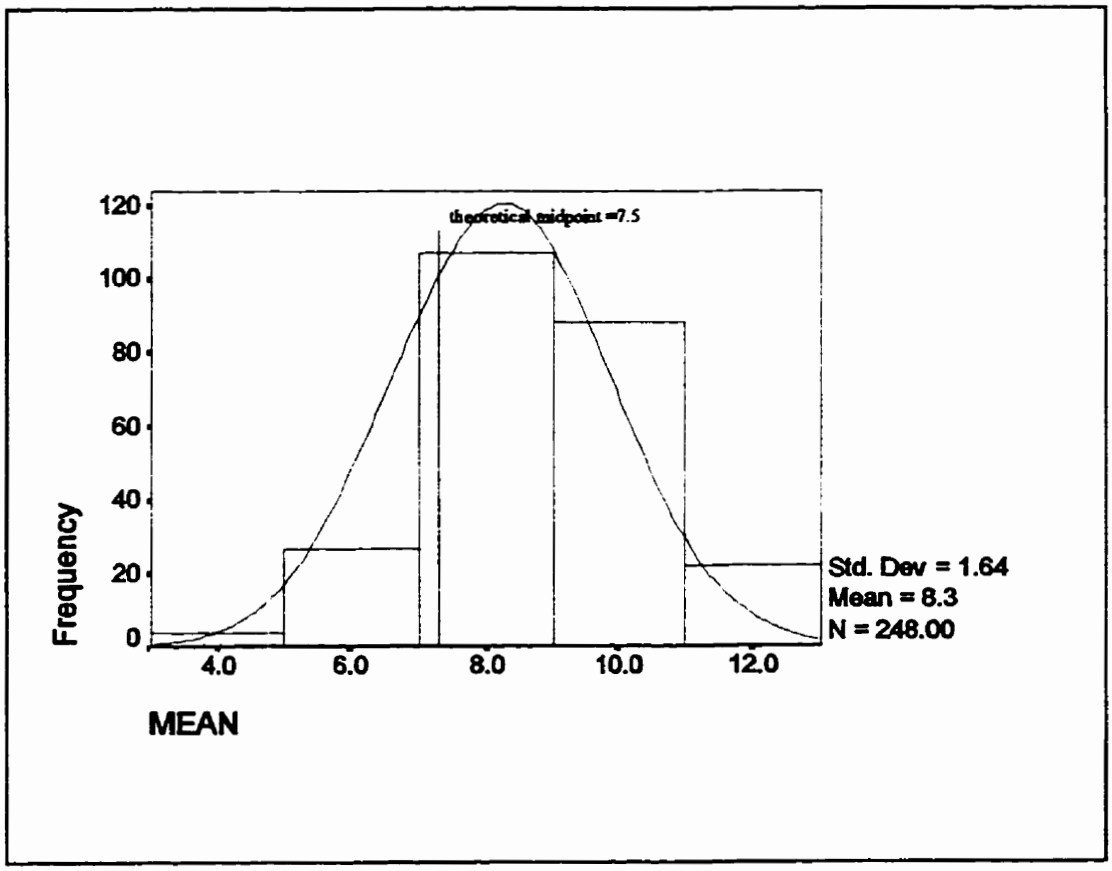


Figure 3. Histogram for *Meaninglessness* (MEAN)

Normlessness

Figure 4 represents the data for the *normlessness* dimension. Normlessness is a scale with possible scores ranging from 5 to 20. Reported scores range from 9 to 20. As indicated in the percentages column of Table 17 of Chapter 3, 23.0 percent of student teachers have scores below the midpoint of 12.5 on the *normlessness* scale and 77.0 percent of students have scores above the theoretical midpoint. The high percentage of student teachers who have scores above the theoretical midpoint and the fact that the mean of 14.0, the mode of 15.0, and the median of 14.0 lie above the theoretical midpoint suggest that a significant number

of student teachers in this study experience normlessness. Specifically, student teachers generally agree with items that state that students will do almost anything to get good grades; that few students either enjoy or look forward to their courses but do the work to get what they want; that they tell professors what they want to hear; and that their grades do not reflect their ability. As Figure 4 illustrates, the variable is slightly leptokurtic and slightly skewed to the right.

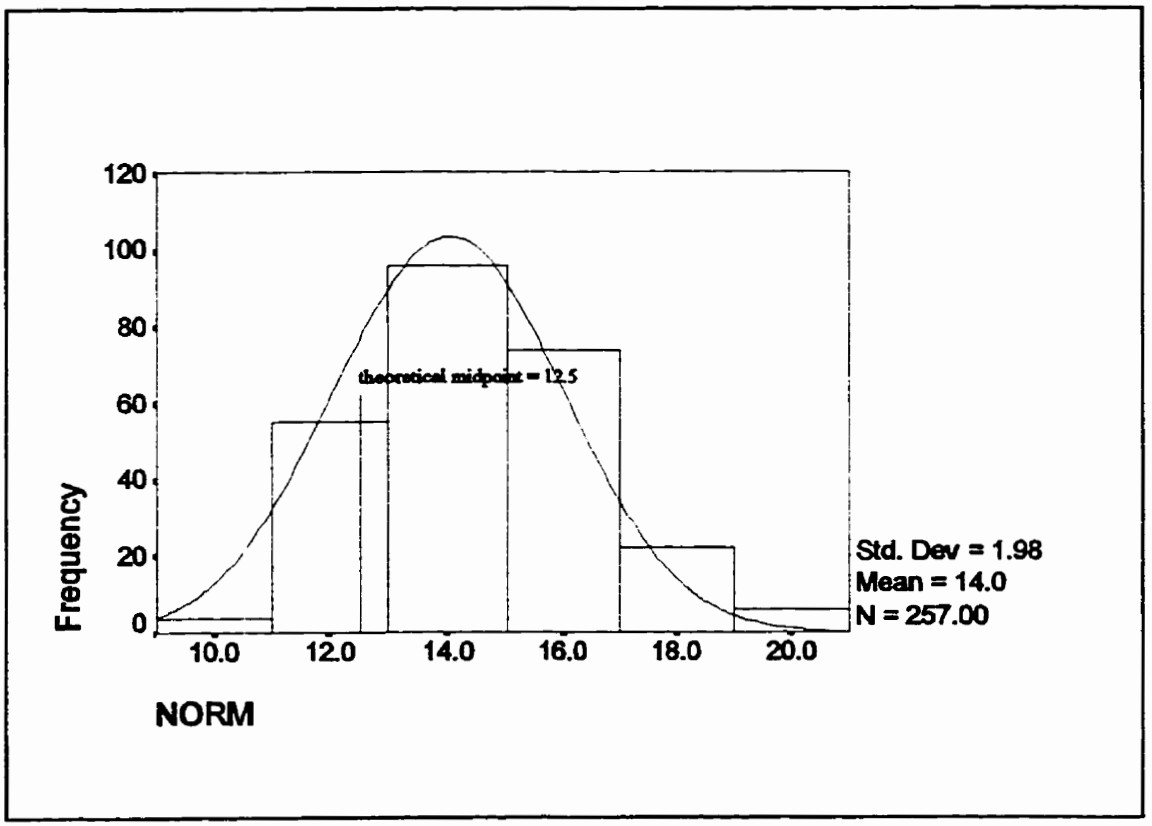


Figure 4. Histogram for *Normlessness* (NORM)

Social Isolation

*Social isolation* is a dimension of alienation with possible scores ranging from 13 to 52. Reported scores range from 17 to 51 but the score of 51 is an outlier and in order to normalize the distribution it is recoded to the next lowest score of 37. Figure 5 represents the data for the *social isolation* scale. As indicated in the percentages column of Table 20 in Chapter 3, 92.8 percent of student teachers have low *social isolation* scores of less than the theoretical midpoint of 32.5, whereas 7.2 percent have scores above it. Coupled with a mean of 27.2, median of 27.0 and mode of 26.0, that are well below the theoretical midpoint of 32.5, these data suggest that very few student teachers experience social isolation. Generally, student teachers feel that professors listen to them, are fair and just, help them, give them the marks they deserve, and that other students care about what they think, treat them with respect, and accept them as they are. As Figure 5 illustrates, the distribution for this variable is has two peaks but is close to a normal distribution .

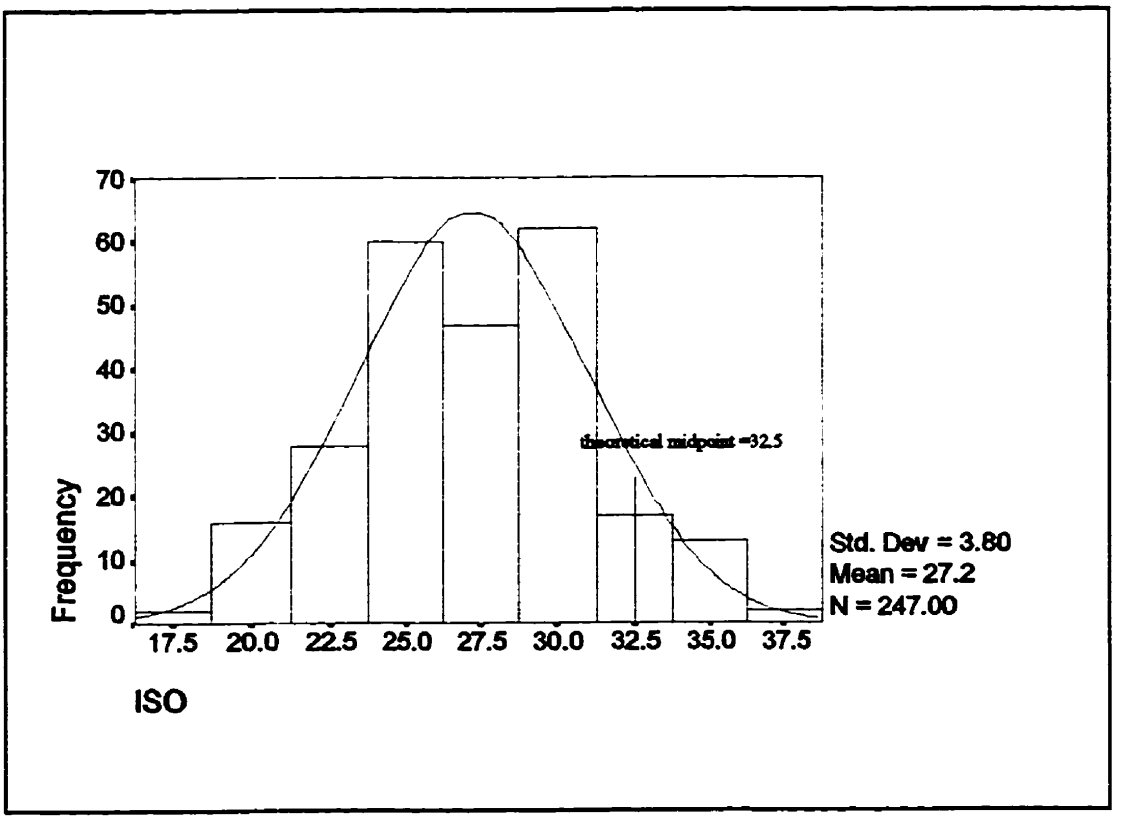


Figure 5. Histogram for *Social Isolation* (ISO)

Self-estrangement

Possible scores for self-estrangement range from 4 to 16 and reported scores also range from 4 to 16. Figure 6 represents the data for the *self-estrangement* scale. As indicated in the percentages column of Table 23 of Chapter 3, 78.6 percent of student teachers have low self-estrangement scores of less than the theoretical midpoint of 10.0, and 21.4 percent have scores above this point. This result, coupled with the mean of 8.9, mode of 8.0, and the median of 9.0, that are all below the theoretical midpoint, suggests that self-estrangement

is not a problem for most student teachers but is nevertheless is a problem for a considerable number of them. Student teachers who feel a sense of self-estrangement agree with statements that they feel worried, upset, depressed, or restless in the faculty of education. As Figure 6 illustrates, the shape of the distribution is very close to being normal.

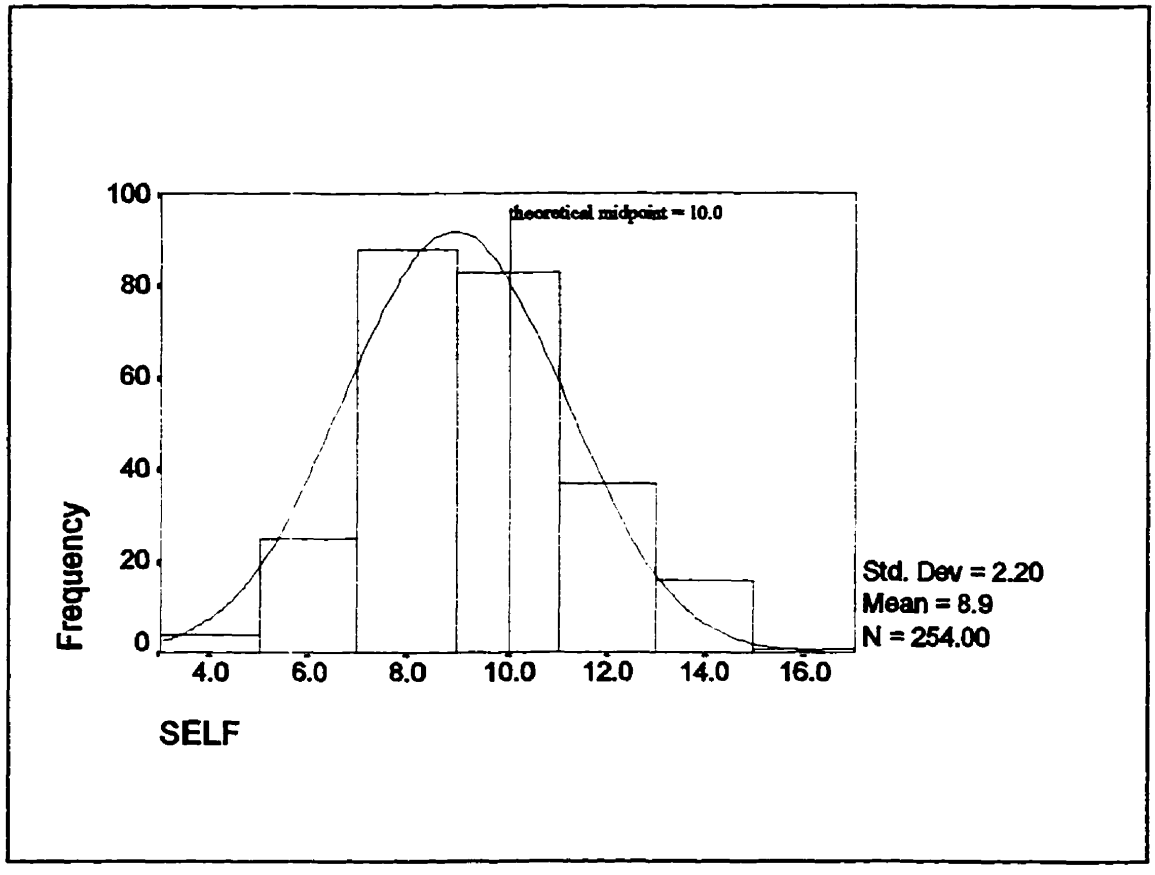


Figure 6. Histogram for *Self-estrangement* (SELF)

Based on the descriptive data, presented in Figures 2 through 6, student teachers are not equally alienated on all five dimensions of alienation. However, it appears that the answer to question one is that to some degree, student teachers *are* alienated along each of the five dimensions of alienation. Although many student teachers experience

meaninglessness and normlessness, and some student teachers experience powerlessness and self-estrangement, fewer student teachers experience social isolation. This quantitative analysis supports, to some degree, qualitative data concerning alienation in student teachers (Clifton et al., 1994a) and also refines the point made in that article. Specifically, Clifton et al. (1994a) suggest that student teachers are more alienated than these data indicate.

Nevertheless, the finding that student teachers experience alienation along the dimensions of powerlessness, meaninglessness, normlessness, and self-estrangement may be important for developing policies and programs in faculties of education. However, this may not necessarily be a cause for concern, unless alienation in student teachers is related in some way to the outcomes of their professional socialization, particularly their grade point averages and their professional identity. To determine whether the relationship between alienation and professional socialization is a matter for concern, the bivariate relationships between alienation and other variables in the theoretical model are calculated. The next sets of analyses present the correlations and regression coefficients for the relationships between university and social background variables, alienation, student effort, grade point average, and professional identity in an effort to obtain preliminary answers to the remaining three questions that guide this study.

## CORRELATION MATRIX

Table 34 presents the zero order correlations, means, and standard deviations for all of the variables in the model. The first set of associations of interest are among the alienation variables. There are moderately high and significant correlations among all of the alienation variables ranging from 0.25 ($p \leq 0.001$) to 0.45 ($p \leq 0.001$) but not so high that

multicollinearity is considered to be a problem in the analyses that follow. The significant positive correlations between the five dimensions of alienation suggests that student teachers who experience one form of alienation are also likely to experience other forms of alienation.

Four of the five alienation variables, *powerlessness,* (-0.17, $p \leq 0.01$) *meaninglessness,* (-0.14, $p \leq 0.05$) *social isolation,* (-0.33, $p \leq 0.001$) and *self estrangement* (-0.21, $p \leq 0.01$) are significantly and negatively related to *professional identity.* In other words, the answer to the question, *What is the relationship between alienation and professional identity in student teachers?* is that four of the dimensions of alienation are negatively related to professional identity. This result is congruent with Seeman's (1983) view that alienation is negatively related to professional identity. It is interesting to note, however, that the relationship between *normlessness* and *professional identity* is not significant.

