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THE RELATIONSHIP BETWEEN COGNITIVE DEVELOPMENTAL LEVEL AND THE CONCERNS OF TEACHERS

A Dissertation Presented

By

R. IAN NISBET

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

September 1990

Education

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THE RELATIONSHIP BETWEEN COGNITIVE DEVELOPMENTAL LEVEL AND THE CONCERNS OF TEACHERS

A Dissertation Presented

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THIS DISSERTATION IS DEDICATED
TO THE MEMORY OF MY TWO SONS, IAN AND GLENN,
WHO SAW THIS CRAZY PROJECT START,
BUT WHO DID NOT LIVE TO SEE IT TO ITS CONCLUSION.

ACKNOWLEDGEMENTS

A study of this kind is not created in a vacuum, and I would like to thank my committee members, Gerry Weinstein, Masha Rudman, and Vincent Cleary for their help, support, and direction in what has been a major battle against all kinds of constraints. I am grateful also to Larry Locke for his responses to my rough drafts and even rougher ideas.

I would specially like to thank Al Alschuler for his support. Al was the person who brought me to the University of Massachusetts in the first place, and also the person who helped me to return when it seemed that the easiest thing to do was to give up.

I must express my appreciation to the warm, supportive people in the Psychological Education Division, who gave me great encouragement when I first arrived on campus from Australia, and I must also thank my colleagues from the former Townsville College of Advanced Education, and from James Cook University of North Queensland, for their support and very practical help. A vote of thanks too, to Joanne Provost, who organized the long distance oral examination.

And finally, I would like to express my special appreciation for the contribution made by my wife, Karmen, who made many personal sacrifices on my behalf.

ABSTRACT

THE RELATIONSHIP BETWEEN COGNITIVE DEVELOPMENTAL LEVEL AND THE CONCERNS OF TEACHERS

SEPTEMBER 1990

R. IAN NISBET, B.ED., UNIVERSITY OF QUEENSLAND
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Against a backdrop of pressure for change in teacher education (Carnegie Forum, 1986; Holmes Group Report, 1986; United Kingdom White Paper, 1983) Feiman-Nemser and Floden (1986) produced a comprehensive review of research in the area of teacher education. Amongst other issues, they identified three broad areas of teacher development - "A model of changes in teacher concerns, a model based on cognitive-developmental theories, and a style of inservice education emphasizing teachers' own perceptions of their needs." (Feiman-Nemser and Floden, 1986, p.522).

Since the first two approaches seemed to possess some common characteristics in that Fuller's (1969) stages of teacher concern were similar to cognitive-developmental stages, it was decided to try to establish whether there was any relationship between cognitive-developmental stage level, and the levels of concern expressed by teachers.

As this study was regarded as an initial exploration of the topic, and as empirical studies in the area had produced confusing results, it was seen as an appropriate project for a qualitative approach to research. Accordingly, two groups of volunteers (12 experienced teachers from a Massachusetts elementary school, and 10 education seniors from the School of Education, University of Massachusetts, Amherst) were administered David Hunt's (1978) Paragraph Completion Method (PCM) and George's (1978) Teacher Concerns Questionnaire (TCQ). On the basis of Conceptual Level scores, four students and four teachers were chosen for follow-up interviews, and the interview data collated and analyzed.

The results of this analysis showed that cognitive-developmental level does affect the profiles of concerns of teachers, and it can be inferred from the study that it also affects the patterns of change of teachers' concerns. The results also cast some doubt on the validity of the TCQ instrument.

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CHAPTER I

INTRODUCTION

1.1 Introduction

Teacher education in the 1980's has been under close scrutiny by the public, politicians, and the teaching profession alike. Calls have been made for " radical reforms", and a number of specific recommendations have been made. Despite this apparent groundswell of support for change, a considerable body of opinion advocating further research, and a re-analysis of existing data, has emerged.

This study is based on the latter position, and will seek to examine the relationship of cognitive developmental level and the professional concerns of teachers. It will adopt a non empirical approach, and focus on the personal perceptions of teachers concerning their teaching role. Specifically, it seeks to address the question:

> Are there significant differences in the way teachers at different levels of conceptual complexity view teaching?

1.2 Background

Recent reports on teaching (Holmes Group, 1986; Carnegie Forum, 1986; Massachusetts Joint Task Force on Teacher Preparation, 1987) have recommended radical reforms in recruitment, training, curriculum, and career structure, so as to update and "professionalize" teaching for the twenty-first century. These reports have elicited a flood of responses. Some (Case, Lanier, and Miskel, 1986; Howey and Zimpher, 1986) have supported the reports. Some (Hawley, 1986; Smith, 1986; Soder, 1986; and Tom, 1986) have attacked the assumptions, terminology, and/or conclusions of the reports. Still others (Ducharme, 1986; Bush, 1987; Guyton and Antonelli, 1987) support the thrust of the reform proposals, but question the recommendations, or favor others. Guyton and Antonelli, in fact, refer to two other recent reports on teacher education, (National Commission of Excellence in Teacher Education, 1985; Southern Regional Education Board, 1985) and have derived a set of recommendations common to all the reports. They are:

> * Raise standards for admission to teacher education and the teaching profession
> * Move professional education of teachers to the postbaccalaureate level
> * Revise the teacher education curriculum, particularly to incorporate research findings
> * Make efforts to enhance the prestige of, and respect for teachers and the teaching profession
> * Engage Arts and Science faculty in the teacher education program.
>
> (Guyton and Antonelli, 1987, p.45.)

However, their conclusion is that "all of the common recommendations regarding teacher education are [already] high priority items for educational leaders, except the recommendation that professional education for teachers be moved to the post baccalaureate level" (Guyton and Antonelli, 1987,p.48). They suggest that "before any recommendations from any source are adopted and instituted by the profession, what is being done in the area, and how it is being done should be researched" (ibid).

Bush has sought to provide a background to the current recommendations with an overview of reform efforts over the last fifty years. He has divided the period into time frames, such as the 1920's, the 1930's and 1940's, the 1950's and 1960's, the 1960's and '70's, and the 1980's, and highlights the major reform efforts of each period. For example, he talks about the trait studies of the 1920's (Charters and Waples, 1928), the "8-year study" (Aikin, 1942) and its evaluation, (Smith and Tyler, 1942). In the 1950's and '60's he lists the Ford Foundation's attempts to promote graduate programs in teaching, and the reports on teacher education by the N.E.A. (Lindsay, 1961) and the Carnegie Foundation (Conant, 1963). Other notable developments were the curriculum reform movement of the "post-Sputnik" era, Ryans' work on the characteristics of successful teachers (Ryans, 1966), and the work of Smith, Cohen, and Pearl (1969), which, together with the development of microteaching at Stanford, laid the basis for "performance-based" teacher education. During the 1960's and 1970's centers for the study of teaching, such as those at Stanford and Texas were set up, the Federal government launched the Teacher Corp, and the "Beginning Teacher Education Study" (Denham and Leiberman, 1980) was conducted in California. Bush claims that the 1980's, however, will prove to be the liveliest years of all.

In reviewing these projects across a half century, Bush (1987) suggests the following lessons can be learned:

i. There has been no fundamental reform in Teacher Education during the past fifty years.

ii. There has been little change in how students in schools are taught.

iii. There has been little change in the teachers' workplace.

iv. There has been a diffusion of control over teacher education among State, Regional, and National accrediting bodies.

v. There are basic design faults in teacher education programs, in that preservice teacher education is crammed into very few hours of credit when compared with other professions trained at Universities, and the various elements of the programs are presented in serial instead of simultaneously, so as to be mutually reinforcing.

vi. There are insufficient resources allocated to support teacher education.

vii. There have been substantial changes in inservice teacher education.

viii. There is a need to pay attention to the beginning years of teaching (induction), in order to tie preservice and inservice education together.

ix. There are many problems caused by an inadequate knowledge base.

On the basis of these "lessons", Bush suggests that we need to expand educational research and development, both in schools and in institutes of higher education, codify and disseminate what we now know, make an effort to bring the schools and training institutions closer together, and use what technology we now possess to help teachers teach more effectively. Such a move towards an analytical, research based and theory oriented approach to preservice teacher education may prove to be more difficult than anticipated, since Bush, himself, has identified a major barrier in that

> what teachers learn about teaching is intuitive and imitative, rather than explicit and analytical; it is based on individual personalities rather than "pedagogical principles." .....[The] largest, almost overpowering influence about how teachers teach derives not so much from their formal training, but from what they have learned from 10,000 hours as students, and ..... to some extent from what they learn by trial and error during their own teaching in isolation during the first few years on the job."
>
> (Bush, 1987, p.17.)

Hawley has proposed an evaluation grid to enable us to screen proposals for the reform of teacher education. He suggests we need to examine each proposal to see its likely influence on four types of outcome:

> (a) What teachers learn and are able to do that enhances student learning
> (b) The attraction to, and retention in, the profession of talented people
> (c) The structure of schools and the nature of the teaching profession
> (d) The most efficacious allocation of public expenditure for educational improvement.
>
> (Hawley, 1986, p.48.)

It is these eminently practical issues, which Hawley claims the Holmes Report does not adequately address, which must be dealt with if teacher education reform is to avoid the rhetorical emptiness which Soder (1986) has so clearly identified in the Holmes Report.

It would seem then, that before we make the "quantum leap" so favored by Howey and Zimpher (1986, p.48) in their support of the Holmes and Carnegie reports, "we need to have much better answers than we have now to at least four questions:

> 1. What is the content and quality of learning we want teachers to foster in our schools?
> 2. What characteristics and capacities must teachers have in order to achieve these goals?
> 3. How do teachers learn and develop the personal qualities, competence, and knowledge that contributes to student learning
> 4. How can we organize the professional development of teachers so as to foster cost-effective learning opportunities?
>
> (Hawley, 1986, p.51.)

1.3 Research on Teacher Education

Teacher education is like any other dimension of formal education in that it is difficult to assess the effectiveness of programs. It would not be stretching the imagination to assume that the confusions and contradictions that are evident in the literature on teaching effectiveness in elementary and high school classrooms (Dunkin and Biddle, 1974) could just as easily characterize studies of effectiveness in teacher education programs. In fact, at about the same time Dunkin and Biddle were conducting their review, Frances Fuller summed up the "state of the art" of teacher education with these words:

> The whole area of teacher education should be recognized as a case of the general class of behavior change: an infant substantively. ------ The appropriate question at this stage of our knowledge is not "Are we right?" but only "What is out there?"
>
> (Fuller and Bown, 1975, p.52.)

Fuller's evaluation was supported by a sociological study ofschool teaching by Lortie (1975). Lortie was somewhat more critical of research on schools and teaching than Fuller. He took the view that

> Schooling is long on prescription, short on description. That is nowhere more evident than in the case of the two million persons who teach in public schools. It is widely conceded that the core transactions of formal education take place where teachers and students meet. Almost every school practitioner is or was a classroom teacher; teaching is the root status of educational practice. Teachers are making strenuous efforts to increase their

> influence on how schools are run. But although books and articles instructing teachers on how they should behave are legion, empirical studies of teaching work - and the outlook of those who staff the schools - remain rare. Changes are proposed and initiated without knowledge of the settings they are presumed to improve. Without a clear picture of school reality, efforts at rationalization can dissolve into faddism and panacean thinking.
>
> (Lortie, 1975, pp.vii-viii.)

One could imagine that, in the light of the radical recommendations of the reports cited above, (Holmes, 1986; Carnegie Forum, 1986), that researchers in the decade or so since Fuller and Lortie made their pronouncements have clarified the situation. Lanier and Little (1986) however, claim that the problems in the field of teacher education are both persistent and of an enduring nature. Therefore they had been deliberately selective in excluding general themes, so that their review emphasizes "better understanding of the chronic problems associated with teacher education, with special attention to potential reasons why they endure" (Lanier and Little, 1986, p.528). In their review, Lanier and Little focus on research relating to teacher educators, student teachers, the teacher education curriculum, and the current context of teacher education. Despite acknowledging that research data in some of these selected areas are "modest at this time", Lanier and Little undertook a "broad search of the literature and a weaving together of circumstantial evidence ...... as part of the sense making task called for in a review of this nature" (Lanier and Little, 1986, p.535). Their conclusions in each of the four areas reveal what they feel are mutually reinforcing factors that "explain why teacher education has been kept from being as academic and as intellectual as it probably deserves to be, and why change is likely to be slow" (Lanier and Little, 1986, p.565). The specific conclusions are:

1. Academically talented persons pursuing careers in teaching and teacher education are proportionately under-represented.
2. Many teachers and teacher educators come from home and family backgrounds whose academic roots are shallow, and are therefore not likely to engender strong and ingrained intellectual propensities.
3. Teacher education tends to be easy and non-intellectual.
4. Initial and continuing teacher education goes on in an environment that makes it difficult to be scholarly.
5. Prospective teachers find little intellectual challenge in their professional training.
6. Classrooms reinforce low levels of knowledge, and provide little motivation to learn more about teaching.

7. Academically capable college faculty find greater reward by distancing themselves from teacher education.
8. The deintellectualization of teacher education feeds on itself, as the capable are discouraged by what they see there.

In sum, "the picture in each domain repeats a pattern that reinforces the maintenance of teacher education as a marginal part of the university community, criticized for its lack of rigor, but discouraged from trying to be anything else" (Lanier and Little, 1986, p.565).

This gloomy prognosis scarcely seems to have advanced our knowledge of teacher education very far. One possible reason for this is suggested by Koehler (1985) in a review of research on preservice teacher education. She argues that "much of the research and the policy interpretations of research findings are based on inappropriate elaborations of two conceptions of teacher education programs" (Koehler, 1985, p.23). These two conceptions are that "teacher education ought to prepare individuals to change and improve education" (Koehler, 1985, p.26), and that "teacher education programs should be based on research findings concerning the skills, behaviors, and knowledge exhibited by effective, experienced teachers" (ibid). She cites research by Copeland (1980) and Doyle

(1977) to suggest that the ecology of the school influences both the student teacher and the cooperating teacher far more than college experience, and it may well be a disservice to students to have them depart radically from classroom practice. She also cites evidence (Morine and Vallance, 1976; Wragg, 1980; Fogarty, Wang, and Creek, 1982; Erickson, 1984) that experienced and inexperienced teachers differ greatly in their teaching behaviors, and there may even be "something of a cognitive-developmental process, that, with experience, allows teachers to become more efficient and global in their thought processes" (Koehler, 1985, p.27). Therefore the preparation of preservice teachers based on the behaviors of experienced teachers may be futile, and in fact create problems for beginning teachers. Koehler does not advocate that we ignore the findings from research based on these conceptions of teacher education, but rather that such views be elaborated in different ways. She recommends research "on the relationship between teacher preparation and teaching practice in order to provide goals and objectives which are possible to attain and have the potential to improve teaching" (Koehler, 1985, p.28). One such area which she suggests has such potential is that of " ...the processes of teacher development. As described above, some excellent work has been done in this important area, but more needs to be done" (Koehler, 1985, p.27).

1.4 Teacher Development

In a comprehensive review of research relating to teacher education, Feiman-Nemser and Floden (1986) focused on describing what they termed "Cultures of Teaching". Their approach constitutes what they term a major shift from "trying to study the world of teaching as a public, social phenomenon, to trying to understand how teachers define their own work situations" (Feiman-Nemser and Floden, 1986, p.505). They feel that this perspective is valuable, despite the difficulty of getting "inside teachers' heads," (Feiman-Nemser and Floden, 1986, p.506), and the fact that neither their "approach nor the research itself is predominantly anthropological," (Feiman-Nemser and Floden, 1986, p.505). Public concern over the quality of teachers (Sellars, 1984; Feiman-Nemser and Floden, 1986) has led to attempts to improve education through policy initiatives. Concern within the profession has led to the recommendations of the Holmes (1986) and Carnegie (1986) Reports. These initiatives can be served better if knowledge about the cultures of teaching "can inform predictions about how teachers are likely to respond to policy initiatives and guide efforts to shape those responses" (Feiman-Nemser and Floden, 1986, p.505).