A number of the university and social background variables are related to the alienation variables and an examination of these relationships provides some answers to the question, *What are the effects of university and social background on alienation?* Specifically, university and social background variables are significantly related to three of the alienation variables, *meaninglessness*, *normlessness*, and *self-estrangement.* There are significant negative relationships between *year* (-0.20, $p \leq 0.01$) and *meaninglessness* and between *previous degree* (-0.15, $p \leq 0.05$) and *meaninglessness.* In other words, student teachers are less likely to experience a sense of meaninglessness as they spend more years in

**Table 34**

Correlation Coefficients, Means, and Standard Deviations for Variables in the Theoretical Model

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. PROG | 1.00 | | | | | | | | | | | | | | | |
| 2. YEAR | -0.28*** | 1.00 | | | | | | | | | | | | | | |
| 3. CRHRS | -0.11 | 0.00 | 1.00 | | | | | | | | | | | | | |
| 4. DEG | -0.22*** | 0.62*** | 0.09 | 1.00 | | | | | | | | | | | | |
| 5. GEN | -0.27*** | 0.13* | 0.05 | 0.07 | 1.00 | | | | | | | | | | | |
| 6. AGE | -0.13* | 0.59*** | -0.18** | 0.39*** | 0.08 | 1.00 | | | | | | | | | | |
| 7. PTED | 0.02 | 0.06 | 0.04 | 0.07 | 0.04 | -0.17** | 1.00 | | | | | | | | | |
| 8. POWR | -0.05 | 0.01 | 0.07 | -0.02 | 0.04 | -0.02 | -0.11 | 1.00 | | | | | | | | |
| 9. MEAN | 0.10 | -0.20** | -0.02 | -0.15* | -0.08 | -0.12 | 0.00 | 0.33*** | 1.00 | | | | | | | |
| 10. NORM | -0.07 | 0.06 | 0.14* | -0.01 | 0.20*** | -0.05 | 0.00 | 0.45*** | 0.25*** | 1.00 | | | | | | |
| 11. ISO | -0.03 | -0.07 | -0.09 | -0.11 | 0.05 | 0.00 | -0.01 | 0.42*** | 0.29*** | 0.26*** | 1.00 | | | | | |
| 12. SELF | -0.11 | 0.24** | -0.03 | 0.14* | 0.01 | 0.15* | -0.03 | 0.37*** | 0.26*** | 0.33*** | 0.32*** | 1.00 | | | | |
| 13. PLAN | 0.07 | 0.09 | 0.07 | 0.07 | -0.21*** | -0.02 | 0.05 | 0.00 | 0.03 | 0.00 | -0.15* | -0.12 | 1.00 | | | |
| 14. STUD | -0.08 | 0.13* | 0.13* | 0.18** | -0.02 | 0.14* | 0.03 | 0.07 | -0.13* | -0.09 | -0.14* | 0.06 | 0.35*** | 1.00 | | |
| 15. GPA | 0.03 | 0.22*** | 0.16** | 0.29*** | -0.07 | 0.22*** | 0.00 | -0.03 | 0.01 | 0.05 | -0.11 | 0.00 | 0.30*** | 0.14* | 1.00 | |
| 16. PROFID | 0.20** | 0.08 | 0.02 | 0.09 | -0.20*** | 0.10 | -0.17** | -0.17** | -0.14* | 0.01 | -0.33*** | -0.21** | 0.33*** | 0.14* | 0.14* | 1.00 |
| Means | 2.48 | 2.60 | 27.48 | 1.18 | 1.25 | 22.57 | 7.84 | 15.89 | 8.23 | 14.04 | 27.22 | 8.93 | 19.96 | 16.29 | 5.90 | 17.89 |
| Standard Deviations | 0.50 | 1.87 | 5.78 | 0.39 | 0.44 | 4.09 | 3.92 | 2.89 | 1.64 | 1.99 | 3.81 | 2.20 | 4.83 | 9.09 | 0.95 | 2.95 |

*p≤ 0.05 **p ≤0.01 ***p ≤0.001

(PROG=Program; YEAR=Years of University; CRHRS=Credit Hours; DEG=Previous Degree; GEN=Gender; AGE=Age; PTED=Parent Education; POWR=Powerlessness; MEAN=Meaninglessness; NORM=Normlessness; ISO=Social Isolation; SELF=Self-Estrangement; PLAN=Time Planning; STUD=Studying; GPA=Grade Point Average; PROFID=Professional Identity)

university and after they have earned a degree. *Credit hours* (0.14, $p \leq 0.05$) and *gender* (0.20, $p \leq 0.001$) are positively related to *normlessness*. These results suggest that those who take a higher number of credit hours and males (coded as 2), in comparison to females, are more likely to experience normlessness. Finally, there are positive relationships between *year* (0.24, $p \leq 0.001$), *degree* (0.14, $p \leq 0.05$), and *age* (0.15, $p \leq 0.05$) and *self-estrangement*. Student teachers who have spent more years in university, who have already earned a degree, and who are older, are more likely to experience more feelings of self-estrangement than their younger, less experienced peers.

The fourth question asks, *What are the effects of university and social background, alienation, and student effort on the grade point average and on the professional identity of student teachers?* The relationships between alienation and university and social background variables and professional identity have already been reported. Since student effort and grade point average are important aspects of their university education, the relationship between alienation and student effort, and between alienation and grade point average are also of interest. Indeed, examining the correlations between the alienation variables and the student effort variables reveals some interesting associations. Specifically, *meaninglessness* is negatively related to *studying* (-0.13, $p \leq 0.05$) and *social isolation* is negatively related to both *time planning* (-0.15, $p \leq 0.05$) and to *studying* (-0.14, $p \leq 0.05$). It seems logical that student teachers who do not value their experiences and who find them meaningless are less likely to spend time studying. These findings suggest that social isolation of student teachers from others, either from professors or peers, reduces their effort to plan their time around academic pursuits and to spend time studying.

Based on the theory outlined in Chapter 2, it was expected that feelings of alienation would reduce academic achievement and therefore would constitute a serious disadvantage to student teachers. Grades, after all, are important educational outcomes of faculties of education that determine whether student teachers will graduate, enter into high-level occupations, or be admitted to graduate/professional school (Baird, 1985). Interestingly, there are no significant relationships between any of the alienation variables and *grade point average*. In other words, at this point, the alienation variables seem to have little or no effect on *grade point average*, unless the effects are suppressed by other variables.

In addition to the associations between alienation and the other variables in the model, there are a number of other associations of interest. For instance, the significant positive relationship between *program* and *professional identity* (0.20, $p \leq 0.01$) suggests that student teachers enrolled in the elementary program are more likely to have higher professional identities as teachers than those enrolled in the secondary program. At least some of this relationship may be explained by structural differences between the two programs. Student teachers enrolled in the secondary program are required to take 12 full courses in faculties other than the Faculty of Education to provide them with a general academic background plus specialization in at least two teachable subjects whereas student teachers enrolled in the elementary program are required to take 10 full courses outside the Faculty to provide them with a general academic background plus some limited specialization in teachable subjects (see University of Manitoba General Calendar, 1996-7, pp. 152 to 157). In other words, student teachers enrolled in the elementary program spend more time in the Faculty of Education, interact with each other more, and move through their courses as a cohort in

contrast to those enrolled in the secondary program who spend less time in the Faculty of Education, interact less with education students, and do not move through courses as a group.

It is also interesting to note that two of the social background variables, *gender* (-0.20, $p \leq 0.001$) and *parents' education* (-0.17, $p \leq 0.01$) are negatively related to *professional identity*. These correlations suggest that females and student teachers whose parents have less education are more likely to have higher professional identities as teachers than males and those whose parents have more years of education. Females have historically dominated the teaching profession and it is not surprising, therefore, that females have higher professional identities as teachers than males. The relationship between parents' education and professional identity is unique and surprising. It may be that student teachers from lower socio-economic status backgrounds view teaching as a means of upward social mobility which consequently inspires their professional identity while it may be viewed as a downward move that discourages their professional identity for students from higher socio-economic status backgrounds (see Lanier & Little, 1986; Darling-Hammond, 1990).

As expected, the student effort variables, *time planning* (0.33, $p \leq 0.001$) and *studying* (0.14, $p \leq 0.05$), are significantly related to *professional identity*. Kalekin-Fishman (1990, p. 262) notes that "the question of how student teachers think of time and how they interpret time spent doing different things and time spent with different people is central to their developing professional identity". These significant correlations suggest that student teachers who organize their time around academic pursuits, and who spend time studying, are making behavioral choices that are consistent with their commitment to their professional identity as

teachers. Similarly, there is also a significant positive relationship between *grade point average* (0.14, $p \leq 0.05$) and *professional identity*. In other words, student teachers who perform well academically are more likely to have higher professional identities as teachers than those whose grade point averages are lower. The importance of commitment to the student role as well as to the student teacher role is underscored by these relationships because, as Adler (1977, p.175) suggests, good teachers need first of all, to be good students.

Overall, the correlation coefficients indicate that a number of variables are associated with one another to a greater extent than would be expected by chance. However, they do not indicate the relative importance of the variables in explaining the effects hypothesized by the theoretical model. To further examine the theoretical model, multivariate analyses are conducted to analyze the interrelationships between the variables in greater detail. That is, effect parameters are calculated to test hypothesized relationships, and as indicated in Chapter 3, both standardized and unstandardized regression coefficients are reported. To examine the theoretical model, only the standardized regression coefficients are discussed.

## MULTIVARIATE ANALYSES

The theoretical model examined in this study, and presented in Chapter 2, links university and social background, alienation, student effort, academic achievement, and professional identity. The analyses are conducted so that each contributes to an increasingly complex examination of the relationships presented in Figure 1. The first set of multivariate analyses are conducted to answer the second question posed in this study, *What is the relationship between alienation and professional identity in student teachers?*; the second set of analyses are conducted to answer the third question, *What are the effects of university and social*

*background on alienation*?; and finally, the third set of analyses are conducted to answer the most complex question, *What are the effects of university and social background, alienation, and student effort on the grade point average and on the professional identity of student teachers?*

Regression analysis is used to estimate the effect parameters in each of these analyses. The $R^2$ statistic, standardized regression coefficients, and the unstandardized regression coefficients for each variable are reported. The $R^2$s provide a measure of the variance explained by the various sets of independent and intervening variables. The effect parameters, whether in standardized or unstandardized form, indicate the amount of change in a dependent variable that results from a one-unit change in an independent variable when all other independent and intervening variables are controlled. In the standardized form, each variable is transformed so that it has a mean of zero and a standard deviation of one, and in the unstandardized form, the mean and standard deviation of each variable depends on the metric properties of the variable. Standardized regression coefficients permit the comparison of the effects associated with a number of independent variables on a common dependent variable regardless of the metrics. In this research, only standardized regression coefficients are interpreted since the analyses are used to test the effects of a number of independent variables on dependent variables, all of which have different metric properties. Unstandardized regression coefficients are reported for the use of other researchers who may wish to compare these results with the results obtained with other groups. Unstandardized regression coefficients permit comparison between groups on the same measure because the measuring units of the raw data will not vary from group to group (see Kim & Mueller, 1976).

Effect of Alienation on Professional Identity

The descriptive analyses, presented earlier, showed that some student teachers are alienated along each dimension of alienation. An important next step is to determine whether feelings of alienation affect professional identity. Question two asks, *What is the relationship between alienation and professional identity in student teachers?* Based on the review of literature in Chapter 2, this relationship is hypothesized to be a negative one, since alienation is described as the obverse of professional identity. Student teachers who feel alienated are not expected to accomplish the tasks of professional socialization successfully or to develop the values of *knowing*, *doing*, and *helping* that are the hallmark of professional identity. The descriptive statistics and the correlation matrix also suggest that there are negative relationships between the five dimensions of alienation and professional identity. In the first multivariate analysis, the effects of the alienation variables on *professional identity* are estimated.

Table 35 reports the effects of each of the alienation variables on *professional identity*. Three of the alienation variables, *normlessness* (0.17, $p \leq 0.05$), *social isolation* (-0.29, $p \leq 0.001$), and *self-estrangement* (-0.15, $p \leq 0.05$) have significant effects on professional identity. Interestingly, the effect of *normlessness* is positive, which suggests that, contrary to expectations, student teachers who are alienated along this dimension have higher professional identities than those who do not have a sense of normlessness. It may be that student teachers who perceive that there is a conflict between theory and practice in their university experiences or are confused by the competing demands in the expectations of their roles as university student and student teacher consider that becoming a teacher, by whatever means,

is more important than what they learn in faculties of education and in the schools in which they practice teach.

As expected, *social isolation* and *self-estrangement* have negative effects on *professional identity*. Research on commitment to teaching (Mandzuk, 1994, p.196), points to a positive relationship between social integration (the opposite of social isolation) and professional identity. Conversely, student teachers who have a sense of social isolation and/or a sense of self-estrangement are less likely to accomplish the tasks of professional socialization in which they develop a commitment to their professional identities.

**Table 35**
Effects of Alienation on Professional Identity

| Independent Variables | Professional Identity |
|---|---|
| 1. POWR | -0.06<br>(-0.06) |
| 2. MEAN | -0.05<br>(-0.09) |
| 3. NORM | 0.17*<br>(0.25) |
| 4. ISO | -0.29***<br>(-0.22) |
| 5. SELF | -0.15*<br>(-0.20) |
| $R^2$ | 0.14 |

*p ≤ 0.05 **p ≤ 0.01 ***p ≤ 0.001

Standardized and unstandardized regression coefficients are reported.
Unstandardized coefficients are in parenthesis.

In total, alienation variables account for 14 percent of the variance in *professional identity*. Based on this result, alienation seems to play a relatively significant role in the

professional socialization of student teachers. Nevertheless, there may be differences in the ways student teachers experience their professional socialization based on their university and social background characteristics. In order to determine whether university and social background characteristics have an impact on the alienation variables, the next multivariate analysis is conducted.

Effects of University and Social Background Variables on Alienation

The third question, *What are the effects of the university and social background variables on alienation?* is considered next. Two sets of analyses are presented. In the first, the effects of university background variables on each of the alienation variables are tested, and in the second, the effects of the social background variables are added to the analyses.

University background characteristics represent differences in the types and the amount of experience student teachers have in university. The type of experience students have in faculties of education depends, at least in part, on whether they are enrolled in the elementary or in the secondary program. Goodlad (1990, p. 210), for example, points out that there is a stronger informal support system among candidates in the elementary program than among secondary school candidates. He suggest that this is partly because student teachers enrolled in secondary programs are scattered across the campus for most of their undergraduate courses, come together with other student teachers for a few education courses, and then are separated from them again during student teaching. In this respect, student teachers who are enrolled in the secondary program may be expected to experience a greater sense of social isolation than student teachers enrolled in the elementary program. Since *program* is coded

as 2 for secondary and 3 for elementary, *program* is expected to have a negative effect on the alienation variables, particularly on social isolation.

In addition, the amount of experience student teachers have or have had in university may have an effect on the degree to which they experience alienation. Based on the literature on sociological ambivalence and alienation, reviewed in Chapter 2, it is anticipated that students who have more years of experience in university (*years*), who are enrolled in more credit hours (*credit hours*), and who have already completed a previous degree (*degree*) have more exposure to the inherent normative conflicts in professional socialization. Consequently, more experienced student teachers are more likely to experience alienation than those who have less experience. There is, however, little empirical evidence in the literature, or in previous work on these students, to indicate that *years*, *credit hours*, or *degree* have effects on alienation in student teachers. Nevertheless, based on the correlations reported earlier, it is anticipated that university background variables will, at least, have negative effects on *meaninglessness*, *normlessness*, and *self-estrangement*. This implies that student teachers who have more experience in university are more likely to have feelings of alienation than those who have less experience.

Table 36 reports the effects of the university background variables on each the five alienation variables. Interestingly, whatever differences there may be between the elementary and the secondary programs, the results show that *program* does not have any appreciable effect on any of the alienation variables. This is contrary to expectations that the elementary program is more integrated than the secondary program and that student teachers enrolled in the former are less likely to experience alienation than student teachers enrolled in the latter.

*Year*, on the other hand, has a significant negative effect on *meaninglessness* (-0.17, $p \leq 0.05$), a positive although not quite significant effect on *normlessness*, (0.11) and a significant positive effect on *self-estrangement* (0.23, $p \leq 0.01$). These results suggest that student teachers who have more years of university experience have a lower sense of meaninglessness than student teachers with fewer years in university. That is, the longer they are involved in the program, the more certainty these student teachers develop about the purpose of their educational experiences. However, this result is in contrast to the finding that the longer student teachers are involved in university, the more normlessness and the more self-estrangement they experience. It may be that as student teachers progress through their programs, they become more aware of the ambivalence inherent in their program and that this contributes to the development of normlessness and self-estrangement. As expected, from the correlational analyses, however, *year* has little effect on either *powerlessness* or *social isolation*. That is, the length of time student teachers remain in university neither enhances nor reduces their sense of control or their sense of community.

*Credit hours* has a positive effect on *normlessness* (0.15, $p \leq 0.05$). That is, student teachers who take more courses in an academic year are more likely to experience normlessness than student teachers who take fewer courses. This finding may indicate some difficulties experienced by student teachers in juggling increased demands on their time or it may indicate that in the minds of some student teachers, at least, too much time is being spent completing time-consuming, irrelevant tasks in courses offered by the Faculty of Education.

**Table 36**
Effects of University Background Variables on the Alienation Variables

| Independent Variables | POWR | MEAN | NORM | ISO | SELF |
|---|---|---|---|---|---|
| 1. PROG | -0.05<br>(-0.27) | 0.04<br>(0.14) | -0.04<br>(-0.18) | -0.07<br>(-0.49) | -0.05<br>(-0.22) |
| 2. YEAR | 0.03<br>(0.04) | -0.17*<br>(-0.15) | 0.11<br>(0.12) | -0.02<br>(-0.05) | 0.23***<br>(0.27) |
| 3. CRHRS | 0.07<br>(0.03) | -0.01<br>(0.00) | 0.15*<br>(0.05) | -0.09<br>(-0.06) | -0.04<br>(-0.01) |
| 4. DEG | -0.06<br>(-0.41) | -0.03<br>(-0.15) | -0.10<br>(-0.50) | -0.10<br>(-1.01) | -0.01<br>(-0.06) |
| $R^2$ | 0.01 | 0.04 | 0.03 | 0.02 | 0.06 |

*p ≤ 0.05 **p ≤ 0.01 ***p ≤ 0.001
Standardized and unstandardized regression coefficients are reported.
Unstandardized coefficients are in parenthesis.

*Degree* has a notable negative but not quite statistically insignificant effect on both *normlessness* (-0.10) and *social isolation* (-0.10). The anomalous effect on *normlessness* may be explained by the fact that those who have already earned a degree are older and more mature and are therefore more intent on learning what they need to know to become professional teachers rather than concentrating merely on certification requirements. More experienced student teachers may also realize the importance of developing social relationships in order to accomplish their goals than their less experienced peers. *Degree* has little effect on the other alienation variables, *powerlessness*, *meaninglessness,* and *self-estrangement*.

The total amount of variance explained by the university background variables on the alienation variables is minimal, varying from 1 percent for *powerlessness* to 6 percent for

*self-estrangement*. In other words, the differences between student teachers that relate to the program in which they are enrolled, the number of years of experience they have in university, the number of credit hours they are taking, and whether they have a degree, are not very important factors in determining whether or not they experience feelings of alienation across any of the five dimensions.

In the next step, social background variables are added to the university background variables to estimate the effects of all these characteristics on the alienation variables. These variables, *gender*, *age*, and *parents' education*, represent important characteristics that may account for some of the differences in student teachers' experiences of alienation noted in Table 36. Since 75 percent of the student teachers enrolled in the elementary program are females (see Clifton et al., 1987), and there have been concerns expressed recently about the "chilly climate" of college classrooms for female students (see Mandell, 1992, p.9), the effects of *gender* on alienation are of some interest to university professors, administrators, and students.

In addition, some research (see Kasworm & Pike, 1994, p. 693) suggests that *age* may also have a significant impact on alienation, since older and younger students experience university in different ways. Younger students may be more socially integrated into the university than older students, but they may be less likely to understand how to benefit from their academic experiences. That is, older students may have more commitments to their families and their children than younger students, and these prior commitments may affect the time and effort they can spend on their university work and the degree to which they are integrated or alienated from the institution.

Some of the earlier research on alienation has focused on socioeconomic status as an antecedent of alienation (see Otto & Featherman, 1975, p. 702). This line of research suggests that there may be an association between socioeconomic status and the alienation of individuals. Basically, the argument has been that those who are economically, socially, and educationally disadvantaged have reduced opportunities and therefore greater difficulty in integrating into societal institutions, such as universities, than those who are more advantaged. In other words, those with lower socioeconomic status are more likely to experience alienation than those with higher status. In this analysis, *parents' education* is included as a measure of socioeconomic status and it is expected, on the basis of this theory, that *parents' education* has a negative effect on alienation.

Table 37 reports the effects of the social background variables on the alienation variables. *Gender* has a significant positive effect on *normlessness* (0.19, $p \leq 0.01$). Since females are coded as 1 and males are coded as 2, a positive effect means that it is *males* who experience a greater sense of normlessness than females. This implies that males are more likely than females to consider their professional socialization in faculties of education as a means to an end, in which they go through the motions in order to become certified teachers. Considering that teaching has been characterized as a predominantly female profession (Lanier & Little, 1986), attention to the problem of alienation in male student teachers may be long overdue. Interestingly, *gender* has little impact on *powerlessness*, *meaninglessness*, *social isolation*, and *self-estrangement*.

*Age* (-0.11) has a negative, though not significant, effect on *normlessness*. That is, younger student teachers are more likely to experience feelings of normlessness than older student teachers. It may be that younger students have less understanding of the purpose of professional education and are therefore more likely to consider that the ends justify the means. *Age* has little impact on *powerlessness*, *meaninglessness, social isolation*, and *self-estrangement.*

*Parents' education* (-0.13) has an expected negative, but not quite significant, effect on *powerlessness.* This relationship may be expected on the grounds that there are significant differences in socialization that are based on social class. Anyon (1981, pp. 338-339) points out, for example, that the children of parents' who are affluent professionals are trained in schools to be independent and creative and the children of middle class and working class parents are trained to less critically support the goals of institutions. Student teachers whose parents have more education, therefore, may feel constrained by education programs that do not allow them to be independent or to take control of their experiences. That is, student teachers whose parents have more education have a greater sense of personal control and competence than student teachers whose parents have less education. *Parents' education* has little impact on *meaninglessness*, *normlessness*, *social isolation*, and *self-estrangement.*

**Table 37**
Effects of University and Social Background Variables on the Alienation Variables

| Independent Variables | POWR | MEAN | NORM | ISO | SELF |
|---|---|---|---|---|---|
| 1. PROG | -0.03<br>(-0.19) | 0.03<br>(0.10) | 0.01<br>(0.03) | -0.05<br>(-0.42) | -0.06<br>(-0.26) |
| 2. YEAR | 0.07<br>(0.10) | -0.17*<br>(-0.15) | 0.15<br>(0.16) | -0.05<br>(-0.11) | 0.24**<br>(0.28) |
| 3. CRHRS | 0.06<br>(0.03) | -0.01<br>(0.00) | 0.12<br>(0.04) | -0.08<br>(-0.05) | -0.04<br>(-0.01) |
| 4. DEG | -0.04<br>(-0.33) | -0.04<br>(-0.16) | -0.08<br>(-0.41) | -0.10<br>(-1.02) | -0.01<br>(-0.06) |
| 5. GEN | 0.03<br>(0.19) | -0.04<br>(-0.16) | 0.19***<br>(0.87) | 0.05<br>(0.41) | -0.04<br>(-0.19) |
| 6. AGE | -0.06<br>(-0.04) | 0.01<br>(0.00) | -0.11<br>(-0.05) | 0.05<br>(0.04) | 0.00<br>(0.00) |
| 7. PTED | -0.13<br>(-0.09) | 0.01<br>(0.01) | -0.03<br>(-0.02) | 0.01<br>(0.01) | -0.04<br>(-0.02) |
| $R^2$ | 0.02 | 0.05 | 0.07 | 0.03 | 0.06 |

*$p \leq 0.05$ **$p \leq 0.01$ ***$p \leq 0.001$
Standardized and unstandardized regression coefficients are reported.
Unstandardized coefficients are in parenthesis.

The addition of the social background variables produces a number of notable changes in the effects of some of the university background variables on some of the alienation variables. First, with the addition of the social background variables, the effect of *year* on *normlessness* increases from 0.11 to 0.15. In other words, the effect of *year* was suppressed by the social background variables and is actually stronger than suggested by the results reported in the previous table. That is, the longer student teachers spend in university, the more normless they feel. On the other hand, the effect of *credit hours* on *normlessness* changes from 0.15 ($p \leq 0.05$) to 0.12. A small amount of the effect of *credit hours* on

*normlessness* is apparently mediated by the social background variables. In this regard, it is interesting to note that the correlation between *age* and the number of *credit hours* is significant and negative (-0.18, $p \leq 0.01$) so that the effect of *credit hours* on *normlessness* may be reduced by the fact that generally, older student teachers take fewer courses than younger students.

Overall, the university and social background variables account for little of the variance in the alienation variables, ranging from 2 percent for *powerlessness* to 7 percent for *normlessness*. This is quite surprising, given the literature that suggested the relationships examined to this point in the analyses. The addition of the social background variables to the university background variables, reported in Table 37, increases the amount of variance explained from 3 percent to 7 percent in *normlessness* with only slight increases of approximately 1 percent for each of the other variables, *powerlessness*, *meaninglessness*, and *social isolation*. There is no change in the amount of variance explained in *self-estrangement* with the addition of the social background variables.

In general, the effects of the university and social background variables on alienation are not very large and may offer little by way of explanation of alienation in student teachers. In other words, student teachers may or may not be alienated, and this is not generally caused by their university experiences or social backgrounds, at least for those characteristics that were measured. The fact that the effects of university and social background on alienation are minimal suggests that administrators, professors, students and researchers need to dig deeper to understand the etiology of alienation in student teachers. At this point, however, it is more important to consider whether alienation is simply an anticipated feature of professional

socialization that can be safely ignored or whether it poses a significant problem in the professional socialization of teachers. The next set of analyses relate the variables examined so far (university background, social background, and alienation) to student effort, grade point average, and professional identity in a further attempt to determine the seriousness of the problem of alienation in student teachers.

Effects of University and Social Background Variables, Alienation, and Student Effort on the Grade Point Average and on the Professional Identity of Student Teachers

The fourth and final question asks, *What are the effects of university and social background variables, alienation, and student effort, on the grade point average and on the professional identity of student teachers?* The theoretical model presented in Figure 1 depicts the argument that alienation affects the educational outcomes of grade point average and professional identity as mediated through student effort. The final four analyses in this study examine the effects of university background, social background, and alienation on the student effort variables, *time planning* and *studying,* the effects of university background, social background, alienation, and student effort on *grade point average,* and finally, the effects of university background, social background, alienation, student effort, and *grade point average* on *professional identity.*

The review of the literature and the theoretical model, presented in Chapter 2, links alienation to professional identity as mediated through student effort. In other words, student teachers who feel alienated are unlikely to expend the effort necessary to accomplish the tasks that are required in their professional education. In turn, failure to accomplish these tasks at a high level of proficiency probably has negative consequences for them. This type of failure means that despite a considerable investment of time by institutions and by individuals, some

student teachers will not develop the skills, attitudes, and values of professional teachers. The next two analyses examine the influence of university and social background and alienation on the two student effort variables, *time planning* and *studying*. In each set of analyses, three steps are presented. In Step 1, the effects of the university background variables are examined, in Step 2, the effects of the social background variables are added, and finally, in Step 3, the effects of the five alienation variables are included in the analyses. In other words, with each step, the analyses become more complex in an attempt to answer the question of whether the amount of effort student teachers make to manage their time and to study is affected by their university experiences and social background and the degree to which they feel alienated.

Table 38 reports the regression coefficients and the $R^2$s for the effects of university, social background and alienation variables, on *time planning*. In the first step, the university background variables are entered. None of the university background variables has a significant effect on time planning but the effects of two of the variables, *program* (0.11) and *year* (0.10) are of note. *Program*, however, decreases in the next two steps, when other variables are entered, while *year* increases and becomes statistically significant. Thus, the effect of *year* will be discussed in greater detail below.

Step 2 adds the effects of the social background variables to the analyses. In Step 2, the effect of gender (-0.21, $p \leq 0.001$) on *time planning* is negative and statistically significant and this effect remains consistent in Step 3 (-0.22, $p \leq 0.001$). That is, females have significantly more positive time planning behaviours than males. The reduction of the effect of *program* (from 0.11 to 0.06), when the social background variables are added in Step 2,

**Table 38**
Effects of University Background, Social Background, and Alienation on Time Planning

| Independent Variables | Step 1 | Step 2 | Step 3 |
|---|---|---|---|
| 1. PROG | 0.11<br>(1.09) | 0.06<br>(0.58) | 0.04<br>(0.40) |
| 2. YEAR | 0.10<br>(0.27) | 0.17<br>(0.43) | 0.21*<br>(0.53) |
| 3. CRHRS | 0.09<br>(0.07) | 0.07<br>(0.06) | 0.05<br>(0.04) |
| 4. DEG | 0.02<br>(0.27) | 0.02<br>(0.21) | 0.01<br>(0.16) |
| 5. GEN | | -0.21***<br>(-2.37) | -0.22***<br>(-2.48) |
| 6. AGE | | -0.08<br>(-0.09) | -0.06<br>(-0.08) |
| 7. PTED | | 0.03<br>(0.04) | 0.03<br>(0.04) |
| 8. POWR | | | 0.07<br>(0.12) |
| 9. MEAN | | | 0.09<br>(0.28) |
| 10.NORM | | | 0.06<br>(0.15) |
| 11. ISO | | | -0.13<br>(-0.17) |
| 12. SELF | | | -0.18*<br>(-0.40) |
| $R^2$ | 0.02 | 0.07 | 0.12 |

*$p \leq 0.05$ **$p \leq 0.01$ ***$p \leq 0.001$

Standardized and unstandardized regression coefficients are reported.
Unstandardized coefficients are in parenthesis.

suggests that it is not the program in which student teachers are enrolled but probably their gender (the only social background variable that is statistically significant) that determines differences in time planning behaviours. As noted previously, this may be explained, in part, by the fact that a much higher percentage of females (75%) are enrolled in the elementary program than in the secondary program. The addition of the social background variables increases the effect of *year* (0.17) on *time planning* by 70 percent but this effect is still not quite significant. Nevertheless, in Step 3, with the addition of the alienation variables, the effect of *year* (0.21, $p \leq 0.01$) is further increased and becomes statistically significant. The increase in the effect of *year* in each of these two steps indicates that some of the effect of *year* on *time planning* is being suppressed by the social background and the alienation variables. In other words, by controlling for social background and alienation, the effect of having more years of experience in university becomes stronger on time planning.

In addition, in Step 3, two alienation variables, *social isolation* (-0.13) and *self-estrangement* (-0.18, $p \leq 0.05$), have noteworthy effects on *time planning*. That is, student teachers who have a greater sense of social isolation from others are less able to plan their time than those who are socially integrated. This result is not surprising, based on the literature of social psychology (see, for example, Pascarella, 1985, p.24) that links degree of involvement of individuals and the quality of their effort. It is also not surprising that student teachers who find their educational experiences less intrinsically worthwhile are less able to plan their time than those who do not experience self-estrangement. Presumably, student teachers who are self-estranged withdraw their energies from all activities including those that relate to planning their time effectively.

Overall, the amount of variance in *time planning* that is explained rises from 2 percent in Step 1, taking into account four university background variables, to 7 percent in Step 2, with the addition of the three social background variables. With the inclusion of the alienation variables in Step 3, the variance explained increases to 12 percent, which is a notable increase and suggests that alienation explains a relatively significant amount of the variance in time planning behaviours. *Time planning* reveals organizational skills and behaviours that student teachers bring to their education, but it is the next student effort variable, *studying*, that provides an actual measure of the effort student teachers expend in studying and related activities. The effect of university and social background and alienation variables on *studying* is considered next.

Table 39 presents the regression coefficients and the $R^2$s for the effects of university and social background variables and the alienation variables on *studying*. In Step 1, the effects of *credit hours* (0.12) and *degree* (0.13) on *studying* are notable, but not statistically significant. In Steps 2 and 3, with the addition of the social background variables and the alienation variables, the effect of credit hours (0.14, $p \leq 0.05$) becomes significant, but the effect of *degree* is reduced slightly to 0.12 in Step 2 and to 0.10 in Step 3. Not surprisingly, when social background and alienation are controlled, student teachers who take more credit hours also report spending more hours studying. This effect is expected on common sense grounds, since the more courses student teachers take, the more time they will be required to spend studying.

As Step 2 and Step 3 indicate, the only social background variable that has a noteworthy effect on *studying* is *age* (0.14 in Step 2 and 0.15 in Step 3), which has a positive

though not significant effect. It may be that older student teachers, in comparison with their younger colleagues, understand the relationship between effort and achievement better and therefore spend more time studying.