In discussing the processes whereby teachers acquire these "cultures of teaching", Feiman-Nemser and Floden describe recent research on the socialization of beginning teachers into the profession, and research on the professional development of teachers. In relation to the latter body of research, they state that the "term 'development' connotes internally guided rather than externally imposed changes " (1986, p.521). In an earlier work, (Feiman and Floden, 1980) they argued that the term "development" implied the nurturing of professional growth with active choice and participation on the part of the learner/teacher, rather than the passive role associated with competency based teacher training. Griffin (1983) and Sellars (1984) support this usage of the term, and they, like Feiman-Nemser and Floden, suggest that increasing our knowledge of the teacher development process can be a means of improving the quality of teaching, and hence the quality of education and schooling.

Rather than attempting to evaluate the relative merits of programs of teacher education by means of some traditional process-product research, it may be more fruitful to look at the actual process whereby uninitiated individuals become fully operational as teaching professionals. Feiman-Nemser and Floden have examined a number of studies, both quantitative and qualitative, and classified the material into broad approaches to teacher development.

> At least three distinct approaches to the study of teacher development appear in the literature (Feiman and Floden, (1980): a model of changes in teacher concerns, a model based on cognitive-developmental theories, and a style of inservice education emphasizing teachers' own definitions of their needs. The first approach grows out of Fuller's (e.g. Fuller, 1969) formulation of stages teachers pass through as they gain professional experience: a survival stage when teachers are preoccupied with their own adequacy, a mastery stage when teachers concentrate on performance and concerns focus on the teaching task, and an impact stage when teachers become concerned about their effect on pupils.
>
> A second approach advocated by Sprinthall and his associates (e.g. Sprinthall, 1980; Sprinthall and Thies-Sprinthall, 1983) rests on theories of cognitive development. Teacher development is considered a form of adult development and effective teaching a function of higher stages. The changes considered important in this theory are described in terms of progression through levels of ego, moral, and conceptual development as defined by Hunt (1974), Kohlberg (1969), and Loevinger (1976). In this progression, higher stages are characterized by "increased flexibility, differentiation of feelings, respect for individuality, tolerance for conflict and ambiguity, the cherishing of interpersonal ties and a broader social perspective" (Witherell and Erickson, 1978).
>
> A third approach to teacher development elaborated primarily by practitioners, is a style of inservice work informed by a view of professional learning as "mental growth spurred from within" (Devaney, 1978). Teachers' centers and advisory services offer a contemporary expression of this way of working (for historic parallels see Richey, 1957) which emphasizes responding to teachers' own definitions of their learning needs, supporting teachers in their own direction of growth, and building on teachers' motivation to take curricula responsibility.
>
> (Feiman-Nemser and Floden, 1986, p. 522)

Both Veenman (1984) and Matthes (1985) are in general agreement with these categories identified by Feiman-Nemser and Floden. The first two of these approaches have clearly delineated conceptual frameworks, which allows the researcher to explore theory and practice in a systematic and organized way. The third is more of an eclectic overview of inservice and support programs, and lacks a coherent theoretical base. Therefore it would seem to make sense to try to relate the first two areas of research to see if there are any links, or any potential for further research. Two theories which are representative of these approaches, and which have attracted considerable research efforts, are those of Frances Fuller (Fuller, 1969; Fuller and Bown, 1975), on teacher concerns, and David Hunt's (Hunt et al, 1978; Hunt and Sullivan, 1974), conceptual level theory. These theories will be described in detail in Chapter II.

Fuller's stages of concern have been used largely as the basis for assessing changes brought about by various experimental interventions (Malone, 1982; Sellars, 1986; Regonold, 1986; Reeves and Kazelkis, 1985). Studies based on cognitive-developmental stage level have generally assumed there are benefits associated with some ultimate level of development (Hunt et al, 1978; Knefelkamp, 1974; Oja, 1980), and have sought to develop or assess programs that have aimed to move teachers towards this desired goal. The validity of such an approach has been supported by Kohlberg and Mayer (1972), Sprinthall and Thies-Sprinthall (1983), and Glassberg (1979).

1.5 Summary

Despite the current pressure for reforms in teacher education (Holmes Group, 1986; Carnegie Forum, 1986; Howey and Zimpher, 1986; Case, Lanier, and Miskel, 1986), there is a considerable body of opinion that favors a further examination of current initiatives in teacher education, a re-analysis of existing research data, and further research in the area before any major restructuring of teacher education occurs.

Lanier and Little (1986) have selectively screened research findings to conclude that the problems affecting teacher education are major, deep seated, and mutually reinforcing. Koehler (1985) has suggested that we need to re-examine the relationship between teacher preparation and teaching practice. Hawley (1986) makes the point that our knowledge base of teacher education research is still inadequate despite calls by Fuller and Bown (1975) and Lortie (1975) more than ten years ago for increased research in the field.

Feiman-Nemser and Floden (1986) have tried to "get inside teachers' heads" with their review of research on the "cultures of teaching". They have identified two strands of research on teacher development, one based on a cognitive developmental approach, and one on the developmental concerns of teachers, which seem to have both the conceptual framework and the research tradition which make them suitable for further research in the area. Koehler recommends further research on "the process of teacher development" (Koehler, 1985, p.27), while Hawley concluded that we needed to find out how "teachers learn and develop the personal qualities, competence, and knowledge that contribute to student learning" (Hawley, 1986, p.51). A useful and appropriate research project which could meet these demands would be one which looked at the teacher development process in a manner which reflected the personal dimension, and which attempted to relate the cognitive developmental perspective with that of levels of teacher concerns. This study will seek to achieve these goals by examining the relationship between cognitive developmental level, as defined by David Hunt (Hunt et al, 1978; Hunt and Sullivan, 1974), and levels of teacher concerns as expressed by Frances Fuller (Fuller, 1969; Fuller and Bown, 1975). In so doing, it will expand our knowledge of teacher development, and by utilizing a modification of the ethnographic interview, it should provide a more personal perspective on the issues.

1.6 The Problem

At the theoretical level, the problem centers on the relationship between a cognitive-developmental stage theory (Hunt, 1978), and what can be called a "functional phase" theory (Fuller and Bown, 1975). A true structural -developmental stage theory must satisfy the essential criteria of "structural wholeness, invariant sequence, and universality," (Selman, 1980, p.23). However, a number of other theories are based on characteristic stages or phases and do not fulfill these criteria. Many, such as Erikson's (1950) "Eight Stages of Man", have made major contributions to research and practice. Fuller and Bown (1975) make the point that regardless of whether teacher concerns constitute a "stage" or a "cluster", the concept is useful in studying the professional development of teachers. One of the outcomes of this study will be a statement on the relationship between the two theories being investigated. If we accept Fuller's approach, and conventional wisdom suggests that professional experience must have an impact on the way an individual perceives his/her position, then we can look more closely at the second or cognitive-developmental approach. Are there differences in the way teachers at different cognitive-developmental stages perceive their concerns in the phases described by Fuller? Do only teachers who have attained the higher cognitive states achieve the "later concerns" phase when they are concerned with their impact on the learners? Or is this stage of presumably sophisticated professional behavior independent of such cognitive operation? It would seem there is value in looking at the relationship between these two different perspectives on teacher development.

In order to obtain "independent" data to use as a check on both of the developmental schemes outlined above, material was gathered by means of ethnographic interviews. Analysis of this independent data was used in an attempt to verify the data gained from the instruments used, and to point towards, or otherwise support, any relationships which are seen to exist between the two sets of data. In the terms outlined above, the practical questions which this study addresses are:

1. Are there significant differences in the way teachers at different cognitive-developmental stages perceive their teaching concerns in the phases described by Fuller? Do they see their concerns in Fuller's terms at all?

2. Do only those teachers who have attained the higher cognitive states achieve the "later concerns" phase described by Fuller, when they are concerned with their impact on learners? Or is this stage of presumably sophisticated professional behavior independent of such cognitive operation?

Studies by Sellars (1986), Reeves and Kazelkis (1985), and Adams (1982), suggest that the third or impact stage does not seem to follow the sequence predicted by Fuller.

3. Is this impact concern the major concern of experienced teachers? Is this the major difference between the concerns of pre-service teachers, and

experienced professionals? Is this cluster of concerns a function of cognitive-developmental stage level?

What is being conceptualized is really a simple matrix, with increasing cognitive-developmental complexity as one dimension, and increasing concern for pupil learning as opposed to self-survival along the other. The first dimension requires the application of Hunt et al's Paragraph Completion Method (1978), hereafter referred to as PCM, to establish moderate and high categories of cognitive- developmental operations, while the other requires the application of the Teacher Concerns Questionnaire to establish concern for self, task and impact on the other axis. The idea of this matrix is shown below in Figure 1.1.

		COGNITIVE-DEVELOPMENTAL STAGE LEVEL	
		Moderate	High
LEVEL OF TEACHING CONCERN	Impact	3	6
	Task	2	5
	Self	1	4

FIGURE 1.1 Matrix of Teacher Concerns by Cognitive-developmental Level

This matrix can be used to clarify the questions above in the following way:

I. Is there a significant difference between inexperienced teachers with high cognitive-developmental characteristics and those with more moderate levels, in terms of exhibiting differential levels of impact concerns? (Cells 3 and 6).

II. Is there a significant difference between experienced teachers with high cognitive-developmental characteristics and those with more moderate levels, in terms of exhibiting differential levels of impact concerns?

III.Is there a significant difference between inexperienced teachers, of differing cognitive-developmental abilities, and their profiles of teaching concerns, as described by Fuller? (Cells 1,2,3, versus cells 4,5,6).

IV.Is there a significant difference between experienced teachers of differing cognitive-developmental abilities, and their profiles of teaching concerns as described by Fuller? (Cells 1,2,3, versus cells 4,5,6).

V. Do persons of like levels of cognitive-development have significant areas of agreement on teaching concerns, despite differences in teaching experience?

Ideally, these questions should be dealt with in a longitudinal study, or at least one which extends beyond the first year of teaching. Since this is not a possibility for this current study, this researcher acknowledges this limitation, and subsequent discussion of results will be oriented towards future research which will more adequately deal with the professional development of teachers during the early years of their careers. Similarly, Hunt et al (1978) acknowledge the inability of the PCM instrument to discriminate between the conceptual levels of mature adults. Hence this limitation will also be considered in the discussion of results.

CHAPTER II

LITERATURE REVIEW

2.1 Teacher Development

In taking a developmental focus on teacher education, my research has moved away from the mainstream of approaches in the field. Despite the philosophical and psychological arguments advanced by Kohlberg and Mayer (1972), Glassberg (1979), Sprinthall and Thies-Sprinthall (1983),and Chickering and Knefelkamp (1980), Feiman-Nemser took great pains to emphasize that a commitment to reflection and growth (through focusing on professional development) represents a "major departure from conventional views about teaching teachers and major trends in research on teaching" (1980, p.133). Feiman and Floden state that this change in emphasis represents a move from a behavioral conception towards a developmental paradigm. They conclude that there is a need to "consider in detail, questions about the adequacy of developmental models for describing differences among teachers or changes undergone by a single teacher" (Feiman and Floden, 1980, p.37). Since the present study will examine two developmental models with a view to identifying some relationships between them, it seeks in a small way, to meet this stated need.

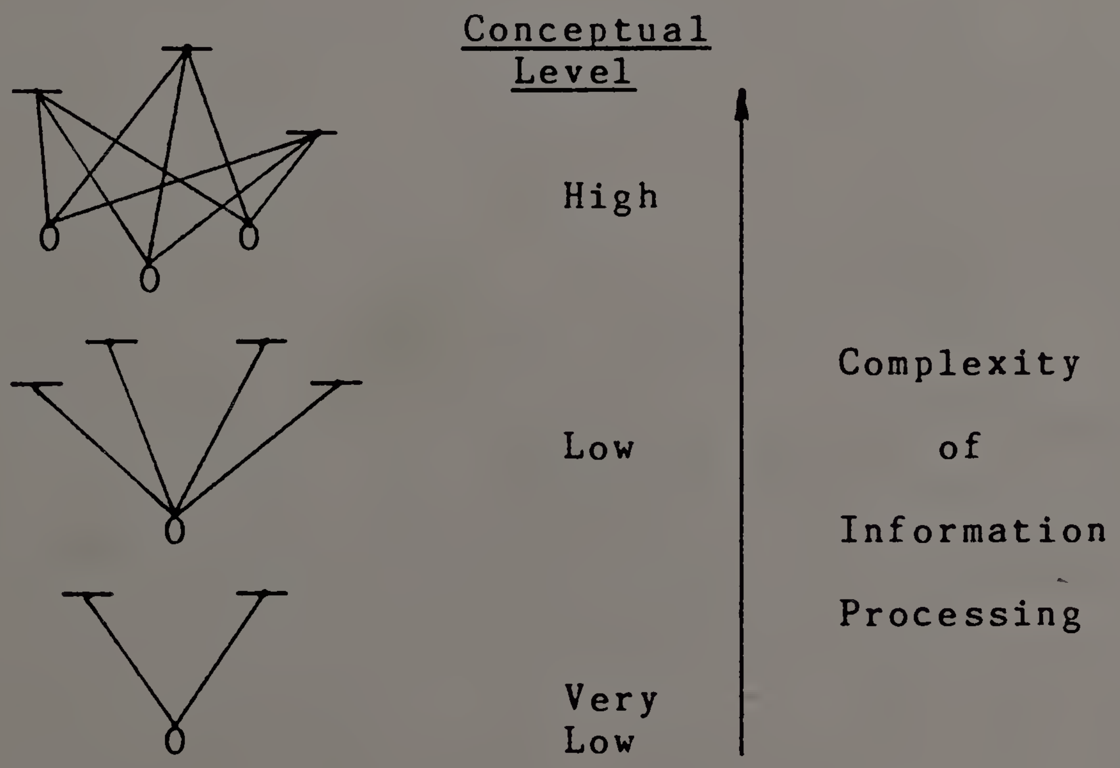
2.2 Conceptual Level Theory

"The Conceptual Level model is an interactive theory of development that considers progression or growth to be determined both by the person's present developmental stage and by the environment he experiences." (Hunt and Sullivan, 1974, p 210.) Conceptual Level Theory (Harvey, Hunt, and Schroder, 1961) is classified, along with the theories of Piaget (1963), Kohlberg (1969), Loevinger (1976), and Perry (1970), as a "cognitive-developmental" theory. In this cognitive-developmental view,

> how a person functions is essentially determined by the complexity of his or her cognitive structure. Piaget (1970) uses the term schema to describe the cognitive system that a person employs to make meaning from experience, while Harvey uses the term conceptual system. Hunt and Joyce denote the concept as the conceptual level, while Kohlberg calls it the moral judgment stage, and Loevinger defines it as the ego development stage. Although none of these concepts are synonymous, all of them assume that an individual's actions are governed by an internal mediating cognitive process which will vary by age and stage of development.
>
> (Glassberg and Sprinthall, 1980, p.31.)