The most important effects on *studying* are the alienation variables that are included in Step 3, three of which are statistically significant. Interestingly, *powerlessness* (0.21, $p \leq 0.01$) and *self-estrangement* (0.10) have positive effects whereas *meaninglessness*, (-0.12) *normlessness*, (-0.15, $p \leq 0.05$) and *social isolation* (-0.16, $p \leq 0.05$) have negative effects. That is, student teachers who feel greater powerlessness and those who are more self-estranged report that they study for more hours rather than fewer hours as hypothesized, than those student teachers who feel less powerless or less self-estranged. It may be that *powerlessness* and *self-estrangement* create feelings of anxiety which are alleviated somehow by spending more time studying. On the other hand, the more meaningless student teachers perceive their professional education to be, the less likely they are to spend their time studying. In other words, student teachers who do not connect what they are learning in their university courses to teaching may spend less of their effort studying to fulfil the requirements of their university courses. Similarly, student teachers who have a sense of normlessness and consider that they are doing work in courses simply to complete their degree requirements are less likely to invest any extra time in studying. It is also not surprising to find that student teachers who experience social isolation and withdraw their

**Table 39**
Effects of University Background, Social Background, and Alienation on Studying

| Independent Variables | Step 1 | Step 2 | Step 3 |
|---|---|---|---|
| 1. PROG | -0.02<br>(-0.39) | -0.04<br>(-0.71) | -0.03<br>(-0.55) |
| 2. YEAR | 0.05<br>(0.22) | -0.03<br>(-0.15) | -0.07<br>(-0.36) |
| 3. CRHRS | 0.12<br>(0.18) | 0.14*<br>(0.22) | 0.14*<br>(0.22) |
| 4. DEG | 0.13<br>(3.12) | 0.12<br>(2.79) | 0.10<br>(2.24) |
| 5. GEN | | -0.05<br>(-1.03) | -0.02<br>(-0.43) |
| 6. AGE | | 0.14<br>(0.32) | 0.15<br>(0.33) |
| 7. PTED | | 0.04<br>(0.10) | 0.07<br>(0.17) |
| 8. POWR | | | 0.21**<br>(0.67) |
| 9. MEAN | | | -0.12<br>(-0.66) |
| 10. NORM | | | -0.15*<br>(-0.69) |
| 11. ISO | | | -0.16*<br>(-0.39) |
| 12. SELF | | | 0.10<br>(0.41) |
| $R^2$ | 0.05 | 0.06 | 0.12 |

*p ≤ 0.05 **p ≤ 0.01 ***p ≤ .001

Standardized and unstandardized regression coefficients are reported.
Unstandardized coefficients are in parenthesis.

energies from planning their time around academic pursuits, report fewer hours for studying than those who are socially integrated. Clearly, the alienation variables have important effects on *studying*, but the fact that two of these variables, *powerlessness* and *self-estrangement*, have positive effects and three of them, *meaninglessness*, *normlessness*, and *social isolation* have negative effects, suggests that there is a more complex relationship between alienation and student effort than hypothesized.

In summary, in Step 1, the university background variables explain 5 percent of the variance in *studying*, the inclusion of the social background variables in Step 2 increases the total amount of variance explained to 6 percent, and the addition of the alienation variables in Step 3 increases the percent of variance explained substantially to 12 percent. These results indicate that there is some support for the argument that some of the alienation variables affect student effort, especially the number of hours that student teachers study. The next two analyses are conducted to examine the effects of the university and social background variables, the alienation variables, and the student effort variables on professional education outcomes (grade point average and professional identity). In the first set of analyses, the effects of the university and social background, alienation, and student effort variables on grade point average are examined. In the second set of analyses, the effects of the university, social background, alienation, student effort, and grade point average on professional identity are examined.

Table 40 reports the effects of university and social background, alienation, and student effort on *grade point average*. There are four steps in this analysis. Step 1 estimates the effects of the university background variables on *grade point average;* Step 2 adds the

social background variable to the university background variables; Step 3 adds the alienation variables; and Step 4 adds the student effort variables. In a previous analysis, some of the dimensions of alienation were shown to have negative effects on student effort. Since it is widely assumed that student effort has a positive influence on grade point average (Astin, 1993), it is important to determine how this relationship may be mediated by the alienation and student effort variables.

In Step 1, the effects of the university background variables on *grade point average* are tested. Based on the literature, it was expected that student teachers with more years of experience and with a previous degree would have higher grade point averages than student teachers with fewer years of university and without previous degree (see Pascarella & Terenzini, 1991, p. 369-370). Interestingly, all of the university background variables have positive effects on *grade point average*, although not all are significant. The effects of *program* (0.13 $p \leq 0.05$), *credit hours* (0.16, $p \leq 0.05$), *and degree* (0.24, $p \leq 0.001$) on *grade point average* are positive and significant whereas the effect of *year* (0.11), while notable, is not significant. In other words, student teachers who are enrolled in the elementary program, who take more credit hours, who have more years of university experience, and who have already earned a degree, have higher grade point averages than student teachers who are enrolled in the secondary program, who take fewer hours of classes, who have had fewer years of university, and who have not earned a previous degree. These findings, of course, are not surprising to university professors, administrators, or students. Neither are they surprising to researchers.

**Table 40**
**Effects of University Background, Social Background, Alienation, and Student Effort on Grade Point Average**

| Independent Variables | Step 1 | Step 2 | Step 3 | Step 4 |
|---|---|---|---|---|
| 1. PROG | 0.13* (0.25) | 0.10 (0.20) | 0.09 (0.17) | 0.08 (0.15) |
| 2.YEAR | 0.11 (0.05) | 0.01 (0.00) | 0.02 (0.01) | -0.03 (-0.02) |
| 3. CRHRS | 0.16* (0.03) | 0.19*** (0.03) | 0.18** (0.03) | 0.17** (0.03) |
| 4. DEG | 0.24*** (0.58) | 0.22** (0.54) | 0.22** (0.54) | 0.22** (0.54) |
| 5. GEN | | -0.09 (-0.19) | -0.10 (-0.22) | -0.04 (-0.09) |
| 6. AGE | | 0.19* (0.04) | 0.20* (0.05) | 0.22** (0.05) |
| 7. PTED | | 0.01 (0.00) | 0.01 (0.00) | 0.00 (0.00) |
| 8. POWR | | | -0.04 (-0.01) | -0.06 (-0.02) |
| 9. MEAN | | | 0.08 (0.05) | 0.05 (0..03) |
| 10. NORM | | | 0.11 (0.05) | 0.09 (0.04) |
| 11. ISO | | | -0.07 (-0.02) | -0.04 (-0.01) |
| 12. SELF | | | -0.06 (-0.03) | -0.01 (-0.01) |
| 13. PLAN | | | | 0.26*** (0.05) |
| 14. STUD | | | | -0.02 (0.00) |
| $R^2$ | 0.12 | 0.15 | 0.17 | 0.23 |

*p ≤ 0.05 **p ≤ 0.01 ***p ≤ 0.001

Standardized and unstandardized regression coefficients are reported.
Unstandardized coefficients are in parenthesis.

In Step 2, the social background variables are added to the regression equation. Only *age* (0.19, $p \leq 0.05$) has an effect worth noting on *grade point average*. In other words, this analysis indicates that when the university background variables are controlled, older student teachers achieve higher grade point averages than younger student teachers. This is also not very surprising. Policies of admitting older people to university without prerequisite high school experiences are predicated on this type of evidence.

The introduction of the social background variables into the analyses in Step 2 affects, to some degree, the relationships between the university background variables and *grade point average*. That is, the effect of *program* (0.10) on *grade point average* decreases and is no longer statistically significant, the effect of *credit hours*, however, on *grade point average* increases by about 28 percent from 0.16 ($p \leq 0.05$) to 0.19 ($p \leq 0.01$), and the effect of *degree* decreases slightly, from 0.24 ($p \leq 0.001$) to 0.22 ($p \leq 0.01$). These changes are probably due to the covariance between the university and social background variables. That is, some of the effect of *credit hours* is not seen in Step 1 because of the association between *age* and *credit hours* ($r=-0.18$, $p \leq 0.05$) indicating that younger student teachers are more likely to be enrolled in greater numbers of credit hours than older student teachers, probably because older student teachers have more complex role demands than younger students. When *age* is accounted for in Step 2, the stronger effect of *credit hours* is revealed. In contrast, some of the effects of *program*, *year*, and *degree on grade point average* shown in Step 1 are actually due, at least in part, to the social background variables, particularly *age*. When age is taken into account in Step 2, the effects of *program* and *year* decrease substantially, but the effect of *degree* is only slightly reduced. That is, even holding the social

background variables constant, student teachers who have a previous degree attain higher grade point averages than those who have not already completed a university degree. Again, this is not surprising to professors and administrators. As students progress through university they learn how to succeed to a greater degree. In addition, some student teachers drop out and these are probably the ones who have not been very successful.

Surprisingly, the analyses in Step 3 indicate that none of the alienation variables have significant effects on *grade point average,* although *normlessness* (0.11) has a notable, although not quite statistically significant, effect. The addition of the alienation variables in Step 3 has little mediating effects on any of the other variables already entered in Step 1 and 2. This result is somewhat surprising since the literature suggests that alienation has an effect on performance, and grade point average is an important measure of performance in university. It may be that what student teachers actually do, by way of student effort, is more important for academic achievement than how student teachers feel about what they do.

Step 4 includes the student effort variables in the analysis. The zero-order correlations between *time planning* and *grade point average* (0.30, $p \leq 0.001$) and between *studying* and *grade point average* (0.14, $p \leq 0.05$) suggest that student effort is also associated with academic achievement. It is important, therefore, to determine the effect of student effort on *grade point average* when other variables are controlled. Not surprisingly, *time planning* (0.26, $p \leq 0.001$) has a strong positive effect on *grade point average*. This result indicates that student teachers who have more effective time management behaviour have higher grade point averages than student teachers who are less effective in managing their time. In other words, as predicted by Britton and Tesser (1991), Pace (1979), Pascarella (1985) and others, student effort in planning their university work has a direct and important influence on

academic achievement. The effect of *studying* on *grade point average* (-0.02 ) on the other hand, is surprisingly weak. This seemingly anomalous result may reflect, in part, the correlation between *time planning* and *studying* ($r=0.35$, $p \leq 0.001$) and this may be suppressing the influence of *studying* on *grade point average*.

In summary, the $R^2$ s reported in Table 40 indicate that 12 percent of the variance in *grade point average* is accounted for by the university background variables in Step 1, which increases to 15 percent with the addition of the social background variables. The inclusion of the alienation variables in Step 3, increases the amount of variance explained by another 2 percent to 17 percent, and with the addition of the student effort variables in Step 4, the amount of variance explained is increased by about 35 percent, from 17 percent to 23 percent. This is an appreciable amount of explained variance. The university background variables, *credit hours* and *degree*, the social background variable, *age*, and the student effort variable, *time planning* have both direct and indirect effects on *grade point average*. Specifically, student teachers who enrol in more credit hours who have already earned a university degree, who are older, and who plan their time effectively around academic pursuits have higher grade point averages than those who enrol in fewer credit hours, have not already earned a degree, are younger, and who do not plan their time effectively. If one wanted to improve the grade point averages of student teachers, these analyses would suggest that perhaps faculties of education should select students who already have a degree, who plan their academic work well, who are older, and who take more credit hours of work. In other words, the results suggest that more successful student teachers are those who are mature (*age*), experienced

**Table 41**
Effects of University Background, Social Background, Alienation, Student Effort, and Grade Point Average on Professional Identity

| Independent Variable | Step 1 | Step 2 | Step 3 | Step 4 | Step 5 |
|---|---|---|---|---|---|
| 1. PROG | 0.25*** | 0.22*** | 0.19*** | 0.18*** | 0.19*** |
| | (1.49) | (1.29) | (1.13) | (1.08) | (1.10) |
| 2. YEAR | 0.09 | 0.10 | 0.09 | 0.05 | 0.05 |
| | (0.15) | (0.16) | (0.15) | (0.08) | (0.07) |
| 3. CRHRS | 0.04 | 0.06 | 0.01 | -0.01 | 0.00 |
| | (0.02) | (0.03) | (0.00) | (0.00) | (0.00) |
| 4. DEG | 0.09 | 0.08 | 0.07 | 0.06 | 0.07 |
| | (0.65) | (0.64) | (0.54) | (0.48) | (0.55) |
| 5. GEN | | -0.16* | -0.20*** | -0.15* | -0.15* |
| | | (-1.08) | (-1.37) | (-1.01) | (-1.02) |
| 6. AGE | | 0.03 | 0.06 | 0.07 | 0.08 |
| | | (0.02) | (0.05) | (0.05) | (0.06) |
| 7. PTED | | -0.18** | -0.18*** | -0.19*** | -0.19*** |
| | | (-0.13) | (-0.14) | (-0.15) | (-0.15) |
| 8. POWR | | | -0.09 | -0.11 | -0.12 |
| | | | (-0.09) | (-0.12) | (-0.12) |
| 9. MEAN | | | -0.05 | -0.07 | -0.07 |
| | | | (-0.10) | (-0.13) | (-0.12) |
| 10. NORM | | | 0.24*** | 0.24*** | 0.24*** |
| | | | (0.36) | (0.35) | (0.36) |
| 11. ISO | | | -0.25*** | -0.21*** | -0.21*** |
| | | | (-0.19) | (-0.16) | (-0.16) |
| 12. SELF | | | -0.20** | -0.16** | -0.16** |
| | | | (-0.26) | (-0.21) | (-0.21) |
| 13. PLAN | | | | 0.23*** | 0.24*** |
| | | | | (0.14) | (0.15) |
| 14. STUD | | | | -0.05 | -0.05 |
| | | | | (0.02) | (0.02) |
| 15. GPA | | | | | -0.04 |
| | | | | | (-0.13) |
| $R^2$ | 0.07 | 0.13 | 0.28 | 0.33 | 0.34 |

*p ≤ 0.05 **p ≤ 0.01 ***p ≤ 0.001

Standardized and unstandardized regression coefficients are reported.
Unstandardized coefficients are in parenthesis.

in university (*degree*), and who make their university work an integral part of their lives (*time planning* and *credit hours*).

The final analysis in this study, reported in Table 41, examines the effects of all fifteen of the independent and intervening variables on *professional identity*. As argued previously, professional identity is an important outcome of the professional education of student teachers. Professional identities are acquired by accomplishing the tasks of professional socialization, as the literature in Chapter 2 suggests. Such tasks are provided by faculties of education and the schools in which student teachers practice teach through course work and practical experiences. It is argued that student teachers who fail to accomplish these tasks are those who develop feelings of alienation as a consequence of the inherent sociological ambivalence, the disjunction of theory and practice, in the professional socialization of teachers.

This final analysis of the study attempts to estimate the combined effects of university and social background variables and alienation on professional identity as mediated through the student effort variables and academic achievement. The analysis proceeds in five steps. First, in Step 1, the effects of the university background variables on professional identity are estimated, in Step 2, the effects of the university and social background variables are added, in Step 3, the effects of the alienation variables are added, in Step 4, the effects of the two student effort variables are added, and finally, in Step 5, the effect of *grade point average* is added. Each step results in an increasingly complex analysis of the effects of these variables on *professional identity*.

In Step 1, the significant positive effect of *program* (0.25, $p \leq 0.001$) on *professional identity* stands out. That is, student teachers enrolled in the elementary program have higher professional identities as teachers than student teachers enrolled in the secondary program. This finding is consistent with other research on differences between these two programs (see Mandzuk, 1994, p. 182; Zeichner & Gore, 1990, p. 336) and highlights the importance of determining what these differences actually mean to student teachers.

In Step 2, the social background variables are considered along with the university background variables. Two of the social background variables, *gender* and *parents' education* have significant effects on *professional identity*. *Gender* (-0.16, $p \leq 0.05$) has a negative effect suggesting that females have higher professional identities than males. This is consistent with literature that characterizes teaching as a profession that is largely committed to nurturing young people and that it generally attracts larger numbers of females than males. This effect increases in Step 3 with the inclusion of the alienation variables to -0.20 ( $p \leq 0.001$), but the effect of *gender* (-0.15, $p \leq 0.05$) decreases in Step 4 and remains the same in Step 5 with the inclusion of the student effort and performance variables. This suggests that when the effects of alienation are controlled, the effect of *gender* on *professional identity* is stronger but with the addition of the student effort variables, the effect of gender on professional identity is mediated, to some degree, by the student effort and performance variables. In other words, female student teachers are better able to reduce the effects of alienation through their efforts to plan their academic work, to study, and their academic performances.

The negative effect of *parents' education* on *professional identity* indicates that student teachers who have parents with lower levels of education are more likely to have higher professional identities as teachers than those whose parents have higher levels of education. It may be, as stated previously, that for these student teachers, becoming a teacher is a step down, whereas for student teachers who come from lower socioeconomic statuses, it is a step up. The negative effect of *parents' education* remains consistent throughout the remaining steps of the analyses.

In Step 3, the five alienation variables are included in the analyses. Three of the alienation variables, *normlessness* (0.24, $p \leq 0.001$), *social isolation* (-0.25, $p \leq 0.001$), and *self-estrangement* (0.20, $p \leq 0.01$) have significant direct effects on *professional identity*, when other variables are controlled. In other words, university and social background do not provide an explanation for the effect of these three dimensions of alienation have on the degree to which student teachers develop professional identities. It is likely, therefore, as predicted by the review of literature, that these three dimensions of alienation are produced by the sociological ambivalence inherent in their professional education. However, as previously stated, student teachers are active participants in their professional education and there is a considerable amount that motivated student teachers can do to ameliorate the impact of alienation on their ability to become professionals. The student effort variables provide measures of the sorts of positive activities that student teachers can choose to pursue in order to accomplish these tasks.

In Step 4, the two student effort variables, *time planning* and *studying*, are added to the university, social background, and alienation variables to estimate their effects on

*professional identity*. Only *time planning* has a significant direct effect on *professional identity* (0.23, $p \leq 0.001$). Based on Seeman's conceptualization of a professional as one who has developed a sense of competence--both as a matter of professional behaviour and of professional attitudes--student teachers who develop positive time planning behaviour and attitudes are accomplishing at least some of the tasks of professional socialization. Surprisingly, *studying* does not have a significant effect on *professional identity*. This finding is probably explained by the fact that the successful planning student teachers do, reduces their need to spend long hours studying in order to succeed academically. That is, *time planning* may be, to some degree, a substitute for long hours of studying, especially if some of it is ineffective.

In Step 4, with the addition of the student effort variables to the analyses, there are some notable changes in the effects of two of the alienation variables on *professional identity*. After the effects of time planning and studying are accounted for, the effects of *social isolation* and *self-estrangement on professional identity* are reduced.

Not surprisingly, the effects of *social isolation* and *self-estrangement* on *professional identity* are reduced with the addition of the student effort variables. The effect of *social isolation* is reduced by 16 percent, from -0.25 ($p \leq 0.001$) to -0.21 ($p \leq 0.001$) and the effect of *self-estrangement* is reduced by 20 percent, from -0.20 ($p \leq 0.001$) to -0.16 ($p \leq 0.01$). That is, the student effort variables mediate some of the effects of *social isolation* and *self-estrangement* on *professional identity*. As anticipated by the theoretical model, some of the effects of some of the dimensions of alienation on *professional identity* are ameliorated by the effort student teachers make to control their time and to study.

Step 5 examines the effect of *grade point average* and all of the independent variables and intervening on *professional identity*. When all the other variables are controlled, *grade point average* has no appreciable effect on *professional identity*. This may seem somewhat surprising because the literature suggests that student teachers who have greater knowledge and understanding are more likely to acquire higher professional identities as teachers (see, for example, Seeman, 1975). The addition of *grade point average* to the analysis does not mediate any of the important variables in the analysis. The effect of all of the other variables is about the same magnitude as they were in the previous step.

In summary, the $R^2$ s reported in Table 41 show that 13 percent of the variance in *professional identity* is explained by the combined effects of the university and social background variables (Step 1 and Step 2). The addition of the alienation variables (Step 3) raises the amount of variance explained substantially to 28 percent. The addition of the student effort variables further increases the total amount of variance explained to 33 percent. Adding *grade point average* in Step 6 adds only 1 percent, raising the total $R^2$ to 34 percent. The results of the analysis of the descriptive statistics and the multivariate analyses presented in this chapter suggest that the theory developed in Chapter 2 has, at least, some validity. In the next chapter the results will be summarized and discussed. At that time, the theoretical importance of the results will be elaborated. In addition, the implication of the results for teacher education reform and for further research will be discussed.

Interestingly, seven of the variables in the model have consistent and significant effects on the professional identity of student teachers. These variables are *program*, *gender*, *parents'*

*education*, *normlessness*, *social isolation*, *self-estrangement*, and *time planning*. That is, student teachers who are enrolled in the elementary program have higher professional identities than those enrolled in the secondary program, even after all other variables in the model are controlled. This suggests that the elementary program somehow reduces the sociological ambivalence inherent in professional socialization. Student teachers who are female have higher professional identities than male student teachers and this suggest that there is something in the professional socialization of teachers that affects the ability of these students to accomplish the tasks of professional socialization. Student teachers whose parents have less education have higher professional identities than those whose parents have more education. This suggests that teacher education continues to have less value for students from families with higher socioeconomic statuses than for students from families with lower socioeconomic statuses and that perhaps family attitudes affect the strength of professional identification in student teachers.

The negative effects of two of the dimensions of alienation, *social isolation* and *self-estrangement* on *professional identity* are expected, on the grounds that student teachers who feel a sense of social isolation from their peers, professors, or others or who are unable to develop a commitment to teaching for its intrinsic values are less likely to acquire a strong professional identity. Also, as expected, student teachers who plan their time effectively around academic pursuits have higher professional identities. In so doing, these students are taking the necessary steps to accomplishing two of the important tasks of professional

socialization, namely, becoming certifiably competent in a skill and acquiring an intellectual understanding of a body of knowledge and theory.

Perhaps the most puzzling of all of the significant effects on *professional identity* is that student teachers who experience *normlessness* have higher professional identities than those who do not. In other words, student teachers who see no linkage between success in faculties of education and success in teaching have higher professional identities than those who make this connection. Based on the general hypothesis that alienation has a negative effect on professional identity, this result is contrary to expectations. However, when examined in the context of role set theory, this result may be understood as a consequence of the way some student teachers reduce the burden of conflicting expectations by adopting role distance from both their roles as university students and as student teachers in preparation for playing their new role as teachers (see Coser, 1966, 1975, 1990, 1991). All the results presented above will be discussed in greater detail in Chapter 5.

# CHAPTER 5

# CONCLUSION

The focus of this study, as outlined in Chapters 1 and 2, is to examine the relationships between university and social background, alienation, student effort, academic achievement, and professional identity. The results of the study, reported in Chapter 4, indicate some expected and some unexpected findings. In this chapter, the most important findings are discussed in relation to the four questions that guide the study: *Are student teachers alienated? What is the relationship between alienation and professional identity? What are the effects of university and social background variables on alienation? What are the effects of university background, social background, alienation, and student effort on the grade point average and professional identities of student teachers?* In addition, implications of the findings for policy and practice in the education of teachers, and suggestions for further research are presented.

## SUMMARY AND DISCUSSION

Schools are being criticised for not preparing students adequately for future employment, for not developing a responsible citizenry, and for not producing students who perform as well on standard scholastic measures as students have in the past. Concern for the quality of schools has turned the attention of researchers and the public, in both the United States and Canada, to the preparation of teachers as a possible source of some of these problems. Recent reports, royal commissions, task forces, reviews, and books on education argue that if we wish to improve schools, we must improve teacher education.

The improvement of teacher education is perhaps most impeded by the sociological ambivalence (Merton & Barber, 1963) inherent in the professional socialization of student teachers. Specifically, the normative expectations of faculties of education and of the schools in which student teachers practice, often appear to be in conflict for student teachers. When student teachers attempt to deal with the demands of the academic programs, they are being asked to perform as if their university student role is most important, and when they attempt to deal with the demands of the schools, they are being asked to perform as if their student teacher role is most important. These competing demands, which are inherent in the professional socialization of student teachers, suggest to Doyle (1986) that teacher education is fundamentally ambivalent,

> At an institutional level, thinking about teacher education programs is driven by an ambivalence toward standard classroom practice. Teacher educators hope to produce graduates who are qualified to teach, who can, that is, function effectively in school settings. Yet, there is often a dissatisfaction with how teachers teach and a strong sense that school practice must be changed by preparing teachers to adopt innovative strategies. This ambivalence enormously complicates relationships between teacher educators and schools. This complexity is exacerbated by the structural discontinuities and centrifugal forces that characterize the teacher education enterprise as it stretches across academic departments, professional programs, and school settings. Given the size of the enterprise, it is not surprising that teacher education is not easy to understand or to reform. (p.18)

For student teachers, ambivalence, complexity, and structural discontinuity, create a sense

that norms are unclear or confusing and a cause for social uncertainty. Seeman (1972, p. 473) characterizes this sense of social uncertainty as *alienation*, which he suggests has five dimensions, *powerlessness*, *meaninglessness*, *normlessness*, *social isolation*, and *self-estrangement*. Student teachers may be expected to experience these dimensions of alienation, if they feel torn between two opposing sources of knowledge (see Clifton, 1989), theoretical knowledge provided by the university, on the one hand, and practical knowledge expected by teachers in the schools where student teachers practice teach, on the other, and two competing sets of role expectations emanating from their university student role and their student teacher role.

As mentioned earlier, alienation signifies a withdrawal of energy, commitment, and affect (Nisbet & Perrin, 1977). Student teachers who develop feelings of alienation are unlikely to invest their energies, commitment, or affect in the program of studies developed by faculties of education. Without this type of student investment, however, these programs, that are intended to help student teachers accomplish the tasks of professional socialization through both university-based and school-based experiences, are unlikely to be effective. Furthermore, without such investment, student teachers are unlikely to succeed in becoming integrated in faculties of education or in developing strong professional identities as teachers.

Seeman (1972, p. 520) clarifies the link between alienation and professional identity by suggesting that each of the five dimensions of alienation is the obverse of the five tasks that student teachers need to accomplish in their professional socialization. As stated previously, these tasks are: 1) becoming certifiably competent in a skill; 2) acquiring an intellectual understanding of a body of knowledge and theory; 3) becoming able to regulate one's

conduct according to the norms of the profession; 4) committing oneself to work for its intrinsic rather than its extrinsic rewards; and 5) developing a sense of loyalty to others and developing the duty of professional exchange.

If student teachers develop feelings of alienation within their faculty of education, from other students and from professors, from the schools in which they practice teach, and from themselves, they are unlikely to accomplish these five tasks. Specifically, this means that student teachers who feel powerless will not feel competent as teachers, those who have a sense of meaninglessness will be unable to discern the underlying knowledge and theory of their profession, those who experience normlessness may not behave according to the norms and standards of the university or the teaching profession, those who feel a sense of social isolation will not become integrated with their peers, and those who have a sense of self-estrangement will not develop a commitment to teaching for its intrinsic values. In other words, the theory suggests that in faculties of education in which sociological ambivalence is fostered, student teachers seem to develop feelings of alienation and are unable or unwilling to accomplish the tasks of professional socialization. Conversely, in faculties of education in which sociological ambivalence is somehow mitigated, student teachers probably accomplish the tasks of professional socialization and acquire a professional identity as teachers.

This study examines the relationships between alienation and the educational outcomes of academic achievement and professional identity and considers whether a number of independent and intervening variables influence these relationships. In particular, independent variables, *program*, *years* of university, number of *credit hours*, previous *degree*, *gender*, *age*, and *parents' education*, representing student teachers' university and social

background, are examined to determine whether they are sources of variation in the primary variables of interest. The study also examined the effects of university and social background and alienation on student effort and finally, whether alienation and student teachers' effort to manage their time and to study intervene between the university and social background variables and the educational outcome variables.

Overall, sixteen variables described in detail in Chapter 3, are included in the theoretical model that gives rise to the four questions that this dissertation addresses. As readers no doubt recall, these four questions are, *Are student teachers alienated? What is the relationship between alienation and professional identity? What are the effects of university and social background variables on alienation? What are the effects of university background, social background, alienation, and student effort on the grade point average and professional* identity *of student teachers*? The alienation variables are derived from scales of items that represent five dimensions of alienation, namely, powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement. The student effort variables include a measure of time management behaviour and the number of hours reported for studying and related activities. Academic achievement is represented by grade point average and professional identity is derived from a scale of occupational commitment.

The study is based on data collected from a survey conducted in 1992 to examine various aspects of student teachers in the Faculty of Education at the University of Manitoba. Using a stratified random cluster sampling technique, approximately 20 percent of the students within each year were selected to complete the questionnaire, that was developed by a research team of faculty members and students. In total, 363 undergraduates were

included in the study. The response rate was approximately 74 percent.

In order to answer the questions posed in the study, both descriptive and multivariate analyses were conducted and are reported in Chapter 4. Descriptive statistics are reported to answer the first question posed, *Are student teachers alienated?* The descriptive analyses are concerned with determining if alienation is indeed a problem for student teachers. Student teachers' responses to items on the scales measuring alienation in the Faculty of Education, support, to some degree, and refine the qualitative analyses reported in Clifton et al. (1994a). The fact that student teachers experience each of these dimensions differently, lends some support to Seeman's (1972) conceptualization of alienation as a domain in which there are discrete dimensions rather than all five dimensions representing a unitary construct. The results do not support Clifton et al. (1994a) who suggest that the three dimensions of alienation they identified (powerlessness, meaninglessness, and self-estrangement) are all equally important for student teachers. The descriptive analyses reveal that many student teachers experience *meaninglessness* and *normlessness*, and that fewer experience *powerlessness* and *self-estrangement*, and fewer yet experience *social isolation*. Overall, the proposition that student teachers are alienated is supported, although not equally along all five dimensions.

Faculties of education certainly need to be concerned if student teachers are experiencing alienation, especially if alienation negatively affects their professional identities. Such results support reforms in teacher education that are directed at reducing the alienation of student teachers. This concern gives rise to the second question, *What is the relationship between alienation and professional identity?* Based on Seeman's (1972) conceptualization

of professional socialization as the obverse of alienation, the theoretical model anticipates that all five dimensions of alienation have negative effects on the professional identity of student teachers. The results described in Chapter 4 reveal that four of the dimensions of alienation have negative effects on professional identity, although only two of these, *social isolation* and *self-estrangement*, have statistically significant negative effects whereas the other two, *powerlessness* and *meaninglessness*, have negative effects but they are not quite statistically significant. In other words, as anticipated by the theoretical model, student teachers who experience alienation, at least on these four dimensions, develop weaker professional identities as teachers than those who do not experience these forms of alienation.

Contrary to expectations, however, one dimension of alienation, *normlessness*, actually has a statistically significant positive effect on *professional identity*. That is, student teachers who have a sense of normlessness have stronger professional identities than student teachers who do not experience normlessness. An explanation for this seemingly anomalous result may be found in role-set theory (see Merton et al., 1957; Coser, 1990, 1991). Readers may recall that in Chapter 1 it was noted that the role-set of a student teacher consists of all of the role relationships he or she has by virtue of occupying the status of student teacher and that the expectations of role partners may differ according to their differing positions in the social structure. As Coser (1975) explains, expectations emanating from the same or different role partners may not only be different, but they may also be competing. Competing expectations may be viewed as providing alienating constraints to behaviour or alternatively, may be characterized as providing the basic structural preconditions for growth, maturity, and identity. In other words, the sociological ambivalence inherent in their role sets provides some

student teachers with the opportunity to deal creatively with conflicting normative expectations through the mechanisms available in the social structure for role articulation (Coser, 1966, p.186). As previously mentioned, the mechanisms available within the social structure to articulate roles include making the contradictions of role expectations manifest, organizing one's time and space to become insulated from observability, limiting the authority and interest of different role partners, and taking role distance (see Coser, 1966). It is this last mechanism, taking role distance, that has the most salience for a discussion of normlessness.

Coser (1966) points out that role distance, or non-conformity to the expectations of some role partners in an attempt to prepare for taking another role, is a mechanism that tends to occur in transitional status systems. For example, adolescents, making the transition from the status of a child to that of an adult, often make a show of abandoning the role of the child in order to fit in more comfortably with their peers, and to some extent they become alienated from their parents, while at the same time trying to avoid being stigmatized as a "stuffed shirt" by taking on the adult role too well. Becoming a teacher is an example of a transitional status system in which student teachers make the transition from the status of university student to the status of teacher.

In changing from one status position to another, an individual must simultaneously conform with the requirements of one of these positions while not conforming to the requirements of the other. That is, taking role distance or departing from role obligations signifies lack of conformity (see Coser, 1966, p.186). Like role distance, normlessness also implies lack of conformity, but it is further characterized by the expectancy that one is not bound by conventional goals. Based on the findings of this study and the literature that was

reviewed (see Coser, 1991, pp. 156-165), males more likely than females are likely to take role distance and, in so doing, develop the sense that they are not bound by the conventional goals of their professional socialization. Although not tested, it seems theoretically possible, at least, that student teachers who already perceive themselves as teachers as a consequence of anticipatory socialization are also more likely to develop a sense of normlessness than those who do not. For these student teachers, professional socialization in faculties of education feels redundant and takes on importance only as a means of becoming professionally certified.

Student teachers who develop normlessness do not become committed to the essential values of their academic and professional preparation and regard their professional socialization as something to "get through" and "get over with". Although normlessness is a poor harbinger for the profession of teaching, nevertheless, the findings of this study suggest that this form of alienation actually helps some student teachers to perform better academically and to acquire stronger professional identities as teachers. Perhaps, in abandoning the role obligations given to them by faculties of education, such student teachers are better able to concentrate on achieving academically and on playing their future roles as teachers. As a consequence, for student teachers, normlessness has a positive effect on both their grade point averages and their professional identities.

The negative effects of the other four forms of alienation (social isolation, self-estrangement, powerlessness, and meaninglessness) on professional identity suggest that faculties of education have not firmly institutionalized the mechanisms of role articulation or have somehow inhibited their smooth operation. For instance, faculties of education need to endorse and facilitate such mechanisms as social support "whose operation alleviates, without

necessarily eliminating, the disturbances that are endemic in a role-set" (Coser, 1990, p.161). As Coser (1990, p.162) points out, obtaining social support requires initiative by a status occupant as well but the social structure must provide the opportunity for the use of such an initiative. As previously mentioned, social structures that place individuals in a position where they are unable to articulate their roles in relation to others foster alienation (Coser, 1975, p.242). Student teachers, particularly those enroled in the secondary program, apparently have few opportunities to receive social support from others who are in a similar position, to voice their concerns as a group, or to take collective action. Consequently, student teachers experience social isolation and self-estrangement and based on the findings of this study, these forms of alienation have negative effects on their professional identity as teachers.

Although, alienation appears to be an significant factor in the professional socialization of teachers, it is important to determine whether independent factors account for its impact on *professional identity.* The third question, therefore, arises from the second. Obviously, not all student teachers have the same university and social background and differences may be anticipated in the degree to which they experience alienation, based on their membership in different groups. The question, *What are the effects of university and social background variables on alienation?* is therefore, posed, to determine whether exogenous variables explain alienation in student teachers.

The results reveal few important effects of either university or social background variables on any of the five dimensions of alienation. *Year* has a negative effect on *meaninglessness*, a statistically significant positive effect on *self-estrangement,* and a notable positive, but not significant, effect on *normlessness,* even when the social background

variables, *gender*, *age*, and *parents' education*, are added to the regression equations. These results suggest, not surprisingly, that student teachers who have spent more years in university develop a greater sense of purpose than student teachers who have had fewer years of university, but that the longer student teachers attend university, the greater the sense of normlessness and self-estrangement they develop. These results suggest that student teachers fail to connect the purpose of their professional socialization in faculties of education with teaching in schools.