Each of these theories is based on a set of five common assumptions. First there is an assumption that all humans progress through a sequence of cognitive stages. Second, it is assumed that this sequence is hierarchically arranged. The third assumption is that the sequence of growth is such that it must occur in one stage before progress is possible to the next. Fourth, there is an assumption that growth is neither unilateral nor automatic. Finally, it is assumed that human behavior can be predicted by developmental level (Sprinthall and Thies-Sprinthall, 1983).

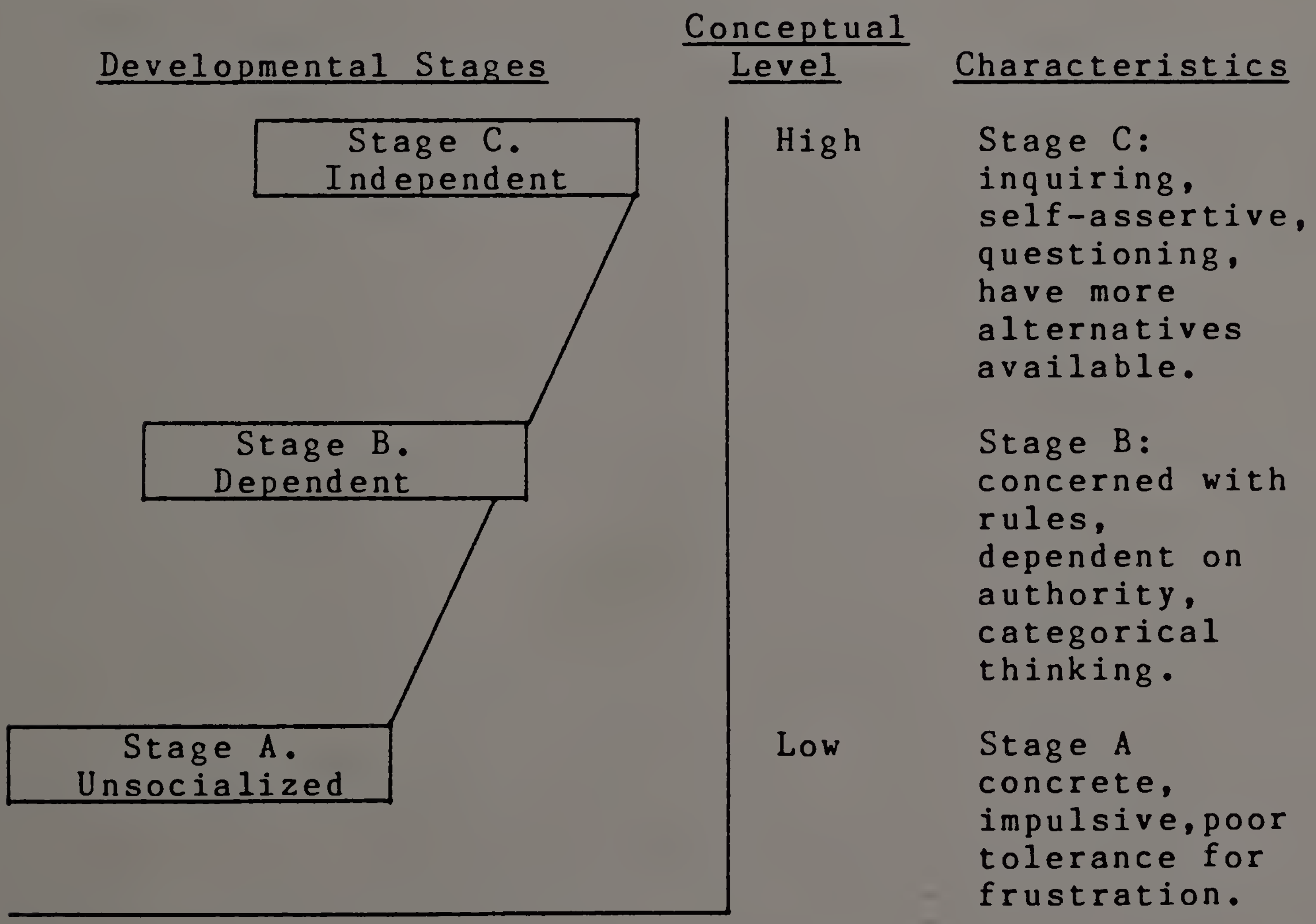
The basic thrust of Hunt's theory is a focus on change in the nature of cognitive structures as development occurs. The "concept" is the basic cognitive unit, and is used to evaluate stimuli. These concepts can be combined into larger networks, called "conceptual systems", and such systems may be linked together into an organized totality which can be viewed as the self. The "Conceptual Level", or number and type of concepts and concept networks available to an individual, bears an obvious relationship to one's information processing ability. This relationship is shown below in Figure 2.1.



(Following Hunt and Sullivan, 1974, p.212.)

FIGURE 2.1 Aspects of Conceptual Level

It is possible to regard human development as a progression through various stages of conceptual complexity. Conceptual development is viewed on a dimension of conceptual complexity or interpersonal maturity. Although development is, under ideal conditions, continuous, this process can best be described in stages or segments, much as a motion picture sequence could be represented by selecting still shots from the sequence, (Hunt, 1974, p.22). This sequence of development is represented below in Figure 2.2.


Developmental Stages
Conceptual Level
Characteristics
Stage C. Independent
Stage B. Dependent
Stage A. Unsocialized
High
Low

Stage C: inquiring, self-assertive, questioning, have more alternatives available.

Stage B: concerned with rules, dependent on authority, categorical thinking.

Stage A concrete, impulsive, poor tolerance for frustration.

(Hunt, 1974, p.23.)

FIGURE 2.2 Development of Conceptual Level

It should be noted that this developmental sequence has been primarily established using samples drawn from grades 6-13. Hunt states that there is evidence of a general increase in Conceptual Level with age, and because the present PCM instrument "would probably not be sensitive in detecting developmental changes at higher levels, e.g.3.0," (Hunt, Butler, Noy, and Rosser, 1978, pp.42,44) research focusing on adult development has been neglected.

Hunt has oriented his work on Conceptual Level theory towards a teaching approach which seeks to match learning environments with the personal characteristics of the learner, both in contemporaneous characteristics, and developmental needs (Hunt et al, 1972; Hunt, 1974; Hunt and Sullivan, 1974; Joyce and Weil, 1986). Other theorists, however, (Sprinthall, 1980; Sprinthall and Thies-Sprinthall, 1983; Oja, 1980; Glassberg, 1979; Knefelkamp, 1974; and Glassberg and Sprinthall, 1980), have seen value in the Conceptual Level Theory, along with other cognitive-developmental models, as a framework for adult learning, and as a pathway to educational goals which are worthy in their own right (Floden and Feiman, 1981). Glassberg sums up the educational goals of this developmental approach with the following statement,

> ...at higher stages an individual functions more abstractly, complexly, comprehensively, and empathically. Higher stages of development are

> considered more adequate and desirable since theoretically they encompass more perspectives, and allow for more empathic role taking and adequate problem solving.
>
> (Glassberg, 1979, p.4.)

Conceptual Level is assessed by the Paragraph Completion Method (PCM), (Hunt, Butler, Noy, and Rosser, 1978), which is a semi-projective, sentence completion procedure. Subjects are asked to write brief responses (at least three sentences within a two minute time limit) on each of the following topics: " When I think about rules ...; When I am criticized ...; What I think about parents ...; When someone does not agree with me ...; When I am not sure ...; When I am told what to do ...." The PCM has been used in this study, and technical detail relating to the instrument and its administration appear in Chapter III.

2.3 Teacher Concerns Theory

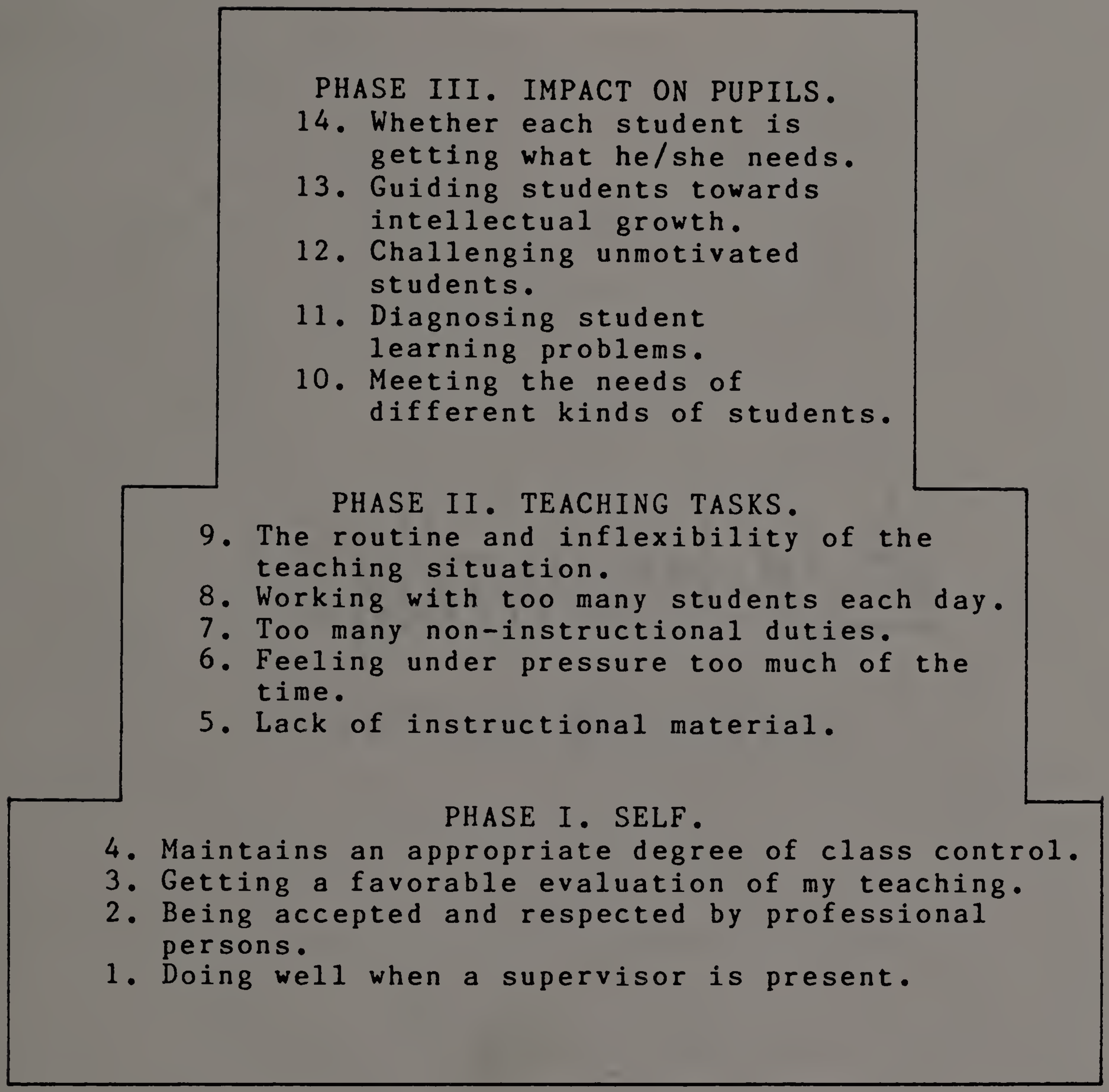
According to Fuller and Bown (1975), Hall and Loucks (1978), and Ryan (1980), teachers perceive a wide variety of problems during their teaching careers. Veenman (1984) has produced a comprehensive review of the literature on the problems of beginning teachers, and Griffin (1983) argues that inservice staff development is necessary to overcome the problems which occur in a school system which is generally regarded as being in crisis. Both Fuller (1969) and Howey and Vaughn (1983) however, state that with the best of intentions, programs of teacher education are not having the impact that the time and resources spent on them would warrant. Fuller (1969) and George (1978) suggest that the experiences offered in such programs may not be matched to the needs and concerns of the teachers taking these programs.

Several theorists have identified developmental sequences which relate to the professional growth of teachers. Yarger and Mertens (1980) developed a six stage typology which ranged from the Pre-education student to the Experienced teacher. Katz (1972) suggested that pre-school teachers pass through four stages in which the central issues are Survival, Consolidation, Renewal, and Maturity. Fuller (1969), Fuller and Case (1972), Fuller and Bown (1975), George, Borich, and Fuller (1974), and George (1978), suggest that one dimension of the teacher's role is what s/he, as a teacher, is concerned about, rather than what s/he, as a teacher, is accomplishing. Fuller (1969) felt that these personal concerns persist throughout one's teaching career, though they change focus as the teacher gains experience. Among these concerns are "class discipline, relationships with administrators, feeling as if they (teachers) were under pressure, and motivation of students" (Brown, 1984, p.3). Fuller (1971) has identified specific clusters of concerns, which her research indicates constitutes a sequence upon which teachers focus as they become more exposed to schools and the teaching environment. These concerns are described by Fuller and Bown (1975).

> 1. Survival Concerns.- These are concerns about one's adequacy and survival as a teacher, about class control, about being liked by pupils, about supervisors' opinions, about being observed, evaluated, praised and failed. These are concerns about feelings, and seem to be evoked by one's status as a student. Preservice teachers have more concerns of this type than inservice teachers.
>
> 2. Teaching situation concerns.- These are concerns about having to work with too many students, about time pressures, about inflexible situations, lack of instructional materials, and so on. These frustrations seem to be evoked by the teaching situation. Inservice teachers have more concerns of this type than preservice teachers.
>
> 3. Pupil concerns.- These are concerns about recognizing the social and emotional needs of pupils, about the inappropriateness of some curriculum materials for certain students, about being fair to pupils, about tailoring content to individual students and so on. Although such concerns cluster together, they are expressed by both preservice and inservice teachers. This may be because such concerns are associated with characteristics which cut across experience, or because inservice teachers feel such concerns more while preservice teachers express more concern about everything than do inservice teachers.
>
> (Fuller and Bown, 1975, pp.37-38.)

These phases, or clusters, and specific concerns relevant to each have been summarized below in Figure 2.3.

Whether these clusters, or phases constitute a developmental sequence in the same sense as a cognitive-developmental sequence is still unresolved. Support for such an idea is provided by Hall and Hord (1981), Katz (1972), and George, Borich, and Fuller



PHASE III. IMPACT ON PUPILS.

14. Whether each student is getting what he/she needs.
13. Guiding students towards intellectual growth.
12. Challenging unmotivated students.
11. Diagnosing student learning problems.
10. Meeting the needs of different kinds of students.

PHASE II. TEACHING TASKS.

9. The routine and inflexibility of the teaching situation.
8. Working with too many students each day.
7. Too many non-instructional duties.
6. Feeling under pressure too much of the time.
5. Lack of instructional material.

PHASE I. SELF.

4. Maintains an appropriate degree of class control.
3. Getting a favorable evaluation of my teaching.
2. Being accepted and respected by professional persons.
1. Doing well when a supervisor is present.

(Adapted from Brown, 1984, p.15)

FIGURE 2.3 A Developmental Concept of Needs expressed by Teachers.

(1978), though Sellars (1986), Reeves and Kazelkis (1985), Adams (1982) and George (1978) found that impact concerns were higher than self and task concerns whether teachers were experienced or not. Further, this level of concern did not appear to change relative to the other areas of concern as a result of teaching experience. Some measure of the degree of confusion which exists can be gauged from the following statement of Fuller and Bown, which sums up their feelings on the situation:

> Whether these really are 'stages' or only clusters, whether they are distinct or overlapping, and whether teachers teach differently, or are differentially effective in different stages, has not been established. These stages, if such they are, have been described mainly in terms of what the teacher is concerned about, rather than what she is actually accomplishing. However, there seems little doubt that the labels describe clusters of concerns, and consequently provide a useful means of describing the experience of learning to teach.
>
> (Fuller and Bown, 1975, p.37.)