The most important effect of the social background variables on alienation is the statistically significant positive effect of *gender* on *normlessness*. This result indicates that males experience greater normlessness than females. In other words, males are less likely to conform to the expectations and role obligations of their role partners in faculties of education and the schools in which they practice teach (see Coser, 1991). Males, more than females, may behave as though their teacher education programs are simply "rungs on a ladder" they need to climb in order get their education degrees and their teaching certificates.

The amount of variance explained in the five dimensions of alienation by university and social background variables ranges from 2 to 7 percent, suggesting that it is neither the amount nor the type of university experience that student teachers have, nor their gender, age, or the socio-economic group to which they belong, that explains, to any great extent, the alienation experienced by student teachers. These results support the theoretical model, outlined in Chapter 2, that factors other than university and social backgrounds explain alienation in student teachers.

Since student effort (Britton & Tesser, 1990; Etcheverry, 1995) has been shown

previously to have an impact on educational outcomes, it is included in the theoretical model. Furthermore, the theoretical model anticipates that student effort reduces the impact of alienation on educational outcomes of *grade point average* and professional identity. In other words, what students actually do to organize their time and effort is expected to ameliorate some of the negative effects of how they feel. This proposition leads to the final question of the study, *What are the effects of university background, social background, alienation, and student effort on the grade point average and on the professional identity of student teachers?*

This question relates to the effects of all of the independent and intervening variables on *grade point average* and on *professional identity*. The theoretical model depicts alienation as having a negative effect on student effort which, in turn, has a negative effect on *grade point average* and *professional* identity. In other words, the model anticipates that both alienation and student effort intervene between the university and social background variables and educational outcomes. Four separate sets of analyses were conducted to address this question. In the first two sets, the effects of the university and social background and alienation variables are examined on *time planning* and on *studying*. The third set of analyses examines the effects of university and social background, alienation, and student effort variables on *grade point average*, and the final set of analyses examines the effects of all of the independent and intervening variables on *professional identity*.

The results of the first two sets of analyses are interesting. The university background variable, *year*, has a notable effect on *time planning* that becomes significant when the alienation variables are included in the analyses. That is, student teachers who spend more

time in university, report more positive time planning behaviours than student teachers who have spent less time in university. The only social background variable that has a significant effect on *time planning* is *gender* and this effect remains significant when the alienation variables are included. In other words, female student teachers plan their time more effectively than male student teachers, whether they experience alienation or not. That is, more experienced student teachers and those who are female are able to develop more positive time planning behaviours in the face of conflicting normative expectations than less experienced student teachers and those who are male. In terms of role-set theory, this may be an instance of female student teachers being better at utilizing mechanisms of role articulation, such as managing time and space, to reduce the burden of conflicting expectations (Coser, 1966, p. 178).

As reported in Chapter 4, the only effects of university and social background on *studying* worth noting are the statistically significant positive effect of *credit hours* and the positive though not statistically significant effect of *age*. These results suggest, not surprisingly, that the higher the course load student teachers take, the greater the number of hours they report for studying. The other finding of interest is that older student teachers study more than younger student teachers. The latter result may reflect mature student teachers' understanding of the relationship between effort and achievement or alternatively, that older student teachers, to reach their level of expectations, need to spend more time studying in order to understand and retain the information.

The theoretical model anticipates that all five dimensions of alienation have negative effects on effort student teachers expend on university work and their work in schools. The

findings of this study show some mixed results. For *time planning,* two dimensions of alienation have negative effects. *Self-estrangement* has a significant negative effect and *social isolation* has a notable but not quite significant negative effect on *time planning.* As expected, student teachers who are not socially integrated and those who feel depressed, upset, worried, and restless do not organize their time effectively around academic pursuits. Overall, the amount of variance in *time planning*, explained by university and social background variables, is 7 percent. However, the addition of the alienation variables increases the amount of variance explained substantially to 12 percent.

As expected, *meaninglessness*, *normlessness*, and *social isolation* have significant negative effects on *studying.* Student teachers who feel a sense of meaninglessness, normlessness, or social isolation, report that they spend fewer hours studying than those who do not experience these dimensions of alienation. Unexpectedly, *powerlessness* and *self-estrangement* have positive effects on *studying.* Student teachers who feel a sense of powerlessness and/or self-estrangement report that they study more hours than student teachers who do not develop these forms of alienation. One possible explanation for these findings is that studying is, for students, an antidote to feelings of lack of control or *powerlessness* and feelings of anxiety or *self-estrangement.* Overall, the amount of variance explained in *studying* by the university and social background variables is 6 percent, but the addition of the alienation variables increases this amount substantially to 12 percent.

Nevertheless, these findings are not entirely consistent with the theoretical model which anticipates that all of the alienation variables will have negative effects on both *time planning* and *studying.* Furthermore, the positive effects of *powerlessness* and *self-*

*estrangement* reveal that these relationships may be somewhat more complex than originally anticipated. Although higher hours of studying might easily be mistaken as an indication of student teacher integration in faculties of education, these results demonstrate that increased hours of studying alternatively must be understood to be a precursor to student teacher alienation.

The final two sets of analyses reported in Chapter 4 examine the effects of background, alienation, and student effort, first on *grade point average* and then on *professional identity.* The most important background effects on *grade point average,* when all of the variables are taken into account, are the effects of *credit hours*, *degree,* and *age*. Specifically, student teachers who are older, who take more credit hours, and who have a degree, have significantly higher grade point averages than student teachers who do not have these characteristics. In other words, experience in the university student role is an asset to student teachers, at least as far as grade point averages are concerned. These findings support reform proposals that recommend that student teachers complete an undergraduate degree in Arts or Sciences prior to entry into teacher education programs and that older, and presumably more mature students, be admitted..

Surprisingly, none of the alienation variables have statistically significant effects on *grade point average*, although the positive effect of *normlessness* is notable. Student teachers who have a sense of normlessness and believe that any means to achieve their certification are justified have higher grade point averages than those who are less normless. In other words, student teachers who focus on professional certification may be more concerned with determining what it takes to get good grades and are therefore more successful in

accomplishing this goal.

As anticipated, student effort, particularly *time planning*, has a positive effect on *grade point average* but the effect of *studying* on *grade point average* is weak. Not surprisingly, student teachers who have positive time management behaviours are rewarded with higher grade point averages (Britton & Tesser, 1990), but when this variable is controlled, student teachers who study more, have slightly lower grade point averages. Simply studying for a longer time is apparently not as effective in achieving academic success in university as employing effective planning and studying strategies.

The addition of the student effort variables, as anticipated, reduces the effect of *normlessness* on *grade point average*. The amount of variance in *grade point average* explained by university and social background variables is 15 percent, but the total amount of variance explained increases with the inclusion of the alienation variables to 17 percent and with the inclusion of the student effort variables, the variance explained rises to 23 percent. Given the percent of variance accounted for by student effort and the fact that *time planning* has such a large significant positive effect on *grade point average*, it seems that student effort, and not alienation, is the important factor here.

Finally, the effects of all of the independent variables on *professional identity* are analyzed. The effect of *program* stands out through all five steps in the analyses. That is, student teachers enrolled in the elementary program have higher professional identities than those enrolled in the secondary program even when all other variables are controlled. A possible explanation for this result, is that student teachers' perceptions of sociological ambivalence may vary as a result of the particular program in which they are enrolled. The

apparently more cohesive structure of the elementary program probably provides increased opportunities for student teachers to use the mechanism of social support to reduce the burden of sociological ambivalence and thus mitigates some of the negative effects of alienation experienced by student teachers in the less cohesive secondary program.

Alternatively, the effect of *program* may be explained by the fact that student teachers who are enrolled in the elementary program choose teaching in their first year of university (or earlier) whereas student teachers enrolled in the secondary program may choose teaching after a number of years in other faculties. Indeed, Lortie (1975) suggests that a number of those who enter the secondary program may enter education as a consequence of "blocked aspirations" to enter other careers. As a consequence, student teachers in the secondary program may be less committed to teaching, at least initially, than student teachers in the elementary program. Furthermore, student teachers in the secondary program may identify more strongly with their discipline specialty (ie. mathematics or history) than with teaching and may therefore have more difficulty becoming committed to their professional identity as teachers rather than as subject matter specialists.

Two of the social background variables are important. Both *gender* and *parents' education* have negative effects on professional identity. That is, females and those whose parents have fewer years of education have higher professional identities as teachers than males and those whose parents have greater years of education. As reported in Chapter 4, the effects of *gender* on professional identity are increased in Step 3 with the addition of the alienation variables but are reduced with the addition of the student effort variables in Step 4. In other words, the alienation variables suppress some of the effects of *gender* on

*professional identity,* but the student effort variables mediate its effect. An explanation for these apparently contradictory results is that males experience a greater sense of normlessness than females and females have more positive time planning behaviours than males, and therefore, some of the effects of *gender* noted are actually due to its covariation with *normlessness* and with *time planning.*

Although there is some debate about whether the influence of parents on career preferences and orientations endures throughout university (see Weidman, 1989, p. 301), the negative effect of *parents' education* on *professional identity* in this study suggests that more research is needed to fully understand the effect of parents' education on professional identity, at least for student teachers. One explanation for this finding is that student teachers whose parents have little education consider teaching to be an important way to improve their social and financial status, whereas student teachers whose parents have more education consider teaching to be a lowering of their social and financial status. For the latter, teaching as a profession, is a step down the socio-economic scale from the educational levels and perhaps, from the occupational levels of their parents.

As previously noted, three of the alienation variables, *normlessness*, *social isolation*, and *self-estrangement*, have strong direct effects on professional identity. When student effort and *grade point average* are included in the analyses, these effects remain and the effects of a fourth dimension of alienation, *powerlessness,* become notable, although not quite statistically significant. As anticipated by the theoretical model, student teachers who have feelings of powerlessness, social isolation, and/or self-estrangement, have weaker professional identities as teachers than those who have feelings of control, community, and concern.

Perhaps the most surprising finding of this study is that *normlessness* has a highly significant positive effect on *professional identity,* regardless of the amount of effort student teachers make to plan their time or to study or how high a grade point average they attain. That is, student teachers who perceive that the *ends* of becoming a teacher justify any *means* of achieving their goal, including "telling professors what they want to hear" or "doing whatever it takes" to get an "A" nevertheless graduate from faculties of education with a strong professional identity as teachers or what Lacey (1977, p.14) characterizes as a "teacher perspective."

Changes in the effects of four of the alienation variables on *professional identity,* after the student effort variables are added, suggest that student effort is an important means through which student teachers can overcome the negative impact of alienation on their educational outcomes. The inclusion of the student effort variables in the analyses reveals that there is a mediation between some of the dimensions of alienation and student effort on *professional identity.* Specifically, the statistically significant effects of *social isolation* and *self-estrangement* on *professional identity* decrease when the student effort variables are included in the analyses. In other words, student teachers who manage their time effectively and who study more hours, are able to reduce some of the negative effects of *social isolation* and *self-estrangement* on *professional identity.*

These findings support suggestions in the literature that professional socialization is an interactive process in which student teachers play an active role. In other words, what student teachers actually do is extremely important in reducing the impact of alienation on professional identity. If this interpretation is correct, there is reason to hope that reforms in

teacher education that focus on the alleviation of alienation in student teachers will also foster their professional identity as teachers.

In fact, there is a growing recognition (Darling-Hammond, 1990, 1996; Keith, 1987; Kramer, 1991; Lanier & Little, 1986; National Commission on Teaching and America's Future, 1996; Proefriedt, 1994) that "the single most direct and influential force in the quality of schooling is the teacher who works in schools" (Fullan & Connelly, 1987, p.52). That is, the findings of this study may be interesting and informative, but beyond that, they are important because they concern not only teacher education, but also the quality of education in schools. A number of implications for policies and practices in teacher education that arise from this study are discussed next and a number of implications for research follow.

## IMPLICATIONS FOR POLICY AND PRACTICE

Recent reports and commissions (Carnegie Forum, 1986; Holmes Group, 1986; Fullan & Connelly, 1987; National Commission for Excellence, 1985; National Commission on Teaching and America's Future, 1996; Hughes, 1993) acknowledge the need for comprehensive reforms in teacher education. As long as teacher education remains fundamentally divided so that student teachers experience theory and practice as separate and incompatible activities, these reforms like those implemented previously (see Zeichner & Gore, 1990, p.337) will continue to have a weak impact on the professional socialization of student teachers. Earlier, in discussing sociological ambivalence, teacher education was compared to Janus, the two-faced Roman god of gates and thresholds. In teacher education, one face represents university-based learning and the other represents school-based practice. Unlike Janus, student teachers do not have the ability to face both directions at once. They

are caught turning from one direction to the other in an ambiguous attempt to bring the academic world and the practical world of school together so that they can create a coherent structure in which to function.

Caught in this position, Merton (1968, p. 430) suggests, it is "the task of the role-set, rather than the status occupant to resolve these contradictions." In other words, faculties of education need to create the structural circumstances that enable student teachers to mitigate the effects of sociological ambivalence and to develop their individuality and autonomy rather than to develop alienation (Coser, 1975). When faculties of education fail to address sociological ambivalence, student teachers continue to perceive theory and practice as being disconnected and to experience confusion about the primacy of their university student role and their student teacher role. As a consequence, they may become alienated from faculties of education, from professors and peers, or they may even become self-estranged (see Coser, 1990). Alienation is a particularly important concept for developing policies and practices in teacher education because the five dimensions of alienation are the obverse of five tasks that student teachers need to accomplish in their professional socialization (Seeman, 1972, p. 520). Faculties of education are expected to provide the courses, experiences, and opportunities that student teachers need to accomplish these tasks.

Numerous reform reports suggest that faculties of education are not successful in this regard because of barriers in three important areas. First, the qualifications student teachers need to enter and particularly to exit teacher education programs are generally considered to be insufficient for them to accomplish the first three tasks. That is, low standards for admission and for graduation mean that when student teachers graduate they will not feel

competent as teachers, they will be unable to discern the underlying knowledge and theory of their profession, and they will not behave according to the norms of the profession. Second, the structure of teacher education needs to be organized around the student teacher role so that student teachers accomplish the fourth task and become socially integrated with their peers, their professors, and members of the education community. Finally, the content of teacher education programs needs to reflect mandated professional standards and to stretch the abilities of student teachers so that they can accomplish the fifth task and develop a commitment to teaching for its intrinsic rewards. Faculties of education need to develop policies and practices in each of these three areas of concern, which as mentioned earlier, are the same issues raised by Horace Mann over one hundred and fifty years ago.

Reformers have become increasingly concerned about the qualifications that student teachers need to enter and to exit teacher education programs. Although less pressing a problem in Canadian universities, recommendations to increase admission requirements appear in most reform proposals, both as a means of attracting more academically gifted students to the profession and as a means of raising the status of the teaching profession (see Fullan & Connelly, 1987; Carnegie Forum, 1986; Goodlad, 1990; Holmes Group, 1986; National Commission for Excellence, 1985; Nikiforuk, 1993, 1994). Consequently, a number of reform proposals (Holmes Group, 1986; Joyce & Clift, 1984; National Commission for Excellence, 1985; National Commission on Teaching and America's Future, 1996) argue that admission standards must be raised so that an undergraduate degree in Arts or Sciences would be a minimum prerequisite for entry into programs in faculties of education, regardless of whether student teachers plan on becoming senior high, middle school, or elementary

school teachers. An undergraduate degree, it is argued, would allow prospective teachers to gain a better understanding of the disciplines they teach, and it would allow them to develop, to a greater degree, the habits of scholarly inquiry.

The theoretical perspective and the empirical findings of this study support this change in admission policy. Presently, many student teachers are admitted into faculties of education directly from high school and as such, they are confronted with the difficult task of having to internalize their university student role at the same time they are internalizing their student teacher role. On the other hand, student teachers who have already earned a degree, have ample opportunities to integrate the academic values of thinking, inquiring, and achieving (the basis of their academic role) before they are asked to internalize the professional values of knowing, doing, and helping (the basis of their student teaching role). The empirical finding that *degree* has a positive effect on *grade point average* is not really very surprising, since student teachers who have already earned a degree have demonstrated their ability to succeed in the university academically. More important, from the theoretical perspective of this study is that having earned a degree indicates that a student teacher is comfortable and secure in the university student role. Presumably, students who feel inadequate academically or who are uncomfortable with the university student role are those who do not complete their undergraduate B.A. or B. Sc. degree.

The importance of the university student role to professional teachers is highlighted in a recently completed two-year study, *What Matters Most: Teaching for America's Future* (National Commission on Teaching and America's Future, 1996), supported by the Rockefeller Foundation and the Carnegie Corporation. This study recommends, like earlier

proposals by Fullan and Connelly (1987), that teacher education should be re-conceptualized as an ecologically integrated continuum that stretches from pre-service education for novices to continuing education for veterans. In other words, student teachers need to consider themselves to be students of learning and to remain committed to their university student role, long after their certification. As Adler (1977, p.175) suggests, good teachers need to be first of all, good students or in other words, to accomplish the first three tasks of their professional socialization. However, the empirical findings of this study suggest that student teachers do not accomplish these tasks, that is they do not generally develop a long-term commitment to life-long learning in their teacher education programs. On the contrary, the findings suggest that student teachers who have a sense of normlessness have stronger professional identities than those who do not experience normlessness. For these student teachers, commitment to teaching may be founded on their commitment to their anticipated teacher role rather than their commitment to their university student or student teaching roles.

At least part of the problem in securing the commitment of student teachers to their university student and student teaching role resides in the widely held perception that teacher education programs lack intellectual rigour, particularly in courses related to their pedagogical preparation (see Goodlad, 1990; Holmes Group, 1986; Nikiforuk, 1994). Indeed, teacher education programs are generally criticised for having generally low expectations for their student teachers (Lanier & Little, 1986).

Support for this criticism also comes from the empirical findings of this study. A qualitative analysis of the anecdotal comments reported earlier, reveals that student teachers attribute at least some of their negative perceptions of the Faculty of Education to its low

standards. The quantitative analysis also indicates that student teachers are alienated, especially along the dimensions of *meaninglessness* and *normlessness*. Of the five dimensions of alienation, these two are arguably most closely related to student teachers' perceptions of whether the standards in their teacher education programs are appropriate and clear. Student teachers who experience meaninglessness, do not perceive their experiences in teacher education programs to be relevant to teaching.

The perception that teacher education programs are meaningless is attributable, according to Keating (1987, p.407), to the fact that university students are rarely able to articulate the assumptions on which an assignment, lecture, or even a course is based. She suggests that professors can alleviate meaninglessness in university students, to some degree, by making an effort to justify and to explain the relevance of the knowledge, skills, and attitudes they are trying to develop in their students. This recommendation seems particularly relevant for pragmatic and vocationally oriented student teachers who experience meaninglessness as a consequence of being unable to connect what they are doing in classes with what they need to do as teachers in schools. Beyond the negative feelings aroused by meaninglessness, the empirical findings of this study indicate that this dimension of alienation has a negative effect on the number of hours student teachers report that they study. The implication for faculties of education is that student teachers will not expend effort to complete course requirements unless they perceive these requirements to be relevant to teaching.

In addition, faculty members need to be aware that student teachers who experience normlessness do not exert their effort to study but rather spend their time and energy

determining what it takes to get good grades, finding out what professors want to hear, and doing whatever they need to do to become certified as teachers. At least some of the normlessness that is aroused in student teachers may be attributed to unclear expectations and this can be counteracted, according to Keating (1987, p. 408), by providing students with very detailed course outlines on the first day of classes, ensuring that there are explicit written instructions for every assignment, and by applying consistent high standards to all students.

The empirical finding that *normlessness* has a positive effect on *professional identity* reveals that teacher education programs are graduating teachers who do not accomplish the task of "becoming able to regulate one's conduct according to the norms of the profession". Perhaps, student teachers do not accomplish this task in faculties of education because they already perceive themselves to be "teachers in waiting"and they therefore distance themselves from their university programs and student teacher roles. If student teachers are drawing upon their 12,000 hours of experience as students in schools as a blueprint for their professional identity as teachers, then faculties of education and educational administrators need to find ways to involve student teachers more directly in accomplishing the tasks of professional socialization. One implication for practice is that faculties of education need to fully inform student teachers about the five tasks of professional socialization at the beginning of their teacher education programs. That is, student teachers are more likely to expend the effort necessary to fulfil the expectations of their teacher education programs if they know what is expected of them.

The second area for concern, in which the theoretical concepts and empirical findings of this study may guide policy and practice relates to the structure of teacher education

programs. At the University of Manitoba, and many other teacher education programs in North America, there are structural differences between the two main programs offered, the elementary and the secondary programs. Often, student teachers enrolled in elementary programs spend more time in faculties of education, interact with each other more, and move through their courses more as a cohort, in contrast to student teachers enrolled in secondary programs, who spend less time in faculties of education, interact less with education students, and who do not generally move through courses as a cohort. The results of this study indicate that there are significant differences in the effects of being enrolled in the elementary and the secondary program on *professional identity*. Specifically, student teachers enrolled in the elementary program have stronger professional identities than those enrolled in the secondary program.

Moreover, the empirical finding that *social isolation* has a negative effect on *time planning*, *studying*, and *professional identity* supports the notion that opportunities for social interaction, such as those offered by elementary programs, are important for student teachers. The implication for faculties of education who want student teachers to have stronger professional identities, therefore, is that they need to structure opportunities for students to become more socially integrated into faculties of education. Some valuable approaches that foster social integration include grouping student teachers into cohorts, requiring that a number of assignments be completed by students working in groups, providing opportunities for class discussions, arranging for student teachers to participate in study groups, and mentorships or peer tutoring. These types of social interactions provide opportunities for student teachers to use mechanisms of social support to resolve inherent conflicting

expectations, to validate shared experiences and goals, to confirm academic standards, and to strengthen social ties (Keating, 1987, p. 408). As a consequence, professional identity of student teachers will be fostered.

The third area of concern in teacher education that can be guided by the theoretical perspective and the empirical findings is the content of teacher education programs. Although some critics (see Goodlad, 1990, p. 214) already view the content of teacher education programs as being overly pragmatic, student teachers continually argue that the content is too theoretical. According to Goodlad, (1990, p. 247) both of these positions may be missing the point. He notes that it is not so much a matter of whether the content is too theoretical or too practical, but whether student teachers perceive the content to be relevant to their intentions of becoming teachers. In other words, faculties of education can help student teachers accomplish the fifth task of professional socialization, "committing oneself to work for its intrinsic rather than its extrinsic rewards", by ensuring that student teachers perceive their teacher education programs as essential for preparing them to get into classrooms and becoming effective teachers.

Student teachers who perceive that the content of their professional education, however relevant, is organized around competing sources of knowledge, suffer confusion about which one should capture their primary interest. The implication for policy and for practice of the inherent sociological ambivalence in teacher education is that faculties of education must either carefully and comprehensively integrate theory and practice or they must clearly and obviously separate them. Attempts to accomplish the former have been continually advocated in the reform literature, but, according to this literature the

implementation has so far been only marginally successful (see Housego & Bidali, 1996). Attempts to accomplish the latter seem to occur more by default than by design. Indeed, the move to require students to have an undergraduate B.A. or B.Sc. degree prior to admission to faculties of education, advocated for the reasons cited earlier, is a move in the direction of more clearly separating the theoretical aspects of teacher education from its more practical aspects. The next step, according to recent reform literature, such as the National Commission on Teaching and America's Future (1996), is to require that student teachers, in addition to completing an undergraduate degree, have a two year teacher education program that includes a full year internship in which they combine teaching and learning under the joint supervision of faculties of education and school personnel.

The implication of first separating theory and practice and then integrating them by design is that universities will need to restructure their teacher preparation programs. The strictly theoretical courses in education that student teachers need as foundations could easily be included as part of the undergraduate degree in Arts or Sciences. If faculties of Arts and Sciences could offer courses, such as psychology of human development, sociology of education, and philosophy of education, faculties of education would be able to concentrate on providing practical, field-based learning that is clearly organized around the student teacher role rather than the university student role. This type of organization would provide student teachers with opportunities to become thoroughly familiar with provincially mandated curricula they would be expected to teach, to practice current methods of instruction and evaluation, to learn and use effective class management techniques, as well as to have graduated opportunities to teach in schools. In other words, the focus of teacher education

programs would be on providing learning opportunities that relate directly to teaching in classrooms. In this way, the sociological ambivalence inherent in teacher education would be largely mitigated and alienation would consequently be reduced. In the next section, research is suggested that might bring such planning closer to reality.

## SUGGESTIONS FOR RESEARCH

There are at least three suggestions for further research that arise from this study. First, it is acknowledged that the findings of this study are derived from only one relatively small sample of students from the University of Manitoba and that some of the findings may be unique to these student teachers or to this university. Examination of the effects of alienation in other groups of student teachers and students in other programs could provide evidence to validate, refute, or further explicate the findings and the interpretations that are made here. Data collected from students in other faculties, professional schools, and universities, using the same variables would help to determine the generalizabilty of the effects of alienation and student effort on educational outcomes.

Second, further research is needed in order to study the effects of alienation in student teachers in longitudinal studies. Using a longitudinal approach, it would be possible to determine if levels of alienation have effects on attrition, and whether levels of alienation change over the period of time student teachers are enrolled in a particular faculty or a particular program. That is, longitudinal research could address questions such as, *Are certain dimensions of alienation more intense at various stages of professional socialization than at other stages? How does alienation affect student effort, academic achievement, and professional identity of student teachers at various stages of their professional socialization?*

Finally, as mentioned in Chapter 1, the model examined in this study is a sparse model that only includes sixteen variables and these do not fully approximate the complexity of the social reality that student teachers actually live in as they progress through their programs. There may be additional variables that would improve the explanatory power of this model. For example, it would be useful to have a measure that would examine the conflict of normative expectations of theory and practice and between the roles of university student and student teacher directly on their professional identities. In addition, it would be helpful to develop a measure of anticipatory socialization and to determine its empirical relationship to alienation, student effort, and professional identity. Furthermore, it may be possible to determine if alienation from faculties of education persists once student teachers graduate, and what effect the experience of alienation has on their job performance as teachers.

In conclusion, universities and faculties of education that are interested in improving their teacher education programs and responding to public criticisms of teacher education can do so in a theoretically informed way. The concepts of sociological ambivalence and alienation provide a useful theoretical framework for understanding the empirical evidence that is evident, and for guiding policies, practices, and research concerning the acquisition of professional identity in student teachers. On a practical level, this study provides researchers and professors in faculties of education with an instrument for measuring alienation that may help them to their improve courses and to better foster professional identities in student teachers. Based on the empirical findings, the theoretical model is largely supported. Some of the unexpected findings reveal that there are a number of complex effects that warrant further investigation. It is hoped that researchers will develop this line of inquiry further so

that the processes by which a student teacher becomes a professional, or in the words of Seeman (1972, p.520) "the ideal-typical description of the unalienated man [sic]" are better understood.

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# APPENDIX

THE UNIVERSITY OF MANITOBA

# QUALITY OF LIFE IN THE FACULTY OF EDUCATION

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This questionnaire is about your life in, and your attitudes toward, the Faculty of Education. There are no right or wrong answers – we are just trying to find out how students feel about their experience in the Faculty. We are interested in your honest opinions.

## PART I

Each item below says that **The Faculty of Education is a place where** some particular thing happens to you or you feel a particular way. We would like you to respond to each statement by checking one of the response categories provided.

Please read each item carefully and check the answer which best describes how you feel. Keep in mind that the phrase **"The Faculty of Education is a place where. . ."** applies to each item. **Check one box for each statement.**

| **The Faculty of Education is a place where . . .** | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| . . . the things I learn are important to me | ☐ | ☐ | ☐ | ☐ |
| . . . people look up to me. | ☐ | ☐ | ☐ | ☐ |
| . . . professors treat me fairly. | ☐ | ☐ | ☐ | ☐ |
| . . . I feel depressed | ☐ | ☐ | ☐ | ☐ |
| . . . I find it easy to get to know other people. | ☐ | ☐ | ☐ | ☐ |
| . . . I really get involved in my work. | ☐ | ☐ | ☐ | ☐ |
| . . . I like learning | ☐ | ☐ | ☐ | ☐ |
| . . . I enjoy being. | ☐ | ☐ | ☐ | ☐ |
| . . . I feel restless. | ☐ | ☐ | ☐ | ☐ |
| . . . professors give me the marks I deserve | ☐ | ☐ | ☐ | ☐ |
| . . . I have acquired skills that will be of use to me. | ☐ | ☐ | ☐ | ☐ |
| . . . I achieve a satisfactory standard in my work. | ☐ | ☐ | ☐ | ☐ |
| . . . people care about what I think | ☐ | ☐ | ☐ | ☐ |
| . . . professors take a personal interest in helping me with my work. | ☐ | ☐ | ☐ | ☐ |
| . . . I am treated with respect. | ☐ | ☐ | ☐ | ☐ |
| . . . mixing with other people helps me to understand myself | ☐ | ☐ | ☐ | ☐ |
| . . . the things I learn will help me in my life. | ☐ | ☐ | ☐ | ☐ |
| . . . people think a lot of me. | ☐ | ☐ | ☐ | ☐ |
| . . . professors help me to do my best | ☐ | ☐ | ☐ | ☐ |
| . . . I get upset. | ☐ | ☐ | ☐ | ☐ |
| . . . I am given the chance to do work that really interests me. | ☐ | ☐ | ☐ | ☐ |
| . . . the things I am taught are worthwhile learning | ☐ | ☐ | ☐ | ☐ |
| . . . professors are fair and just. | ☐ | ☐ | ☐ | ☐ |
| . . . I really like to go each day. | ☐ | ☐ | ☐ | ☐ |
| . . . I feel worried | ☐ | ☐ | ☐ | ☐ |
| . . . the work I do is good preparation for my future. | ☐ | ☐ | ☐ | ☐ |
| . . . other students accept me as I am. | ☐ | ☐ | ☐ | ☐ |
| . . . I have learned to work hard | ☐ | ☐ | ☐ | ☐ |
| . . . I get on well with the other students in my class. | ☐ | ☐ | ☐ | ☐ |
| . . . I find that learning is a lot of fun. | ☐ | ☐ | ☐ | ☐ |
| . . . professors listen to what I say | ☐ | ☐ | ☐ | ☐ |

# PART II

Different people have different ideas about the overall quality of education received in the Faculty of Education. Listed below are some things that students and professors have said are important.

Please assess each statement by checking the response which best describes your experience. Remember that the phrase "**In the Faculty of Education, I have been challenged to . . .**" applies to each item. **Check one box for each statement.**

| **In the Faculty of Education, I have been challenged to . . .** | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| . . . remember an extensive number of new terms | ☐ | ☐ | ☐ | ☐ |
| . . . translate complicated ideas into everyday language. | ☐ | ☐ | ☐ | ☐ |
| . . . demonstrate how theories are useful in real life. | ☐ | ☐ | ☐ | ☐ |
| . . . identify organizing principles in my courses | ☐ | ☐ | ☐ | ☐ |
| . . . design my own plans in completing assignments. | ☐ | ☐ | ☐ | ☐ |
| . . . logically defend a course of action. | ☐ | ☐ | ☐ | ☐ |
| . . . recall a substantial number of new concepts. | ☐ | ☐ | ☐ | ☐ |
| . . . translate difficult concepts into my own words. | ☐ | ☐ | ☐ | ☐ |
| . . . use theories to address practical questions. | ☐ | ☐ | ☐ | ☐ |
| . . . analyze complex interrelationships between concepts | ☐ | ☐ | ☐ | ☐ |
| . . . organize ideas into themes. | ☐ | ☐ | ☐ | ☐ |
| . . . evaluate alternative solutions to problems. | ☐ | ☐ | ☐ | ☐ |
| . . . recall a lot of factual information | ☐ | ☐ | ☐ | ☐ |
| . . . interpret the meaning of new facts and terms. | ☐ | ☐ | ☐ | ☐ |
| . . . illustrate abstract ideas with concrete examples. | ☐ | ☐ | ☐ | ☐ |
| . . . identify assumptions underlying theories | ☐ | ☐ | ☐ | ☐ |
| . . . develop new ideas based on theories. | ☐ | ☐ | ☐ | ☐ |
| . . . detect missing parts in arguments. | ☐ | ☐ | ☐ | ☐ |
| . . . remember an extensive number of facts | ☐ | ☐ | ☐ | ☐ |
| . . . understand difficult ideas. | ☐ | ☐ | ☐ | ☐ |
| . . . use theoretical ideas to address practical problems. | ☐ | ☐ | ☐ | ☐ |
| . . . identify the reasoning underlying theories | ☐ | ☐ | ☐ | ☐ |
| . . . solve problems by integrating theories. | ☐ | ☐ | ☐ | ☐ |
| . . . judge the logic of written arguments. | ☐ | ☐ | ☐ | ☐ |
| . . . recall a significant number of facts | ☐ | ☐ | ☐ | ☐ |
| . . . translate a variety of technical terms into ordinary language. | ☐ | ☐ | ☐ | ☐ |
| . . . apply theories to new situations. | ☐ | ☐ | ☐ | ☐ |
| . . . identify the basic ideas in theories | ☐ | ☐ | ☐ | ☐ |
| . . . make original contributions to classroom discussions. | ☐ | ☐ | ☐ | ☐ |
| . . . identify the strengths and weakness of arguments. | ☐ | ☐ | ☐ | ☐ |
| . . . remember complex facts | ☐ | ☐ | ☐ | ☐ |
| . . . interpret the meaning of complicated charts and graphs. | ☐ | ☐ | ☐ | ☐ |
| . . . apply theoretical principles in solving problems. | ☐ | ☐ | ☐ | ☐ |
| . . . illustrate how the different aspects of my discipline are related | ☐ | ☐ | ☐ | ☐ |
| . . . organize ideas in new ways. | ☐ | ☐ | ☐ | ☐ |
| . . . identify bias in written material. | ☐ | ☐ | ☐ | ☐ |

# PART III

In the following four sections, we ask you to tell us how you feel about yourself, both as a propsective teacher and as a student in the Faculty of Education.