More recent research has suggested that variables other than teaching experience may be operating, and that these may result in different levels of concern expressed by people with similar teaching experience. Marso and Pigge (1989) suggest that both gender and teaching field are variables which affect teaching concerns.

Teacher Concerns can be expressed as a profile, obtained from scores on 15 statements about Self, Task, and Impact concerns, with 5 point Likert-type response items in each of the three categories. This "Teacher Concerns Questionnaire" or TCQ, was developed by George (1978) from a factor analysis of more than a thousand responses to the 56 item TCCL-B (Teacher Concerns Checklist, Form B). The TCQ is used in this study, and details of the instrument and its administration are included in Chapter III.

2.4 Parallel Development or Decalage ?

Kohlberg and Mayer (1972) in a seminal work addressing both the philosophical and psychological issues of education, concluded that social-cognitive development is the true aim of our school system. In so doing, the authors acknowledge the fundamental place that cognitive development occupies in human growth. However, they also identify related "domains" of social, moral and aesthetic development. Walker (1980) and Kohlberg (1976) advance the view that cognitive development is a necessary, but not sufficient, pre-condition for perspective taking and moral reasoning. Turiel, presents the view that "individuals develop distinctly different forms of social knowledge, reflected in structural systems that parallel each other " (1983, p.75). These "parallel development sequences may progress at similar or varying rates" (ibid). Kohlberg uses this idea of "structural parallelism" to show the inter-relationship between cognitive development, moral development, and the ego-development theory presented by Jane Loevinger (Loevinger, 1976). Walker (1980) has compared the characteristics of several theories to give an example of this "parallel development". This comparison is presented below as Table 2.1.

TABLE 2.1 Parallel Stages in Cognitive, Perspective-taking, and Moral development.

Cognitive Stage(a)	Perspective-taking Stage (b)	Moral Stage (c)
Preoperations The "symbolic function" appears but thinking is marked by centration and irreversibility.	**Stage 1.** (subjectivity) There is an understanding of the subjectivity of persons but no realization that persons can consider each other as subjects.	**Stage 1.** (heteronomy) The physical consequences of an action and the dictates of authorities defines right and wrong.
Concrete Operations The objective characteristics of an object are separated from action relating to it; and classification seriation and conservation skills develop.	**Stage 2.** (self-reflection) There is a sequential understanding that the other can view the self as a subject just as the self can view the other as subject.	**Stage 2.** (exchange) Right is defined as serving one's own interests and desires and cooperative interaction is based on terms of simple exchange.
Beginning Formal Operations There is development of the coordination of reciprocity with inversion, and propositional logic can be handled.	**Stage 3.** (mutual perspectives) It is realized that the self and the other can view each other as perspective taking subjects. (a generalized perspective)	**Stage 3.** (expectations) Emphasis is on good person stereotypes and a concern for approval.

(Continued)

TABLE 2.1 Parallel Stages in Cognitive, Perspective-Taking, and Moral Development. (Continued.)

Cognitive Stage (a)	Perspective-taking Stage (b)	Moral Stage (c)
Early Basic Formal Operations The hypothetico-deductive approach emerges, involving abilities to develop possible relations among variables and to organize experimental analyses.	**Stage 4.** (social and conventional system) There is a realization that each self can consider the shared point of view of the generalized other (the social system).	**Stage 4.** (social system and conscience) Focus is on the maintenance of the social order by obeying the law and doing one's duty.
Consolidated Basic Formal Operations Operations now completely exhaustive and systematic.	**Stage 5.** (symbolic interaction) A social system perspective can be understood from a generalized point of view.	**Stage 5.** (social contract) Right is defined by mutual standards that have been agreed upon by the whole society.

(a) Adapted from Colby and Kohlberg (1975).

(b) Adapted from Selman and Byrne (1974) and Selman (1976).

(c) Adapted from Kohlberg (1976).

(Walker, 1980, p.132.)

However, it should be noted that a too narrow concentration on the stage concept of developmental theories can perhaps blind one to the essential nature of the developmental process itself. Sweitzer (1984), in a review of developmental theories suggests that the work of Kegan (1982) illuminates aspects of structural-developmentalism that are not adequately explained by Piaget. Kegan sees developmental progress as a dialectic, and the resolution of successive stages of conflict or disequilibrium leads the individual to a higher level of cognitive operations. It would be reasonable to infer that while Piaget has sought to explain cognitive development through his detailed descriptions of the different capabilities of the individual at key points in her/his development, Kegan has sought to explain the process by which the individual reaches those key points. Hence, at any given point in the developmental sequence, an individual may not exhibit the predicted behaviors of a particular stage due to the incomplete resolution of a dialectic conflict.

Walker (1980), Kohlberg (1976), and LeMare and Rubin (1987) suggest that perspective taking is one of the fundamental dimensions of social-cognitive development, and is a necessary, but not sufficient condition for progression in other domains such as moral reasoning. If we were to regard the stages of teacher concerns proposed by Fuller (Fuller, 1969; Fuller and Bown, 1975) as a true structural-developmental sequence, then the levels identified by Fuller (1969) and George, Borich, and Fuller, (1978) should form an invariant sequence characterized by qualitatively different intellectual behavior. Such a stage sequence could be developed from Brown's table of Teachers' Needs which is presented above as Figure 2.3. There are obvious parallels when one places this sequence beside some of those developed by Walker (See Table 2.1 above.) Such a comparison is presented below as Table 2.2.

However, since teacher education is a process which begins at least in late adolescence or early adulthood, its phases would necessarily have to coincide with the level of Formal Operations, and Stage 3 in Moral Development. Fuller (1969) discusses a "Preteaching" Stage where one may speculate on a rising interest in, and awareness of teaching, but which Fuller found was characterized by a lack of concern with the specifics of teaching, and a tendency to view teaching in terms of one's own experience. Some idea of the apparent sequential nature of Fuller's stages of concern can be gained by comparing them with the appropriate stages of cognitive and moral development as in Table 1.1. However, there is little available research evidence which would

TABLE 2.2 Possible Parallel Stages in Cognitive, Teacher Concerns, and Moral Development

Cognitive Stage	Teacher Concerns	Moral Stage
Concrete Operations The objective characteristics of an object are separated from action relating to it; and classification seriation and conservation skills develop.	**Phase 0.** (Pre-teaching) There is an awareness of the teacher as an other in an interactive situation. Teaching is viewed in terms of one's own experience, and there lack of concern for specifics.	**Stage 2.** (exchange) Right is defined as serving one's own interests and desires and cooperative interaction is based on terms of simple exchange.
Beginning Formal Operations There is development of the coordination of reciprocity with inversion, and propositional logic can be handled.	**Phase 1.** (concern for self) There is a concern for one's personal survival. Receiving approval from supervisors and professional persons, getting good reports on teaching, and being able to control the class.	**Stage 3.** (expectations) Emphasis in on good person stereotypes and a concern for approval.
Early Basic Formal Operations The hypothetico-deductive approach emerges, involving abilities to develop possible relations among variables and to organize experimental analyses.	**Phase 2.** (concern for task) The focus is on task related problems, such as lack of materials, too many pupils, too many non-instructional duties, feeling under pressure, and being restricted by an inflexible teaching situation.	**Stage 4.** (social system and conscience) Focus is on the maintenance of the social order by obeying the law and doing one's duty.

(Continued)

TABLE 2.2 Possible Parallel Stages in Cognitive, Teacher Concerns, and Moral Development. (Continued).

Cognitive Stage	Teacher Concerns	Moral Stage
Consolidated Basic Formal Operations Operations now completely exhaustive and systematic.	**Phase 3.** (concern for pupils) The concerns here focus on meeting pupil needs, diagnosing problems, motivating and challenging pupils, and guiding pupil growth.	**Stage 5.** (social contract) Right is defined by mutual standards that have been agreed upon by the whole society.

(Adapted from Walker, 1980.)

verify such a sequence, and research by George (1978), Sellars (1986), Reeves and Kazelkis (1985), shows that the impact stage does not follow in sequence as a third stage, as would be predicted by the theory. Further research in this direction seems warranted, however, as the stages presented in Table 2.2, if validated, seem to form a useful sequence of professional development, and a useful metaphor for an ontogenetic cycle of teacher concerns.

Part of the problem may be due to uneven development both within and between individuals, which social-cognitive and cognitive theorists have commented on at different stages of development. In order to explain such variations, which are ,in essence, very real manifestations of individual differences, Piaget coined the term "decalage", by which he means that not every individual operates at the same level in all domains, nor even on all tasks in the one domain. Graham (1976) cites Rest, Turiel, and Kohlberg, as all using this concept to explain developmental differences. They all "refer to the probability that in the course of their development, children prefer *reasoning* at a higher stage of judgment before they *understand* it,understand it before they fully *assimilate* it, and assimilate it before they *use* it" (Graham, 1976, pp.105-106).

The potential for apparent departures from a developmental sequence becomes more obvious with further reference to Table 1 above. With cognitive development being a necessary pre-condition for social-cognitive development, and certain dimensions of social-cognitive development being necessary pre-conditions for further development in other dimensions (albeit not totally sufficient pre-conditions), there is ample scope for variations in the proposed sequence which may simply be due to decalage within one or more related dimensions of development.

2.5 Decentration: A Continual Refocusing of Perspective

Another reason for the confusion surrounding the stage sequence of teacher concerns is that Fuller is looking essentially at changes in adult development. Two concepts developed by Piaget which relate directly to role taking are **egocentrism,** and **decentration,** (Selman and Byrne, 1974) "Centering" or "centration" involves a restriction of perception which limits the capacity of a subject to operate on a higher or more complex cognitive stage. The ability to step back and perceive a more complete picture using newly developed cognitive abilities releases the individual from this limiting influence, or state of "egocentrism", and is referred to as "decentration". An example of this is given by Boyle, in an explanation of how the child develops operational thought. The child initially "centres (sic) on one aspect of the situation ..... (As s/he grows older) the child decentres (her)/his thinking, and is able to think about more than one aspect of a situation at a time" (Boyle, 1969, p.47).

This process of decentering, better described as a sequence of decentering processes, is not identical at all stages of development, though similar qualities are exhibited. Gruber and Voneche (1971) describe decentering at three different levels - the sensori-motor, the pre-operational, and the formal thinking levels. At the first, or sensori-motor level, the infant is unable to separate out the effects of its actions from the qualities of external objects or persons, a truly "egocentric" state. "Later, he differentiates his/(her) own ego, and situates his body in a spatially and causally organized field composed of permanent objects and other persons...." (Gruber and Voneche, 1977, p.439). This is the first decentering process, and it has a number of similarities to the process which occurs when symbolic functioning develops. At this point, the child is no longer limited to the form of egocentrism imposed by the need to interact directly with persons and objects by way of sensori-motor channels. The decentering process enables the child to "be able to structure relationships between classes, relations, and numbers objectively" (ibid).

However, with the appearance of formal thought, the subject's cognitive field is again enlarged, and a third form of egocentrism comes into play. "This egocentrism is one of the most enduring features of adolescence; it persists until the new and late decentering which makes possible the true beginnings of adult work" (ibid). Gruber and Voneche maintain that this more adult manifestation of egocentrism stems from the adoption of adult roles in society. Each adolescent or young adult "has to think about (her)/his own future activity, and how (s)/he (her)/himself might transform this society" (ibid).

Both Piaget (1969) and Gruber and Voneche (1977) suggest that as a person moves through the developmental stages from egocentrism towards decentering, there is a qualitative change, or increase, in knowledge, which brings about a refocusing of perspective.

> In the end, the relative adequacy of any perception to any object depends on a constructive process, and not on an immediate contact. During this constructive process, the subject tries to make use of whatever information (s)/he has, incomplete, deformed, false as it may be, and to build it into a system which corresponds as nearly as possible to the properties of the object. (S)/he can only do this by a method which is both cumulative and corrective, and which, in perception, is based on decentrations which correct one another's deformations.
>
> (Piaget, 1969, p.365.)

This suggests to Gruber and Voneche that learning is not purely an additive process, and "to pile one newly learned piece of behavior or information on top of another is not in itself adequate to structure an objective attitude. Objectivity presupposes a decentering - i.e. a continued refocusing of perspective" (Gruber and Voneche, 1977, p.440).

2.6 Need for Future Research

This process of decentering can be seen as highly relevant to the sequences of social-cognitive and ego development proposed by a number of theorists, e.g. Kohlberg (1976), Selman (1976), Loevinger (1976), and Perry (1970). At the formal thinking level, the major application of one's fully developed social-cognitive powers in their various domains, is the focus on entry into the occupational world.

> The adolescent becomes an adult when (s)/he undertakes real job. It is then that (s)/he is transformed from an idealistic reformer into an achiever. In other words, the job leads thinking away from the dangers of formalism back into reality. Yet observation shows how laborious and slow this reconciliation of thought and experience can be. One has only to look at the behavior of beginning students in an experimental discipline to see how little inclined is the mind to subjugate its ideas to the analysis of fact.
>
> (Gruber and Voneche, 1977, p.441).

One final contextual factor must also be considered. Along with the problems of decentering in an adult professional milieu, together with uneven development of social-cognitive abilities, or decalage, the beginning teacher also has the problem of a double focus: which perspective to take, that of teacher or pupil? Obviously a beginning teacher needs to be able to take the generalized perspective of both the teacher and the pupil. To complicate matters further, the "pupil" is a corporate whole - a group - as well as a set of individuals. It seems hardly surprising that the phases described by Fuller which have parallels with earlier social-cognitive stages, e.g. ego concerns, and strategic, or operational concerns, manifest themselves in a clear sequence.

The impact concerns, however, complex subjects, requiring the principled behavior of an autonomous professional who is part of a pluralistic group, are rated highly by both experienced and inexperienced teachers alike. Since student teachers are obviously capable of formal thinking in the Piagetian sense, and since they have been exposed to teaching, schools and education for at least twelve years, it is highly likely that they have formed idealized views of children, their needs, and what is required to improve education.

Because of the low status of teaching, and its low financial rewards (Lanier and Little, 1986; Lortie, 1975) it follows that many of those who enter the profession will be dedicated and idealistic persons. Hence it is likely, right from the start, that such teachers will exhibit a high degree of idealized concern for the issues Fuller has categorized as "impact". It is also possible, however, that while they view the content of the issues in the same way more experienced teachers do, their perspective will be considerably more romanticized. This explanation accords closely with that given by George (1978).

While the procedures adopted in this study are not designed to differentiate between the responses of student teachers and practicing teachers on the impact scale, it is possible that the analysis of interview data, may in fact shed some light on this area. In any case, the fact that the TCQ does not adequately discriminate between student teachers and practicing teachers on this issue is important enough to suggest that it is an area for future research.

2.7 Summary

At least three approaches to teacher development have been identified in the literature (Feiman and Floden, 1980; Feiman-Nemser and Floden, 1986; Veenman, 1984). Two of these, the cognitive-developmental approach, and the teaching concerns approach have been selected as the focus of this study. Theories which are representative of these approaches, and which show promise for research are the Conceptual Level Theory (Harvey, Hunt, and Schroder, 1961), and the Teacher Concerns Theory (Fuller, 1969; Fuller and Case, 1972; Fuller and Bown, 1975).

Hunt's Conceptual Level Theory is categorized with other cognitive-developmental theories such as Piaget (1963), Kohlberg (1969), Loevinger (1976), and Perry (1970), and it exhibits the same set of characteristic assumptions. Hunt's basic thesis is that the number of available concepts and the complexity of one's conceptual network bear a direct relationship to one's ability to process information. Individuals progress through stages of conceptual complexity, and these stages can be identified through the Paragraph Completion Method (Hunt et al, 1978). Each of these stages exhibits qualitatively different forms of thought.

Frances Fuller and her associates analyzed more than a thousand statements about teacher concerns from respondents with greatly varying backgrounds and experience in teaching. As a result, characteristic clusters of teacher concerns were identified. The earlier research (Fuller, 1969; Fuller and Case, 1972; George, Borich, and Fuller, 1974) suggested that these clusters, identified as self, task, and impact concerns, formed a developmental stage sequence similar to the cognitive-developmental stages described above. Recent research (Sellars, 1986; Reeves and Kazelkis, 1986; Adams, 1982; George, 1978), however, has cast considerable doubt on the extent to which these clusters form a sequence. The work of Marso and Pigge suggests that the situation may be even more complex than Fuller and her associates envisaged, with variables such as field of teaching, and gender affecting teachers' concerns. Regardless of whether Fuller's theory meets the criteria for a structural-developmental theory or not, there is little doubt that she has identified groupings of concerns, and that these are useful in describing the experience of learning to teach. It would be helpful to explore further the nature of these concerns, the contexts in which they arise, and the variables which differentially affect the nature and sequence of their development.

The literature in the area of cognitive-development and social-cognitive development indicates that the process of "decentration" is necessary before individuals may progress to each higher cognitive level or stage.

This process does not occur in all domains at the same time (Turiel, 1983). Progress in any given domain, however, follows an invariant sequence (Kohlberg and Mayer, 1972) and if Fuller's stages of concern constitute a true structural-developmental sequence, there will be evidence of this in the current study.

The confusion surrounding the research data to date can be partially explained by "decalage" within a domain, uneven parallel development between domains, the persistence of adolescent egocentricity even into the formal thinking stages of development, and idealistic statements of neophyte teachers as opposed to the realistic concerns of experienced professionals. This last area is one of such importance, that it should be the focus of further research.

Despite such confusion, however, the present study is focused on the relationship between one aspect of cognitive-developmental growth, that of Conceptual Level, and one aspect of teacher professional development, that of Teacher Concerns. Clarification of this particular relationship may provide some indication of how future research in the area should proceed.

CHAPTER III

RESEARCH METHODOLOGY

3.1 The Research Design

This research was designed as a three stage study. The first stage consisted of the administration of the TCQ (George, 1978) and the PCM (Hunt et al, 1978) instruments to student teacher and practicing teacher volunteers. This had a two fold purpose. Firstly, it provided screening data to enable informants to be selected for interview, and secondly, it provided material against which the interview data could be compared and contrasted.

The second stage involved the collection of data using ethnographic interview techniques following Spradley's (1979) methodology. The final stage of the study was accomplished by analyzing the interview material, and drawing conclusions from that data. These conclusions then became the basis for a comparison with the data from the screening tests. More detailed information about the screening instruments and Spradley's methodology is presented below, together with data collection procedures.

3.1.1 Informant Selection

In the first stage, informants from each group were selected by using the extreme scores from the PCM instrument. Thus the two highest, and the two lowest, Conceptual Level scores indicated the interview candidates.

3.1.2 Empirical Analysis

While it was not part of the research design to conduct any form of empirical study, the fact that scores were available from both the TCQ and the PCM enabled correlation coefficients to be calculated. It was felt that any relationship that appeared to exist between the variables might have some bearing on the conclusions that were drawn from the interview data.

3.2 Background

It was noted in Chapter I (Fuller and Bown, 1975; Lortie, 1975; Koehler, 1986; Lanier and Little, 1986; Hawley, 1986), that research in teacher education suffers from a number of deep-seated problems, and that the knowledge base in the area is still inadequate for the radical changes being proposed at the present time (Holmes Group, 1986; Carnegie Forum, 1986; Massachusetts Joint Task Force on Teacher Preparation, 1987). Popkewitz, Tabachnick, and Zeichner (1979) challenge the traditional "empirical-analytic paradigm" which dominates research in teaching and teacher education. They conclude that "we cannot incorporate knowledge from teacher effectiveness studies into teacher education programs with any degree of confidence," (Popkewitz, Tabachnick, and Zeichner, 1979, p.53). More recently, Ornstein (1985) and Erickson (1986) have drawn similar conclusions.

While not advocating "either qualitative or quantitative research" Popkewitz et al suggest that the "concepts and categories of research, though orienting and focusing study, must be open in orientation, enabling researchers to accommodate evolving insights and to allow themes to emerge from ongoing events" (Popkewitz, Tabachnick, and Zeichner, 1979, p.58). Allender (1986) also criticizes the traditional research paradigm, contending that decisions about educational research processes are generally subjective, and reflect a particular world view rather than being examples of so called "scientific objectivity". He sees a trend towards new-paradigm research which is being stimulated by humanistic approaches to education, and this trend has resulted in a renewed emphasis on qualitative research. Such new directions in educational research "might be very fruitful for the study of human experience to improve education and human connectedness" (Allender, 1986, p.188).

3.3 The Interpretive Approach to Research

There are many manifestations of new-paradigm research. Erickson (1968, p.119) has listed approaches which are variously labelled "ethnographic, qualitative, participant observational, case study, symbolic interactionist, phenomenological, constructivist, or interpretive." Bogdan and Biklen present a similar list which includes "symbolic interactionist, inner perspective, the Chicago School, phenomenological, case study, interpretive, ethnomethodological, ecological, and descriptive" (Bogdan and Biklen, 1982, p.3). Locke (1989) and Bogdan and Biklen (1982) use the term "qualitative" as the umbrella title for this family of research strategies. In this study, however, I have chosen to follow Erickson's lead in using the term "interpretive." His reasons are:

> (a) It is more inclusive than many of the others (e.g. ethnography, case study);
>
> (b) it avoids the connotation of defining these approaches as essentially non-quantitative (a connotation that is carried by the term qualitative) since quantification of particular sorts can often be employed in the work; and
>
> (c) it points to the key feature of family resemblance among the various approaches - central research interest in human meaning in social life and in its elucidation and exposition by the researcher.
>
> (Erickson, 1986, p.119).

In elaborating further on this "key feature of family resemblance," Erickson has identified three substantive concerns of interpretive research in education. They are:

> (a) The nature of classrooms as socially and culturally organized environments for learning,
>
> (b) the nature of teaching as one, but only one, aspect of the reflexive learning environment and

> (c) the nature (and content) of the meaning-perspective of teacher and learner as intrinsic to the educational process.
>
> (Erickson, 1986 p.120).

Bogdan and Biklen have also attempted to identify a set of common characteristics of "qualitative" (their term) or interpretive strategies. They list these as:

(a) "soft" data, which is rich in description, but not easily handled by statistical procedures,

(b) researchers who do not generally approach the research setting with specific questions to answer or hypotheses to test,

(c) researchers who are concerned with understanding behavior from the subject's own frame of reference, and

(d) data which is collected through sustained contact with people in settings where subjects normally spend their time.

They conclude that the best known and most representative approaches to interpretive research "that most embody the characteristics ... are _participant observation_ and _in-depth interviewing_" (Bogdan and Biklen, 1982, p.2).

The research on Conceptual Level and Teacher Concerns, reviewed in Chapter II, was largely quantitative, and many of the weaknesses and conflicting findings have been pointed out already. The fact that there appear to be no studies in the literature which show any link between the two research orientations is one justification for the current study. As such, this piece of research is fulfilling an exploratory role, both in direction and scope, and thus is an appropriate vehicle for a more open and interpretive research methodology.

The decision to use a cross sectional design which obtained data from student teachers and experienced practicing teachers, was partially dictated by time constraints, but there are many precedents for this type of design in the area of human development. Although the approach raises questions of comparability of populations, it has been historically "the first line of evidence offered in support of the developmental nature of ... (theories)... (Rist, Davison, and Robbins, 1978, p.265).

Since the study sought to explore the "meaning-perspectives" of the subjects in relation to their concerns about teaching, rather than simply describe classroom behavior, the data gathering had to allow for, in fact had to encourage, the informants to express subjective views about teaching. Thus the nature of the study and the type of data required made some adaptation of the ethnographic interview (Spradley, 1979) a logical choice.

3.4 Borrowings from Ethnography: Interpretive License

Spradley (1979) states that ethnography can be used to obtain culturally descriptive material in any substantive area of human experience. This information is generally used to develop "grounded theory" (Glaser and Strauss, 1967), which is an alternative to the traditional social science approach of formulating theoretical propositions, and then testing them in the field. It must be stated from the outset that this is not an ethnographic study in the strict anthropological sense. Rather it uses an ethnographic technique, the interview, to gather data and to draw conclusions. However this does not mean that the ethnographic model does not have much to offer in the way of illuminating a less restrictive interpretive research process.

3.4.1 Wolcott's Criteria

Wolcott (1975), in discussing ethnographic research in schools, identifies four criteria of appropriateness relating to the use of the ethnographic approach. However he also makes the point that his criteria, particularly the points on individual qualifications "are narrowly focused on standards that satisfy the conditions of professional ethnography, not the conditions of research" (Wolcott, 1975, p.117). The criteria presented relate to the appropriateness of:

1. the Problem
2. the Ethnographer
3. the Research Climate
4. Expectations for the Completed Study

Appropriateness of the Problem.

Wolcott suggests that an ethnography is best served when the investigator is free to "pursue hunches or to address himself to problems that he deems interesting and worthy of sustained attention." Ethnographers therefore should embark upon an investigation guided primarily by "foreshadowed notions" and thus they would be "free to discover what the problem is rather than obliged to pursue inquiry into a predetermined problem that may exist only in the mind of the investigator," (Wolcott, 1975, p.113). Ethnographers generally believe that such an approach allows hypotheses and categories of observation to emerge as informants stress their importance (Erickson, 1986). Over time, research questions will become more focused and more specific (Agar, 1980; Goetz and Le Compte, 1984).

In the present study, it is debatable whether the "openness" which Wolcott posits is necessary to discover the problem, really exists, or even if it is required. The research focus has been derived from a consideration of Hunt's Conceptual Level theory and Fuller's Teacher Concerns theory, and has drawn on bodies of empirical research related to each theory. Although this orientation has necessarily determined the direction of inquiry, the study is still essentially descriptive, and the initial focus is expressed in the form of a foreshadowed notion.

3.4.1.1 Foreshadowed Notions

My professional area of concern relates to basic classroom procedures, planning, teaching skills and strategies, and classroom management. In these areas I am in close contact with both preservice and inservice teacher clients. A natural consideration in my work is how to meet the widely varying needs of these two different groups. A study of the literature on professional development led me to examine teacher development both from a cognitive developmental perspective, and from a teacher concerns point of view. (See Chapter I, Section 1.4.) This preliminary study gave rise to the following foreshadowed notion:

There might be a relationship between Teacher Concerns and Conceptual Level, but what form might it take?

This question was further developed by an examinationion of background issues and practical considerations in Chapter I. The questions developed there constitute the operational guidelines for this study. They are:

1. Are there significant differences in the way teachers at different cognitive developmental stages perceive their teaching concerns in the phases described by Fuller? Do they see their concerns in Fuller's terms at all?

2. Do only those teachers who have attained the higher stages of Cognitive Complexity achieve the "later concerns" phase described by Fuller, which relates to their impact on learners? Or is this presumably sophisticated professional behavior independent of such cognitive operation?

3. Does the impact phase constitute the major concern of experienced teachers? Is this the major difference between the concerns of preservice teachers and experienced professionals? Is this cluster of concerns a function of cognitive developmental stage level?

Appropriateness of the Ethnographer.

Wolcott first states that, ideally, the researcher should have had field work experience in a cross-cultural setting, and be thoroughly grounded in cultural anthropology. However, he also identifies other personal qualities which are valuable to the researcher. Among these are sensitivity, perceptive observation, emotional stability, physical stamina, personal flexibility, and a high level of writing skill. While I must admit to some deficiencies in the first set of requirements in that I have no formal background of anthropology, I taught for four years in a cross-cultural education setting with Australian Aborigines and have lived and studied in the United States for almost two years. The current study was conducted in the U.S.A., which, despite many similarities, still constitutes a foreign culture to an Australian. I have well developed skills in counseling, group leadership, interviewing, and interpersonal communication, as well as the other personal qualities described by Wolcott. Overall, I am confident that my credentials as a researcher are adequate, and better than adequate.

Wolcott, in fact, has also addressed this very question. He says that if an ethnographer possesses appropriate personal qualities, if the research proposal is "solid and related to the problem at hand," and if it is identified as one that "borrowed generously from the ethnographic techniques rather than insisted ... (that it was) anthropological" (Wolcott, 1975, p.117), then it can be a "good" study even if it does not meet the somewhat narrow standards of professional ethnography.

Appropriateness of the Research Climate.

He further directs our attention to such basic considerations as the scope of the study and the time available to conduct it. He states that he discourages doctoral candidates from attempting to use ethnographic methods on the grounds that estimates of the time required to conduct field work and to write up material accumulated are frequently unrealistic. Time constraints have been a major concern with this study, and I am convinced in retrospect that halving the number of subjects, and doubling the amount of time for data gathering would have been a sounder approach. Despite this qualification, however, the current study, is, I believe, more than adequate in its methodology.

The Appropriateness of Expectations for the Completed Study.

Wolcott's final criterion relates to the way the study is conducted, and to the conclusions which are drawn from it. Studies which gather data through a variety of ethnographic techniques greatly increase their credibility. Wolcott states that we can expect that the "account will be based on information from a number of sources gleaned through a variety of techniques" (Wolcott, 1975, p.124). However Erickson (1968) points to the distinction between machine recorded data collection, such as a taped interview, and that of participant observation, allowing that each has strengths and limitations. Locke, too, states that "Some of the most important approaches involve techniques such as in-depth phenomenological interviewing (Seidman, 1985) which require no use of direct observation" (Locke, 1988, p.19). Since Wolcott concludes that the actual features of the account will depend on the researcher's "talents and interests and the special features of the cultural scene that he is describing" (Wolcott, 1975, p.123-124), then the expectations of it may differ. Provided that the researcher deals adequately "with the way information is acquired ... (and) with the way it is transmitted," (Wolcott, 1975, p.124) then one can derive appropriate expectations.

3.4.2 The Ethnographic Interview

Following Spradley's (1979) Developmental Research Sequence, the steps involved in the interview process include the following: the development of foreshadowed notions, the locating of informants, conducting of interviews, making the ethnographer's record, asking descriptive questions, analyzing the interviews, making a domain analysis, asking structural questions, making a componential analysis, discovering cultural themes, and writing the ethnography. Spradley's notes on each of these stages are presented as a series of mini-instructions and hints to the researcher using this method. These notes have been included as Appendix A.

In general terms, Spradley's procedure first involves the establishment, or delineation, of a problem area, by way of foreshadowed notions, and the selection of a key informant, or informants. This step has a crucial bearing on the success of the interview process, and Spradley asserts that the "most persistent problems" in gathering data by interview result from the "failure to locate a good informant" (Spradley, 1979, p.46). In order to ensure sound decision making in this fundamental aspect of the method, Spradley has developed five minimal requirements for selecting key informants. These are that he or she have: (1) thorough enculturation, (2) current involvement, (3) unfamiliar cultural scene, (4) adequate time, and (5) nonanalytic" (Spradley, 1979, p.46). Spradley's position is similar to Wolcott's in that he is concerned with the procedures of ethnography from a rather narrow, and predominantly anthropological viewpoint. Nonetheless, these criteria provide a useful perspective on the procedures used in the current study.