## Section 1

The following statements concern your personal feelings and thoughts about becoming a teacher. Read each statement carefully since no two are exactly alike. If a statement is TRUE or MOSTLY TRUE as applied to you, circle the T in front of the statement. If a statement is FALSE or MOSTLY FALSE as applied to you, circle the F in front of the statement.

| MOSTLY TRUE | MOSTLY FALSE | |
|---|---|---|
| T | F | 1. When people are discussing the topic of teaching, I probably will listen and/or join the conversation. |
| T | F | 2. If I come across an article related to teaching, I probably will read it with interest. |
| T | F | 3. If problems develop in my life, I try to think them through as they will affect my teaching. |
| T | F | 4. With respect to teaching, I don't care if I make mistakes. |
| T | F | 5. During the past week, I have had no conversations about teaching. |
| T | F | 6. During the past week, I have made 10 or more decisions in which my interest in teaching has influenced the decision process. |
| T | F | 7. I rarely or never think about how I can become a better teacher. |
| T | F | 8. Compared to other concerns, I worry little about how good a teacher I will be. |
| T | F | 9. If I had to give up something, becoming a teacher is the last thing I would give up. |
| T | F | 10. When I am involved in activities related to teaching, I usually feel indifferent. |
| T | F | 11. If I become a better teacher than everyone else, it would make little difference to me. |
| T | F | 12. When I can, I seek out situations in which I can express myself as a teacher. |
| T | F | 13. Being a teacher is not important to me. |
| T | F | 14. I feel bad when I think I am not going to be a good teacher. |
| T | F | 15. I rarely devote much time to my teaching interests. |
| T | F | 16. When I meet new people, it is important to me that they know I will be a teacher. |
| T | F | 17. I typically organize my day so that I can work toward goals that are related to teaching. |
| T | F | 18. Being a teacher is of little value to me. |
| T | F | 19. Being a teacher will have virtually no effect on my life. |
| T | F | 20. I enjoy it when people encourage me to become a teacher. |
| T | F | 21. I would feel a great sense of loss if suddenly I were unable to be a teacher. |
| T | F | 22. I am strongly committed to being a good teacher. |
| T | F | 23. If people could know only one thing about me, I would want them to know I will be a teacher. |

# Section 2

Please think about the experiences students have in this faculty, and give your opinion about each of the following statements. **Check one box for each statement.**

| | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| 1. It is almost impossible for one student to really understand the feelings of another. | ☐ | ☐ | ☐ | ☐ |
| 2. Too many people in this faculty are just out for themselves. | ☐ | ☐ | ☐ | ☐ |
| 3. These days, students do not really know who to count on. | ☐ | ☐ | ☐ | ☐ |
| 4. There is not much chance that students will do anything to make this faculty a better place to learn. | ☐ | ☐ | ☐ | ☐ |
| 5. If classes were smaller, grades would better reflect true ability. | ☐ | ☐ | ☐ | ☐ |
| 6. Success in this faculty is more dependent on luck than on real ability. | ☐ | ☐ | ☐ | ☐ |
| 7. There is no one in this faculty that students can really trust. | ☐ | ☐ | ☐ | ☐ |
| 8. In spite of what some people say, the lot of the student is getting worse. | ☐ | ☐ | ☐ | ☐ |
| 9. There is little use in talking to professors because they are not interested in the problems of students. | ☐ | ☐ | ☐ | ☐ |
| 10. Most students do not realize how much their lives are controlled by the decisions made by others. | ☐ | ☐ | ☐ | ☐ |
| 11. Few students look forward to their course work. | ☐ | ☐ | ☐ | ☐ |
| 12. Most students play an active role in class. | ☐ | ☐ | ☐ | ☐ |
| 13. It is really best to tell professors what they want to hear. | ☐ | ☐ | ☐ | ☐ |
| 14. Students will do almost anything to get good grades. | ☐ | ☐ | ☐ | ☐ |
| 15. Most students do not enjoy their courses but do the work in order to get the things they want. | ☐ | ☐ | ☐ | ☐ |
| 16. The grades students receive will be an accurate reflection of their true ability. | ☐ | ☐ | ☐ | ☐ |
| 17. The final grades students receive will have an effect on their future status. | ☐ | ☐ | ☐ | ☐ |
| 18. There are many students who do not know what to do with their lives. | ☐ | ☐ | ☐ | ☐ |
| 19. Many students in this faculty are lonely. | ☐ | ☐ | ☐ | ☐ |
| 20. Students are unhappy because they do not know what they want out of life. | ☐ | ☐ | ☐ | ☐ |
| 21. Students expect to learn a lot in this faculty. | ☐ | ☐ | ☐ | ☐ |

## Section 3

We are trying to learn more about how undergraduates feel about their own academic abilities. Please respond to the following items by checking the box that best answers each question.

1. Think of your university friends. Do you think you can do your university course work
   - . . . better than all of them. ☐
   - . . . better than most of them. ☐
   - . . . about the same. ☐
   - . . . poorer than most of them. ☐
   - . . . poorer than all of them. ☐

2. Think of the students in your faculty. Do you think you can do your university course work
   - . . . better than all of them. ☐
   - . . . better than most of them. ☐
   - . . . about the same. ☐
   - . . . poorer than most of them. ☐
   - . . . poorer than all of them. ☐

3. When you complete your undergraduate degree, do you think that you will be
   - . . . better than all students. ☐
   - . . . better than most students. ☐
   - . . . about the same. ☐
   - . . . poorer than most students. ☐
   - . . . poorer than all students. ☐

4. Do you think you have the ability to complete a doctoral degree?
   - . . . Yes, for sure. ☐
   - . . . Yes, probably. ☐
   - . . . Maybe. ☐
   - . . . No, probably not. ☐
   - . . . No, for sure. ☐

5. Forget how your professors grade your work. How good do you think your work is?
   - . . . Excellent. ☐
   - . . . Good. ☐
   - . . . Same as most of the students. ☐
   - . . . Below most of the students. ☐
   - . . . Poor. ☐

6. How far do you believe you will go in university?
   - . . . Less than a bachelor's degree. ☐
   - . . . A bachelor's degree. ☐
   - . . . A second bachelor's degree. ☐
   - . . . A master's degree. ☐
   - . . . A doctoral degree. ☐

7. How far do you think your parents believe you will go in university?
   - . . . Less than a bachelor's degree. ☐
   - . . . A bachelor's degree. ☐
   - . . . A second bachelor's degree. ☐
   - . . . A master's degree. ☐
   - . . . A doctoral degree. ☐

8. How far do you think your peers believe you will go in university?
   - . . . Less than a bachelor's degree. ☐
   - . . . A bachelor's degree. ☐
   - . . . A second bachelor's degree. ☐
   - . . . A master's degree. ☐
   - . . . A doctoral degree. ☐

9. How far do you think your most significant other believes you will go in university?
   - . . . Less than a bachelor's degree. ☐
   - . . . A bachelor's degree. ☐
   - . . . A second bachelor's degree. ☐
   - . . . A master's degree. ☐
   - . . . A doctoral degree. ☐

10. Most people's ideas about their abilities are influenced by parents, peers, and significant others. How influential have each of these groups been to you? Using a scale from 1 to 10 (where 1 = low influence and 10 = high influence), rate the influence of each of these groups:

    Parents ____ Peers ____ Most Significant Other ____

# Section 4

The ways in which you spend your time as a student, employee, parent, or family member may affect the quality of your educational experience. Please answer each of the following questions about how you use your time.

1. In how many credit hours of course work are you enrolled **this term**? _____ credit hours
2. On average, for this term, how many hours per week do you spend in paid employment?
   _____ hours per week
3. Time you spend **studying** may involve preparing assignments, reading, reviewing notes, discussing content with professors, and other activities. On average, for this term, how many hours per week do you spend studying?
   _____ hours per week
4. Are you married or living with someone in a similar type of commited relationship?
   Yes ☐ No ☐
5. Are you responsible for one or more **dependent** family members?
   Yes ☐ No ☐
6. For how many dependents are you responsible? _____

The ways in which you manage your time may also affect the quality of your educational experience. Please answer each of the following questions about how you manage your time. **Check one box for each question.**

| | | Always | Frequently | Sometimes | Infrequently | Never |
|---|---|---|---|---|---|---|
| 7. | Do you make a list of the things you have to do each day? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 8. | Do you continue unprofitable routines or activities? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 9. | Do you plan your day before you start it? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 10. | Do you make constructive use of your time? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 11. | Do you make a schedule of the activities you have to do on work days? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 12. | Do you believe that there is room for improvement in the way you manage your time? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 13. | Do you write a set of goals for yourself each day? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 14. | On an average class day, do you spend more time with personal grooming than doing school work? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 15. | Do you spend time each day planning? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 16. | Do you feel you are in charge of your own time, by and large? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 17. | Do you have a clear idea of what you want to accomplish during the next week? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 18. | Do you often find yourself doing things which interfere with your school work simply because you hate to say "NO" to people? | ☐ | ☐ | ☐ | ☐ | ☐ |
| 19. | Do you set and honour priorities? | ☐ | ☐ | ☐ | ☐ | ☐ |

# PART IV

In this part of the questionnaire, we ask for some factual information about your social background. Your answers to all of the questions are confidential and the names of individual students will not be identified in our research reports. We need this information in order to make statistical comparisons between students with different backgrounds.

1. What gender are you? Male ☐ Female ☐

2. How old are you? _____

3. What is your ethnic origin?

| | | | |
|---|---|---|---|
| . . . English | ☐ | . . . Polish | ☐ |
| . . . French | ☐ | . . . Scandanavian | ☐ |
| . . . German | ☐ | . . . Ukrainian | ☐ |
| . . . Native Indian | ☐ | . . . Other | ☐ |

If *Other*, please state your ethnic origin _____

4. What was the highest level of education that your parents received? **Check one box for each parent.**

| | Mother | Father |
|---|---|---|
| . . . Elementary school | ☐ | ☐ |
| . . . Some high school | ☐ | ☐ |
| . . . Completed high school | ☐ | ☐ |
| . . . Some technical, vocational training | ☐ | ☐ |
| . . . Completed community college | ☐ | ☐ |
| . . . Some university | ☐ | ☐ |
| . . . Completed a Bachelor's degree (e.g., B.Ed., B.A.) | ☐ | ☐ |
| . . . Some education at the graduate level | ☐ | ☐ |
| . . . Completed graduate degree (e.g., M.Ed., Ph.D.) | ☐ | ☐ |

5. What are your parents' occupations? (If they are retired or deceased, please indicate the occupations they held.) **Check one box for each parent.**

| | Mother | Father |
|---|---|---|
| Self-employed professional (e.g., architect, dentist, engineer, M.D.) | ☐ | ☐ |
| Employed professional (e.g., accountant, school teacher, university teacher) | ☐ | ☐ |
| High level manager (e.g., president, vice-president, financial manager) | ☐ | ☐ |
| Semi-professional (e.g., cameraman, musician, photographer) | ☐ | ☐ |
| Technician (e.g., engineering technologist, life sciences technician) | ☐ | ☐ |
| Middle manager in business or government | ☐ | ☐ |
| Supervisor | ☐ | ☐ |
| Skilled clerical, sales, and service (e.g., insurance agent, salesperson) | ☐ | ☐ |
| Skilled crafts and trades (e.g., cabinet maker, painter, plumber) | ☐ | ☐ |
| Farmer | ☐ | ☐ |
| Semi-skilled clerical, sales, and service (e.g., office clerk, library file clerk) | ☐ | ☐ |
| Semi-skilled manual (e.g., bus driver, cook, taxi driver) | ☐ | ☐ |
| Unskilled clerical, sales, and service (e.g., mail carrier, nursing aide, orderly) | ☐ | ☐ |
| Unskilled manual (e.g., chambermaid, elevator operator, janitor) | ☐ | ☐ |
| Farm labourer | ☐ | ☐ |
| Other | ☐ | ☐ |

Please describe _____

# PART V

In this part of the questionnaire, we ask for some factual information about your university education. We need this information in order to make statistical comparisons between students in different programs.

1. Do you have an undergraduate university degree? Yes ☐ No ☐

2. Are you a visiting student from the University of Winnipeg? Yes ☐ No ☐

3. How many years of university education have you completed? (If you have been a part-time student, then estimate the number of equivalent full-time years.) _____ years

4. How many credit hours of university work are you taking this academic year (Sept. - April)? _____

5. From which undergraduate Faculty of Education program do you intend to graduate? **Check one box.**

   I have not made a decision yet ☐
   An Elementary Program ☐
   A Secondary Program ☐
   None ☐

6. What is your cumulative grade point average? **Check one box.**

   . . . 4.0 - 4.5 ☐ . . . 2.5 - 2.9 ☐ . . . 1.0 - 1.4 ☐
   . . . 3.5 - 3.9 ☐ . . . 2.0 - 2.4 ☐ . . . 0.0 - 0.9 ☐
   . . . 3.0 - 3.4 ☐ . . . 1.5 - 1.9 ☐

7. What are you most likely to be doing within six months of completing your B.Ed. degree? **Check one or more boxes.**

   . . . I don't expect to complete a B.Ed. ☐ . . . Further education ☐
   . . . Teach ☐ . . . Stay at home ☐
   . . . Work at another job ☐ . . . Other ☐
   . . . Travel ☐

# PART VI

If you would like to receive a short report of this study, please provide your name and **permanent** address. **Please print.**

Name: _____
Last name First name

Address:

_____
Street & Number City or Town

_____ Postal Code _____
Province

Phone number: (___)_____
(Area Code)

We may wish to contact you in the future to see what you are doing. If you are willing to take part in future studies, please check the box. Yes ☐

# PART VII

Thank you very much. We really appreciate the time and effort you have given in answering our questions.
If you have any comments or suggestions, please take a few minutes to jot them down.

If you have more comments, please note them on the back of this page.

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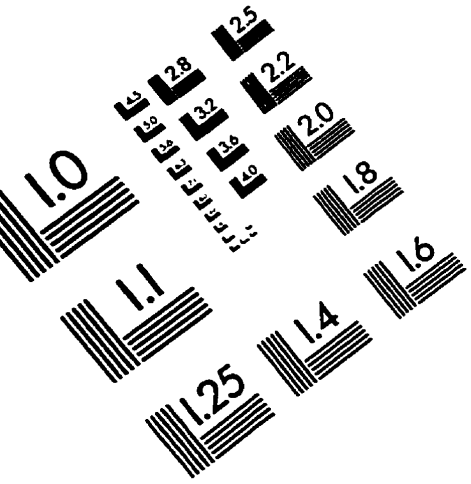


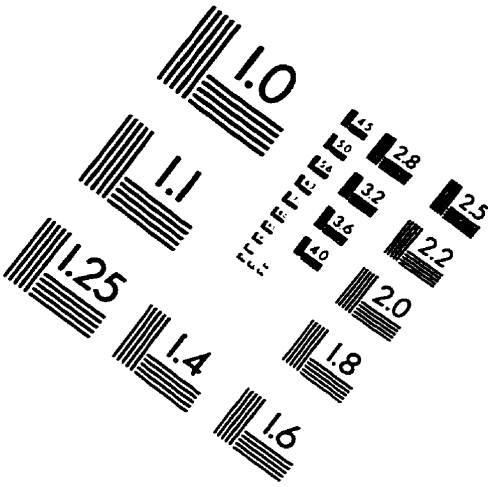


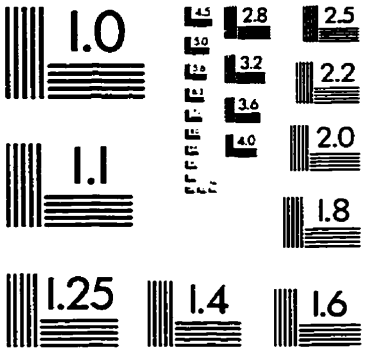


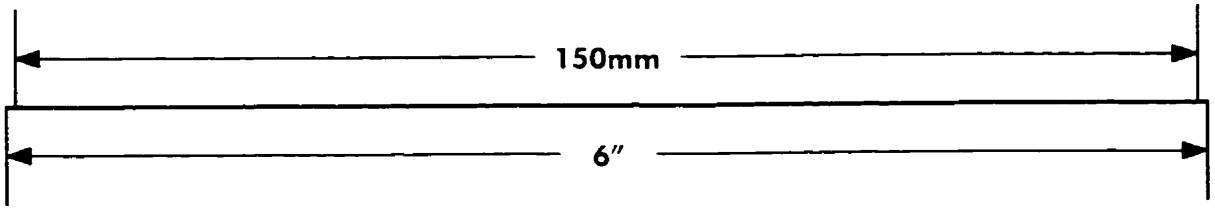


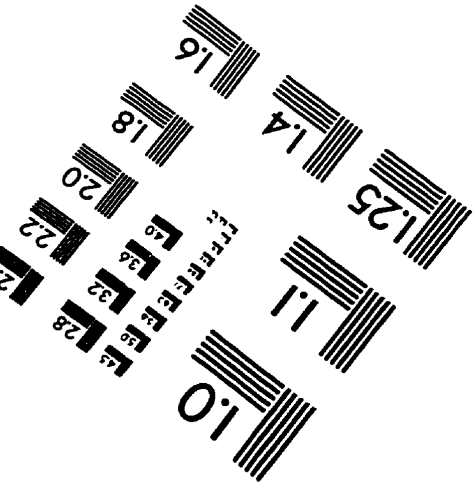


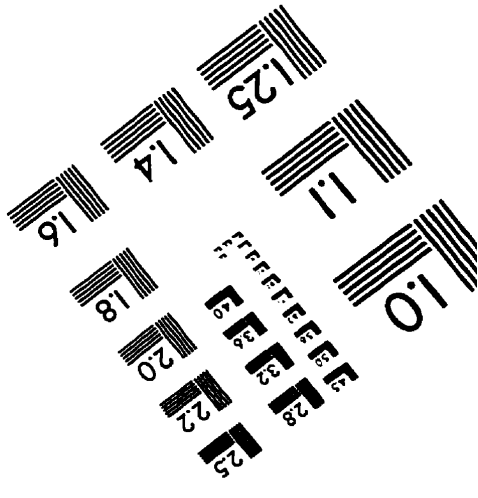


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