The requirement of thorough enculturation means that a person is thoroughly familiar with a particular culture, which is defined as "the acquired knowledge that people use to interpret experience and generate social behavior" (Spradley, 1979, p.5). In this case, the culture represented the acquired knowledge of teachers as it applies to teaching, and the role of the teacher.

All the subjects met this requirement substantially, allowing for the circumstances of the study. The four teachers were all currently teaching, with classroom experience ranging from fourteen to twenty years. The four students were all in their Senior Year as Education majors, and were in the last weeks of their major student teaching practice. This was a full time, supervised teaching practicum of one semester's duration. In addition each student had completed three semester-long subjects (Life in Classrooms; Diversity and Change; The

Integrated Day) each of which had an associated classroom pre-practicum of one-half, one, and two-and-one-half days per week respectively. They had also studied five teaching method subjects, and one on Special Education.

If one's attendance at school is accepted as part of the acquisition of the cultural experience of teaching, the students had at least sixteen years of experience, and the teachers and myself almost twice that. There are obvious differences in the degree of enculturation between the two samples, but since this is the very difference the study is exploring, the students represent, for the purposes of this study, a "thoroughly enculturated" sample of the "student teacher culture", just as the teachers represent "the practicing teacher culture."

In terms of all informants being currently involved in the culture being studied, all the participants in the study were teaching when the project began. It should be noted however, that the teachers were all specialists (Special Education, English as a Second Language, Physical Education, Teacher Librarian) and it is possible, even probable, that their perceptions of teaching reflected the specialized context in which they taught. The students were involved in their teaching practice when approached and given screening tests to identify who would be suitable as informants. After the first interview, the semester concluded and subsequent interviews were conducted while the students attended normal academic classes on campus.

Spradley's third criterion states that, from an ethnographic point of view, "the most productive relationship exists between a thoroughly enculturated informant, and a thoroughly unenculturated ethnographer" (1979, p.50). This point represents a major difference between Spradley's approach and that of the present study. As was pointed out above, all the interview subjects were "thoroughly enculturated," but in addition, so was I, the interviewer. In contrast to the situation described by Spradley of an "outsider" seeking to attain an "insider's" point of view, this study represents the efforts of an "insider" seeking to uncover some of the more subtle and confusing relationships within a common culture. This situation presented both problems and advantages. On the negative side, there may have been a tendency on all our parts to make assumptions that what we were speaking about held common meaning for us all. On the one hand, I, as interviewer, may have taken some terms for granted when I might have explored them further. On the other, interviewees may have used terms which, for them, were rich in associations, but for me had limited meaning. These differences too, might have been explored. On the positive side, however, we were discussing a cultural setting which, with minor differences, was familiar to us all, and it is equally possible that my familiarity with teaching which could have caused me to gloss over some aspects of the teachers' responses, could also have made me sensitive to gaps and omissions in their statements. This "insider" knowledge also made it possible for me to elicit more complete statements than perhaps an outsider might have done.

Another problem related to the fact that all participants had studied aspects of teaching as formal academic subjects. There was often no easy way to decide when an opinion was offered or a judgment made, whether it was based on personal experience, or a theoretical position which appealed to the informant. This was particularly true when the student teachers offered opinions or judgments.

I tried to minimize these effects by: (i) being sensitive to the problem, (ii) emphasizing my Australian background as a means of stressing cultural differences, and (iii) using the device of "being a Martian", i.e. being totally unfamiliar with the culture, during the initial interviews, to make both parties aware of the need to provide a detailed description of all ideas. Also, during the analysis of interview data, I tried to become aware of terms which needed further elaboration, and follow up on these in subsequent interviews.

Available time was by far the major constraint on the study. While access to the students and the teachers was negotiated in November, and the screening of each group was conducted over the period November 26 to December 6, the first interview sessions with student informants were not held until the last week of the Fall semester, i.e. the third week in December, in order to enable the students to gain as much classroom experience as possible. Unfortunately, it was impossible to interview the teacher informants until late January because of scheduling difficulties within the school. Subsequent interview sessions were spread over the spring semester, being interrupted by school vacations, and the University spring break. Under these circumstances I was not able to obtain the "six to seven one-hour interviews" that Spradley suggests is the minimum required for an ethnographic study. Spradley also indicates, however, that the use of "tandem informants" (Spradley, 1979, p.52) can help to overcome such time constraints. Thus the selection of two informants in each Conceptual Level category (moderate and high, for both teachers and students) helped me with regard to obtaining material, as well as providing additional opportunities for comparing and contrasting ideas, and validating data.

Spradley's final admonition that interview questions and responses be nonanalytic was probably the most difficult requirement of all to adhere to in this study. Each of the participants had experience in the formal study of Education and Teaching, with its emphasis on analysis, synthesis, and evaluation. It was difficult to provide descriptions, or to ask questions which did not adopt an analytical perspective, or could be interpreted as requiring such a perspective. One teacher informant during the first interview seemed unable to respond on a personal level, and gave a series of "academic" responses to all the questions. In subsequent interviews, there was a need to use "native language questions" based on other informants responses, to elicit less formal answers.

In general then, many of the requirements relating to informant selection proposed by Spradley were not completely met. Since I was aware, however, of these differences and problems, I sought to minimize their effects during the interviews and the subsequent analyses. As with any form of research, quantitative or qualitative, the conclusions which are drawn are limited by the context of the study. The problems outlined above, on the one hand, will limit the extent to which this study can be regarded as a "proper" ethnography. On the other, it is also possible that these very same deviations may add to, and make important contributions to, the research findings.

Having selected one's informants, the next stage of Spradley's procedure is to conduct interviews. In the early stages of the interview process, the task is to provide a detailed coverage of the situation by asking descriptive questions. The interview data is then analyzed, and "domains" of meaning are identified. In subsequent interviews, structural and contrast questions are asked in order to expand on earlier statements, verify domains, and to build up more comprehensive meaning structures which Spradley calls "taxonomies." In many instances in this study, because the interviewer had an "insider's" intimate knowledge of teaching, structural and contrast questions were asked along with descriptive questions, so that various aspects of meaning could be explored or verified within the framework of one interview session.

The final stage is to establish the various components of the conceptual terms or symbols used by the informants, and the identification of any cultural themes which may run through their responses. On the basis of these findings, conclusions may be drawn about the culture under examination. Spradley's Taxonomy of Ethnographic Questions is included as Appendix B, and an example of a domain and a taxonomy are presented as Appendix C.

3.5 The Screening Process - Instrumentation

Since the study deals with the relationship between Conceptual Level and Teacher Concerns, it was necessary to measure these variables in order to select informants for the interview process. The instruments used in this screening process are the Paragraph Completion Method (Hunt et al, 1978) and the Teacher Concerns Questionnaire (George, 1978). These instruments will be referred to as the PCM and the TCQ respectively. Copies of these instruments are included as Appendices D and E.

3.5.1 The Paragraph Completion Method, (PCM)

Conceptual Level is assessed by the Paragraph Completion Method (Hunt, Butler, Noy, and Rosser, 1978); this is a semi-projective sentence completion procedure. Subjects are asked to write brief responses (at least three sentences within a two minute time limit) on each of the following six topics: rules, being criticized, parents, being disagreed with, being unsure, and being told what to do. These responses are then analyzed on the basis of a set of characteristics, outlined in the scoring manual, and a rating from .5 to 3 is assigned for each response.

The Conceptual Level Score is calculated by averaging the three highest scores. This compensates for deflation of the total score through lack of interest or faking (Hunt et al, 1978, p.37). A "secondary" Conceptual Level

Score can also be computed by obtaining the mean of all six scores. This score is often useful in identifying people with scores below 1 (Hunt et al, 1978, p.38). In a summary of inter-rater reliability on scoring the Paragraph Completion Method, Hunt reports agreement ranging from .74 to .96. Hunt states, however, that test-retest reliability taken over a one year period ranges only from .45 to .56, although Gardner and Schroder (1972) reported a test-retest r of .67 over a three month period. Before scoring the responses in this study, I first practiced on the sample items included in the Manual (Hunt et al, 1978). Having mastered these, I then completed the test items which were also included, achieving 96% agreement with the classifications provided by Hunt and his colleagues. This was considered a high enough level of agreement to allow me to score the responses from the study without requiring a second opinion.

While Hunt et al (1978) state that Conceptual Level changes slowly, and is thus not suitable for short term projects, the very fact that the reliability measures reported are measures of a changing characteristic, and the samples were drawn from a population of high school students , suggests that little value can be attached to the low scores obtained. Hunt (1983) further states that one of the major contributions Conceptual Level Theory has made to educational research is that it has provided an alternative intellectual measure to the I.Q., and he refers to Conceptual Level as a measure of "adaptive intelligence" as opposed to the "fixed intelligence" nature of the I.Q. (Hunt, 1983, p.15). Support for this assertion comes from a summary of Conceptual Level Scores correlated with I.Q. and Achievement Measures. Only low to moderate correlations of from .15 to .43 were recorded, with the highest scores being obtained from highly verbal measures. This is consistent with Hunt's assertion that the instrument is primarily verbal (Hunt, 1983) as well as the computerized analyses carried out by Ingersoll (1984), and Hurndon, Pepinsky, and Meara (1979).

3.5.2 The Teacher Concerns Questionnaire, (TCQ)

Measurement of a teacher's concerns can be expressed as a profile, obtained from scores on 15 statements about Self, Task, and Impact concerns, with 5 point Likert-type response categories. This "Teacher Concerns Questionnaire" or TCQ, was developed by George (1978) from a factor analysis of more than a thousand responses to the 56 item TCCL-B (Teacher Concerns Checklist, Form B). The internal consistency of the three five-item scales of the TCQ has been reported by George (1978) as .80 and .83 for the self and impact scales, and .67 for the task scale. While the consistency of the latter is not as great as the other two, the task scale measures a wider sample of concerns, which is probably why its consistency rating is lower. All three scales are reliable enough to be used with data from individual teachers. Test-retest reliability was also reported over a one week period. Coefficients of .79, .71, and .77 were reported for self, task, and impact concerns, and these are regarded as reliable enough for use with individuals. Investigations of the validity of the TCQ scores indicated that the self and task scores had some validity, but that the impact scores were "open to question" (George, 1978, p.28). Findings by George (1978), Reeves and Kazelkis (1985), and Sellars (1986), namely that impact concerns were higher than both self and task concerns, supports George's statement that the "TCQ should be considered a research tool that has not been fully field tested" (George, 1978, p.5).

3.6 Organization and Data Collection

Erickson speaks of the need to negotiate entry to the field setting in which the research is to be conducted. An important aspect of this negotiation is the need (a) to inform participants as fully as possible of the purposes, activities and extra burdens of the project, and (b) to protect them from risk.

The decision to conduct a cross sectional study involved gaining access to pre-service teachers and practicing teachers. It was felt that initial groups of

10-12 volunteers would be both realistic and differentiated enough to enable high level and moderate level informants to be chosen. The need to have access to such numbers of subjects, and the convenience of being able to conduct interviews on campus were major factors in the decision to approach the thirty-two students in the Integrated Day Program, who were currently on their student teaching practice, and the staff of the Mark's Meadow Elementary School, a demonstration school attached to the University of Massachusetts School of Education at Amherst.

3.6.1 Negotiation of Entry

In early November staff in charge of the Integrated Day Program were given an overview of the project, and permission was sought to approach students during one of the discussion periods which were held by program staff in conjunction with the teaching practice. Permission was granted, and a week later the students were addressed; twelve volunteered. Of these, ten completed the PCM and the TCQ in the first week of December.

In mid-November, permission was sought from the Principal of Mark's Meadow School to address staff and to call for volunteers. I specifically required teachers who had three or more years of teaching experience, since this would ensure they were past the troubles which are often reported by beginning teachers (Veenman, 1984; Fuller, 1975). Thirteen teachers volunteered, and twelve completed the PCM and TCQ instruments during the second and third weeks of December.

Both groups were given assurances that their time involvement would be only the half hour test period, and three subsequent one hour interviews. To protect informants, an agreement was entered into with each one. A copy of this agreement is attached as Appendix F. The agreement assured students that their comments about the University, its staff, cooperating teachers, and classroom practices, would be kept confidential. Similarly the teachers were assured that their comments on their school, colleagues, the University and its staff, and the students, would also be treated with strictest confidentiality.

3.6.2 Selection of Informants

The selection of informants from those who volunteered was based on scores obtained on the PCM. Hunt et al (1978) regard a score of 2.0 and above as a high rating, while 1.0 and below is regarded as low. For the purpose of this study, scores between 1.0 and 2.0 will be designated as moderate. By selecting from the extremes of each group, it was hoped to obtain informants who fell into different Conceptual Level (CL) categories. This was the case with the student informants, with the high CL informants scoring 2.5 and 2.2, and the moderate CL informants being rated as 1.8 and 1.7. However, while the top CL scorers in the teacher group were easy to select, with scores of 3.0 and 2.7, the moderate level informants were not. Hunt et al (1978) warn that CL rises with age, and that the instrument does not seem to discriminate well among adult subjects. As all the teachers were mature adults, this weakness may indeed have been a factor. The lowest scores of the teacher group were each 2.0, which Hunt et al categorize as high. However, by using the secondary CL score calculated by averaging all six scores from the PCM, scores of 1.83 and 1.75 were obtained. It is hoped that this provides sufficient variation to reveal differences between the responses of the teacher informants.

3.6.3 Data Collection

The first student interviews were conducted in the third week of December, and the first teacher interviews in February. The second round of interviews was held in March for the student informants, and in April for the teachers. The final interviews were held in May.

In order to develop rapport with the informants, I stressed certain points in my background, such as lengthy classroom experience, current involvement in studies of classroom teaching, and a desire to make teacher education more relevant to preservice and inservice students. My past experience had been that these themes seemed to strike responsive chords in classroom teachers. In the test sessions, I tried to appear both well-organized, and relaxed, and I made a point of stating my appreciation of the volunteers. In this way I hoped to convey the fact that I valued them as individuals. In the actual interviews, I tried to make the situation as relaxed as possible, and used humor to reduce tension and establish a less formal relationship. When time permitted, I tried to spend some time after the interview in social discussion, in an attempt to build a better relationship for the next session.

One aspect of the planned data gathering was to gather additional data "by such means as ... observations of professional discussions and expressions of professional views in such forums as staff rooms and staff-meetings" (Dissertation Proposal, 1987, p.13). The seminars held by the resource persons from the Integrated Day program, and Staff Meetings at Mark's Meadow school seemed appropriate for this purpose. The four seminar sessions which I was able to attend, however, were structured with guest speakers and/or formal student presentations, and very little open discussion occurred. I was also unlucky when I sought permission to sit in on school staff meetings, as sensitive issues were under discussion, and the Principal felt my presence might be an inhibiting factor. Thus these avenues of potential data gathering proved fruitless, and I was unable to gather any additional data which might have provided further insights on the interview material. However, the interview process by itself is regarded as a powerful means of gathering data, and in and of itself is regarded as an important interpretive strategy (Locke, 1989; Bogdan and Biklen, 1982).

3.7 Summary

Criticism of research on teacher education (Fuller and Bown, 1975; Lortie, 1975; Koehler, 1986; Lanier and Little, 1986; Hawley, 1986) and criticism of the traditional "empirical-analytic" research paradigm (Popkewitz et al, 1979) have led to a renewed interest in qualitative research (Allender, 1986). This study accepts the challenge of being "open" and uses ethnographic methodology to look at the relationship between Conceptual Level and Teacher Concerns Phases.

It is not, however a classical ethnographic study, and Wolcott's four criteria for ethnography (1975), and Spradley's (1979) requirements for an ethnographic interview have been discussed in order to point out differences between this study and those following a more strictly ethnographic approach. These differences, however, do not necessarily constitute weaknesses, and this study represents, in my view, a valid interpretive or qualitative study in the tradition described by Erickson (1986), Bogdan and Biklen (1982), and Locke (1989).

The PCM (Hunt et al, 1978) and the TCQ (George, 1978) instruments have been discussed in detail, and evidence of their validity and reliability presented. Access to the students in the Integrated Day Program was negotiated, and the PCM and TCQ administered. Similarly, the staff of the Marks Meadow School were approached and the PCM and TCQ administered to those who volunteered. From the scores obtained on these tests the eight informants were chosen, and three sessions of interviews were conducted over the period December, 1987, to May, 1988.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

The purpose of this study is to describe the relationship between Teacher Concerns and Conceptual Level. This objective was derived from the foreshadowed notion:

There might be a relationship between Teacher Concerns and Conceptual Level, but what form might it take? (See Chapter III.)

In operational terms, this objective was reduced to three questions, namely:

1. Are there significant differences in the way teachers at different cognitive developmental stages perceive their teaching concerns in the phases described by Fuller? Do they see their concerns in Fuller's terms at all?
2. Do only those teachers who have attained the higher stages of Cognitive Complexity achieve the "later concerns" phase described by Fuller, which relates to their impact on learners? Or is this presumably sophisticated professional behavior independent of such cognitive operation?
3. Does the impact phase constitute the major concern of experienced teachers? Is this the major difference between the concerns of preservice teachers and

experienced professionals? Is this cluster of concerns a function of cognitive developmental stage level?

In Chapter 1 (See Section 1.6) it was suggested that these questions could be more easily conceptualized by using a matrix with cognitive-developmental level as one dimension, and levels of teacher concerns as the other (See Figure 1.1). Such a matrix would enable the concerns expressed by subjects designated as moderate conceptual level (i.e. student teachers 3 and 4; experienced teachers 3 and 4) to be compared with the concerns of teachers who were classified as high conceptual level (i.e. student teachers 1 and 2; experienced teachers 1 and 2).

It was also seen to be useful in comparing responses which revealed a focus on different teacher concerns (e.g. Self, Task, and Impact Concerns). These stated concerns could then be examined in the light of the conceptual level of the informant.

4.2 The Screening Process

Hunt et al's (1978) Paragraph Completion Method, (PCM) and George's (1978) Teacher Concerns Questionnaire (TCQ) (See Chapter 3, Sections 3.5.1 and 3.5.2), were administered to each of the ten student teacher volunteers, and the twelve practicing teacher volunteers. The results obtained from these tests are set out below in Tables 4.1 and 4.2. The initials of the subjects have been selected at random to protect their identities.

TABLE 4.1 Practicing Teacher Scores

	SELF		TASK		IMPACT		
NAME	R.S.	S.S.	R.S.	S.S.	R.S.	S.S.	C.L.
WI	7	1	6	1	25	8	3.0
MA	8	1	11	3	22	6	2.7
MJ	14	4	19	6	24	7	2.7
DM	6	1	7	1	17	2	2.5
LF	11	3	20	7	18	3	2.3
YJ	13	4	10	2	20	4	2.3
WL	13	4	14	4	23	6	2.2
LC	11	3	9	2	18	3	2.2
CK	11	3	13	4	13	1	2.2
WJ	19	7	17	6	23	9	2.0
WS	11	3	15	4	20	4	2.0
ML	9	2	8	1	15	2	2.0
MEAN	11.1	3	12.4	3.4	19.8	4.6	2.3
STD.DEV.	3.3	1.6	4.5	2.0	3.6	2.5	0.31

TABLE 4.2 Student Teacher Scores

	SELF		TASK		IMPACT		
NAME	R.S.	S.S.	R.S.	S.S.	R.S.	S.S.	C.L.
SJ	19	7	15	6	23	7	2.7
AL	14	3	17	7	25	8	2.5
BT	17	5	13	5	22	5	2.2
KS	16	4	13	5	23	6	2.0
DS	14	3	8	2	13	1	2.0
GK	13	3	10	3	22	5	2.0
WR	13	3	12	4	18	3	2.0
WS	19	6	17	7	25	8	1.8
QD	14	3	9	3	25	8	1.7
LK	17	5	18	7	20	4	1.7
MEAN	15.6	4.2	13.2	4.9	21.6	5.5	2.06
STD.DEV.	2.2	1.4	3.3	1.8	3.6	2.2	0.31

4.2.1 Correlations

Correlation coefficients were calculated for the various scores of each of the two groups. Only one correlation of any significant value was established between any of the scores. For practicing teachers, a positive correlation (*r* =.6688>.6581, with DF=10, significant at the .02 level) was found to exist between Self concerns and Task concerns. A similar positive correlation (*r* =.623) was found for the same sets of scores obtained by student teachers. However this was not quite high enough to reach significance at the .05 level, (.6319 with DF=8). This would suggest that with experience, the self concept of the teacher becomes linked with the ability to deal with the tasks of teaching effectively, and it is highly likely that teachers would increasingly evaluate their "self" in terms of teacher effectiveness. This would account for the "self-task" relationship, and would not be inconsistent with Fuller's view of a sequence of development through levels of teaching concerns.

4.3 The Interview Data

Underlying the interview process used in this study was the assumption that the subjects, both experienced teachers and students, would have concerns about teaching, and that the best way to have them reveal these concerns would be to have them make value judgments about teaching practices. To achieve this, they were asked to comment on various aspects of those practices they felt were desirable, and those they would like to see changed or abandoned altogether.

This forms one of the major points of difference between this study and an ethnography, in that the latter seeks to be substantively descriptive. While the intention of this study was to obtain a description of teaching from the cultural frame of reference of the subjects, it was also necessary to focus their attention on their teaching concerns. A "teaching concern" in this context is defined by Fuller and George in the following way:

> We consider you to be "concerned" about a thing _if you think about it frequently and would like to do something about it personally._ You are not concerned about a thing simply because you believe it is important .. if it seldom crosses your mind, or you are satisfied with the current state of affairs, do not say you are concerned about it. You may be concerned about problems, but you may also be concerned about opportunities which could be realized. You may be concerned about things you are not currently dealing with, but only if you anticipate dealing with them and frequently think about them from this point of view. In short, you are concerned about it if you _often think about it_ and would like to do something about it.
>
> (George, 1978, p.32)

4.3.1 _Opening Questions._

Faced with the task of eliciting value statements, and yet not unduly influencing the responses of the interview subjects, I stressed the fact that I was not seeking any preconceived responses, and that I required each respondent to answer from his/her own frame of reference. To achieve this, the following "ethnographic explanations" were offered:

1. I'm interested in your experiences of, and your feelings about teaching, especially from your point of view as an experienced teacher/a student teacher.

2. I will be recording the interview, but from time to time I will make little notes, or jot something down. Don't think I have stopped listening, or that I have found something to trick you up on. It's just that I need to write down some of the terms that you use so that, if necessary, I can get you to explain them or add to them.

3. Even though you know I've been a teacher and I am a graduate student in Education, I really need to have you describe things in your own words, and to use the terms you would use in ordinary conversation. There may be some differences in terminology between Australia and the U.S., so don't think I am being "picky" or trying to catch you out if I ask you to talk about something that may seem self evident.

4.3.2 Grand Tour Questions

To make sure the interview subjects were encouraged to make judgmental statements about teaching situations, the "Grand Tour" questions (Spradley, 1979) were framed so that the teaching situation was approached from several different perspectives. For example, both practicing teachers and student teachers were first asked to simply describe their typical day as if to someone who knew nothing at all of teaching or the school system. Then they were asked to look at teaching from the supervising teacher-student teacher perspective. Practicing teachers were asked what they would emphasize to their students, and students were asked to put themselves in the role of a co-operating teacher, and to indicate what they would present to their students. This was done in an attempt to make subjects identify important aspects of teaching. Such an approach was thought likely to reveal areas of concern.

The final question asked the subjects to describe their views of a perfect teaching situation. Again, this was intended to bring to the fore teaching practices and behaviors which were regarded as high priority, and could thus be expected to uncover areas about which the teachers might be concerned. These questions are included as Appendix G.

4.3.3 The Interview Sequence

The interview sequence approximated the order of Spradley's Developmental Research Sequence (Spradley, 1979; See Appendix A). The first interviews were basically seeking descriptive information, and so open, descriptive questions were asked. The second interviews sought more detailed information, and a series of structural and contrast questions were used. On the basis of this interview data, a taxonomic analysis was made. Using the terms from this analysis, cards were made up, and subjects were asked in the third interview to sort these out, and to talk about the sets and associations they had made. (The sets of terms which were derived from the first two series of interviews and used for the card sorting exercise, are listed in Appendix H.)

4.4 A Preliminary Analysis

The data from the final set of interviews was analyzed to see whether there appeared to be any relationship between Conceptual Level and the Teaching Concerns expressed by interview subjects. If experience only was to be the major influence on teacher concerns, and if a developmental sequence did exist, one could expect that all the experienced teachers would exhibit low Self Concerns, somewhat higher Task Concerns, and that Impact Concerns would be the highest rated concerns of all. Similarly, one would expect the student teachers to have high Self Concerns high Task Concerns, and somewhat lower Impact Concerns. It was also a major focus of this project to see whether the interview data supported the results obtained using the Teacher Concerns Questionnaire instrument (George, 1978).

The material obtained from the interviews needed to be quantified in some way so that comparisons could be made. The measure adopted was simply lines of interview transcript of subject responses, analyzed in terms of Self, Task, and Impact concerns, and Other Responses. The results obtained from this analysis are presented below in Table 4.3.

Table 4.3 Statements of Concern Expressed in Interview

SUBJECT	SELF	TASK	IMPACT	OTHER	TOTAL
T1	2 0.3%	136 21.2%	315 49.4%	216 33.9%	637
T2	0 0%	93 19%	167 34.3%	219 45%	487
T3	25 5.7%	113 26%	78 17.9%	214 49.3%	434
T4	17 1.9%	524 61%	159 18.5%	175 20.4%	858
ST1	5 1.3%	161 43.8%	156 41.7%	36 9.6%	374
ST2	3 0.9%	152 48.7%	79 25%	79 25%	316
ST3	0 0%	159 69.4%	27 11.8%	44 19.2%	229
ST4	9 2.5%	225 63.2%	72 20.2%	58 16.3%	356

Following George (1978), a set of profiles based on the scores from the initial screening process, and data from the interview process was developed for each of the subjects. These profiles were based on a nine point scale for each ofthe areas of Self, Task, and Impact. The profiles from the TCQ instrument appear below in Figure 4.1, and those from the interviews are shown in Figure 4.2.

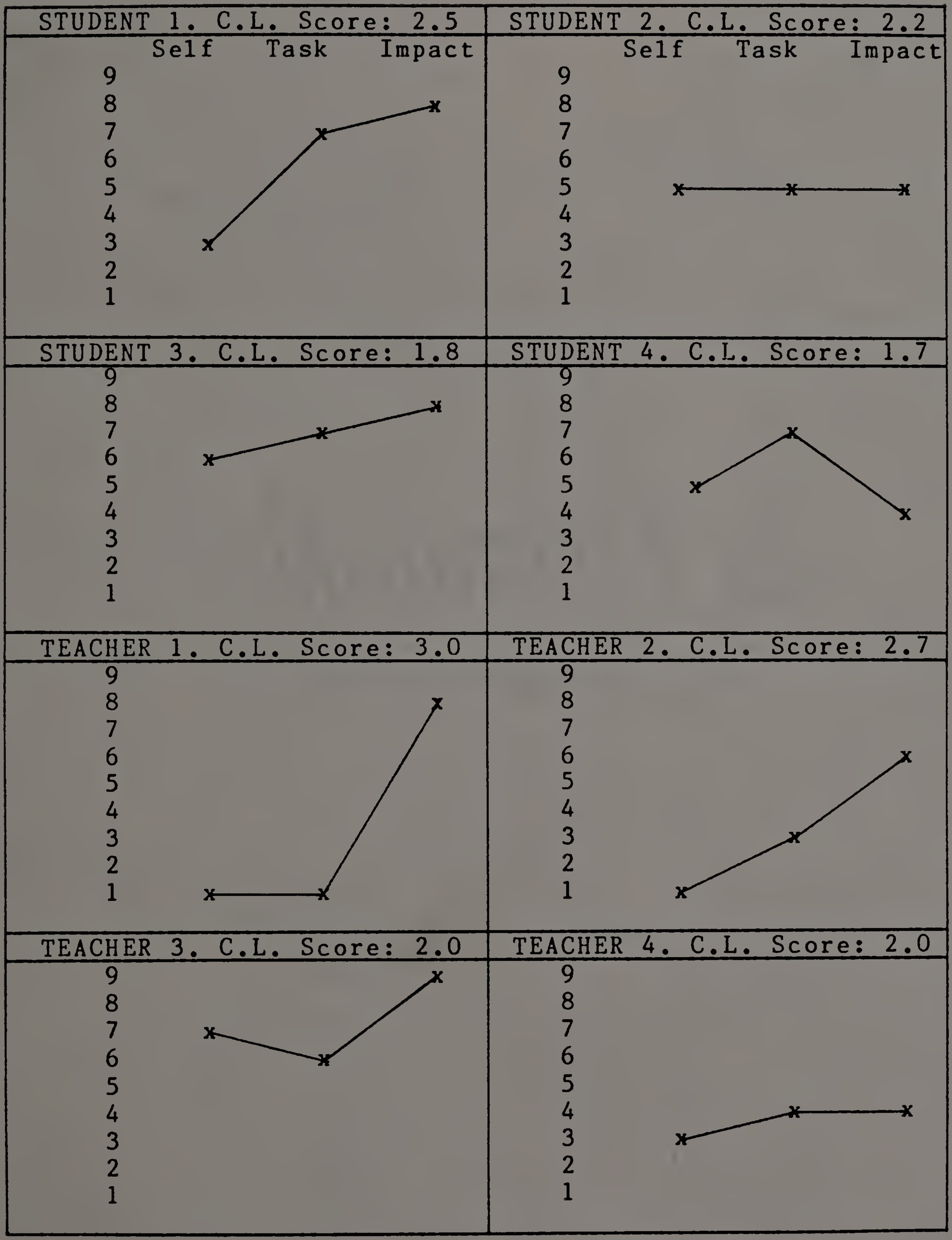


Figure 4.1 Profiles of Teacher Concerns from TCQ Instrument

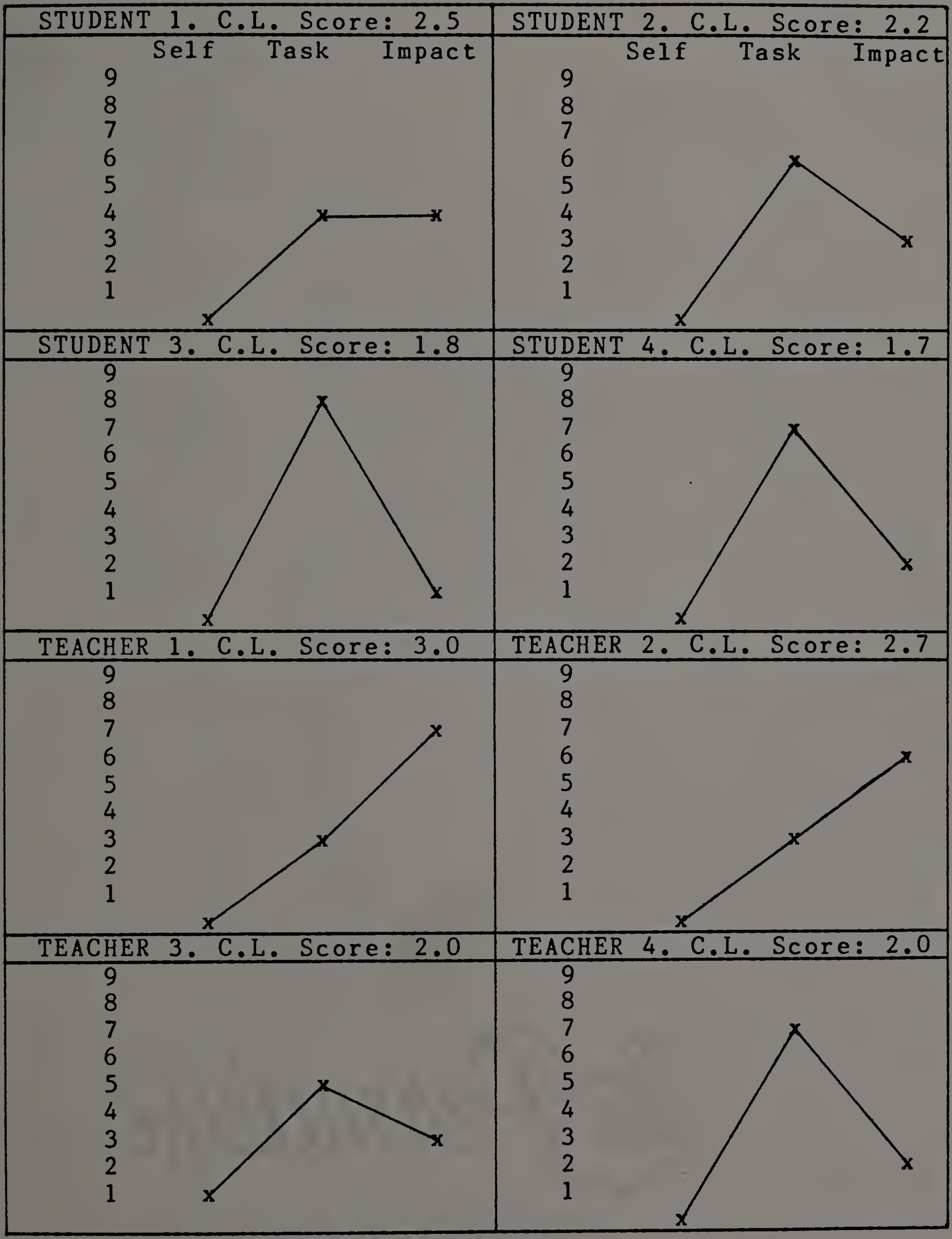


Figure 4.2 Profiles of Teacher Concerns from Interviews

4.4.1 Tentative Conclusions

There are several conclusions which almost leap out of the profiles of concerns. While these data must be regarded as only tentative, and the procedures for quantifying material from the interview transcripts extremely rough, nonetheless the results seem impressively clear.

Firstly, in answer to the general question as to whether there is a relationship between conceptual level and teacher concerns, the profiles of all moderate conceptual level subjects, both student teachers and practicing teachers, show a remarkably similar pattern, with almost no concern about self issues, (ratings from 0 to 1), relatively high scores on task concerns, (from 4.6 to 7.7), and quite low concern for impact, (ranging from 1.3 to 3.1).

The relationship between the scores of the high conceptual level subjects is not so clear cut. While the practicing teachers exhibit the pattern which Fuller and her associates would have predicted for experienced teachers, Student Teacher 1 has task and impact scores which are almost equal (4.3 and 4.1). Student Teacher 2, however, has an impact score which is well below her task score (3 compared with 5.7). It should be noted that this student had been subjected to several gruelling job interviews shortly before the final interview, and it seemed obvious from comments which were made during the interview that she was still affected by them. This may explain her heavier emphasis on task rather than on impact, and it is my opinion based on the earlier interviews that her impact score should have been higher. Despite this, it still appears that student teachers of high conceptual level have higher scores on impact concerns than do their fellow students with moderate conceptual level scores.

The comparison of interview results with the scores of the TCQ instrument also gives a clear indication. Except for the high conceptual level experienced teachers, all subjects obtained higher scores for both self and impact using the TCQ procedure than they did from interview. While the comparability of the interview scores is questionable, one cannot help but ask to what extent the format and wording of the TCQ affected the responses of the subjects.

In his discussion of the reliability of the TCQ, George canvasses a number of possible reasons for the fact that the scale provides scores which are at variance with the developmental predictions of Fuller. This preliminary analysis has produced some findings which appear to have some relevance to this issue. Firstly, it seems highly likely that a person's conceptual level score may have more affect on the developmental sequence of her/his teaching concerns than teaching experience, or that there may be an interaction between these two variables. Secondly, it appears that the TCQ instrument gives a false high score for impact concerns for all subjects except experienced teachers with high conceptual level ratings. The more detailed analysis of the interview data which follows should confirm or disconfirm these conclusions.

4.5 Analysis of Interview Data

Profiles were developed for each of the teachers in the sample. Information on background, teaching position, attitudes towards teaching, and perceptions of "good" and "bad" teaching practices were included. The interviews also provided information on school administration, aspects of student teaching , and relationships between student teachers and co-operating teachers. All interviewees were asked specifically about their teaching concerns, and this information is included together with the data from the TCQ instrument (George, 1978).

Aspects which were common across the sample (e.g. all teachers worked at the same elementary school; all students were enrolled at the same school of education, were in their senior year, and had completed the same integrated subject curriculum study) have not been described in detail. After these initial analyses, comparisons are made between individuals and groups.

4.6 Analysis of Teacher Interviews

Teacher 1.

This teacher was a female of Hispanic background, forty-one years of age, with eighteen years of teaching experience. Her current position was that of a Teacher of English as a Second Language (ESL). This position was crucial to the operation of the school, as it served the communities of several large University residential complexes, with high proportions of foreign students, most of whom did not speak English. It was estimated by Teacher 3 that up to one third of the school population were from non-English speaking backgrounds.

> We deal with 33% population of ESL at times. I have a new kindergarten group of four year olds, which are very young. I think, almost all of them are ESL, so this is a ... the ratio of ESL's coming into the kindergartens each year is huge *(T3:1:1).

Teacher 1 was clearly and consistently expressing Impact Concerns - strong feelings about the social and emotional needs of her pupils. She stated that her "whole thrust" was to develop the pupils' ability to "communicate effectively orally" because

> .... if they're not able to really express themselves well and really understand what someone else is speaking then you know, in a classroom situation they are at a loss .... (T1:1:3).

[* Acknowledgement of interview data follows the following pattern:- Interview subject: interview number: page number.]

Later she stated

> for me it's important that the students be able to have a good sense of who they are, and be able to express that, and its ... unless they are able to develop all the skills that would allow them to do that, there's quite often a sense of frustration in not being able to communicate with teachers and peers, as to what we're thinking, what we know, what we observe .... (T1:2:4-5).

Her concerns about teaching practices were strongly directed towards tailoring learning experiences for individual learners. Her initial description of a typical day was a catalog of different activities and experiences designed to meet the needs of a variety of groups of pupils (1:1:1-5). The rationale for her approach to teaching was expressed in terms of the need to reduce the stress caused by a lack of language. She states that all teachers should experience

> .... that sense of impotency when they know they know something, and they can't let anyone else know that they know something (T1:1:11).

In terms of her teaching goals, she listed a string of affective objectives to be achieved in order for academic goals to be reached.

> Okay, so these are the sort of things that I want them to be, that I would like to have them develop in my classroom. Okay, a child's sense of self, increase their learning, child's ability to express sense of self, reduce the stress level that is caused, you know, when the child doesn't have enough English and feels at a loss, you know, reduce again the frustration that results from that and by doing so they feel more relaxed and they are more, they feel more comfort within the . . . with themselves and within the classroom situation, and therefore they will be able to learn, you know, I think it's

> important learning is more meaningful, and more long term when you feel good about it, what you're doing, you feel good about who you are, and so I think these are the affective objectives that I would have for the children .... (T1:3:3).

Teacher 1 was also aware that her concerns had changed over the years. She talks about her concerns as a beginning teacher with coverage of the curriculum, and the possibility of her supervisor's negative evaluation of her work, and then she expresses her confidence in her present ability to be able to judge the best way of meeting a child's needs.

> .... I think I mentioned before that when I first started teaching I wasn't comfortable with doing that. You know, giving students the time that they needed because, you know, the pressure to cover the curriculum is really great and you know, what's your . . . what are other teachers going to say, what's your supervisor going to say that you only got what, .. only got half way through the book, or what's wrong with you.
>
> At this point I feel confident enough in my ability to judge what's appropriate for the students in my classroom that I'm not hesitant at all to say .... well the reason why this child is at this particular level is because you know this child needs more time to develop certain skills and you know I feel no need to try to, you know, to force that child to move at a quick pace and kind of cram the information in which they will probably forget two days later, so I am quite content at this point to give students a solid foundation on something, and then next year's teacher builds more on that, you know, and more on that .... (T1:3:12-13)

When asked explicitly about teaching concerns in the last interview, Teacher 1's response was entirely consistent with her views on teaching. Though there is a reference to herself, it relates to the past, and is included to give support for what is really a statement of the principles underpinning her approach to teaching.

> I think one of my major concerns is being able to influence what happens to non-English speaking, or limited-English speaking, or non-white children within the school systems. When I observe what the educational system does to these children, and then when I remember what the educational system did to me, and students of my generation, I mean I have reason to be concerned (T1:3:17).

The few references to concerns that might have been classed as "Task" in nature, were clearly set against a context of Impact issues. For instance, when speaking of the pace of teaching sessions and her problem in trying to interact with each child,

> So it's kind of a fast pace during those 45 minutes because I'm just basically going from one, ... trying as much as possible to touch bases with each child within that grouping. It used to be one of my best groups because there were three children each who could work independently and it went smoothly, now as a result of new students coming into the school that's why I have the sort of set-up that I have (T1:1:1).

Teacher 1 was in the middle of a description of her typical day, and her statement was part of a detailed overview of a very individualized approach to instruction. Similarly, when speaking of her frustrations at opposition to native language teaching, and ESL services in schools,

> There are still many, many, administrators and educators that still adamantly oppose the whole notion of using the native languages of children within the school system. So, that's frustrating, you know, that's frustrating (T1:2:10),

she was able to indicate how such situations were no longer personally frustrating, and that she was able to do something concrete about the problems in inservice workshops she had participated in.

All in all, there is very clear evidence that this teacher was highly motivated by her concern for the needs of her pupils, and her whole conceptualization of teaching was built around trying to satisfy those needs, and the personal satisfaction she received from achieving her teaching goals.

Teacher 2.

The second teacher in the high Conceptual Level category was also a female, thirty-six years of age, who had been teaching for fourteen years at the time of being interviewed. She was the Special Education teacher in the school and because of the educational problems associated with non-English speaking pupils, together with those caused by changes in school systems suffered by pupils from other states and other countries, as well as the "normal" problems which occur in any similar American school setting, she had a very busy schedule.

This made it difficult to categorize the focus of Teacher 2's teaching concerns. Because she was concerned at times with the numbers she had to teach, with time pressures, and with the frustrations associated with her role in the school, many of her concerns appeared to be straight Task oriented. However, these concerns were then often linked to, or based on some concern for the pupils' needs, which seemed to indicate a high level of Impact concern. Examples of this sort of concern are:

> .... the first set has to do with the steps, most of the steps, that I go through in writing an educational plan. What's missing is the development of a student profile which actually takes me probably the longest amount of time, but it needs to be here (T2:3:2),

which seems to indicate a concern for the task aspects of this particular part of her Special Education role, but then she says:

> In the profile I describe the child's personality in general terms and their strengths and weaknesses and their learning styles and specific information about their family situation or other siblings that may have learning problems, something historical (T2:3:2).

This would seem to indicate clearly a concern for meeting the needs of the child, and a very specific plan to treat the child as an individual, and hence a level of concern that is clearly Impact in nature.

Similarly, the following description gives the same type of message.

> I'm not in one place all day so that it ties me up in terms with my schedule and just not being able to have the time to work with kids long enough so that sort of fits with limited opportunity to develop relationships with students [My emphasis] (T2:3:3).

The first part of the statement again describes a Task concern orientation, but the underlined section indicates that the concern is based on a consideration of Impact issues surrounding teacher-pupil relationships.

Other statements are clearly related to pupil needs, and are more clearly Impact in nature. In speaking of the integrated focus of Special Education programs, Teacher 2 indicated how pupil interests were followed up in order to develop the academic skills required by the pupils.

> .... first of all it's based on the kids' interests. Like for instance, one group expressed some interest in learning about the body, the skeleton. And so we sort of, put away the reading ... the skill instruction for a while, and they learnt how to take notes from the books in the library, and then they learnt how to take those notes and write them into sentences, and then, they've just finished up typing their reports on the computer, and they did illustrations for it, and had this well done ... well documented group project on different bones in the body (T2:2:6).

In talking of the advantages for pupils in the Special Education teacher working out of the classroom rather than the Resource room, she stated that

> .... some of it has to do with aspects of advantages of working in the classroom with my students instead in the resource room, and then I found that the kids seemed more grounded, they seemed more part of the classroom and they seemed more invested in their work, giving me opportunities to know kids better .... (T2:3:12).

To further complicate the categorization of this teacher, there are strong feelings of rejection, and of being evaluated negatively by classroom teachers.

> ....but we're not really legitimized, like, we're still ... there's sort of a second class stigma that comes with our jobs. There's also the notion from

> the classroom teacher's point of view that our jobs are easier than the classroom teacher's. Although, they don't say that (T2:1:4).

Despite the clear references to meeting the needs of the pupils, and the very many detailed descriptions of individualized approaches to instruction which clearly indicate that Teacher 2 is primarily concerned with Impact matters, there are enough references to time pressures, pupil numbers, and instructional details to give the feeling that Task concerns are important issues, though obviously lower in priority than Impact concerns. There are also several references to Self concerns, to being evaluated by classroom teachers, and being judged as a "second rate" citizen. This concern for acceptance and status is indicated by a demand for respect from interns:

> .... the interns need to come to this ... the ... practicum experience, whatever, with a sense that they're ... they're to respect their master teacher. That this is a job that we have, and things related to the job, ... are important, because we count on it. I mean, once we set up that relationship in the situation, there's an expectation that they're going to follow through on it (T2:2:8).

Such references to Self concerns, however, are not a major feature of this teacher's view of teaching, and did not seem to exert much of an influence over her approach to classroom practice.

Teacher 3.

Teacher 3 was the only male in the sample, and represents one of the moderate Conceptual Level subjects.

He was fifty-three years of age, and had twenty years of teaching experience. He was the Physical Education teacher in the school, and seemed to feel that this position caused him to be isolated from the rest of the staff. He and the principal were the only males on the staff at the time the project was being conducted. He seemed to feel very strongly that these factors cut him off from the usual support systems available to teachers, a situation which may well have been true in fact, as well as in his perceptions. This sense of personal and professional isolation undoubtedly influenced his teaching concerns, and his sense of being out of touch -

> .... now I've had a lot of experience but I'm sort of losing track of the latest with parents and teachers, and staff will come and say "Hey, what about this?" "What about that?" and I say "Oh, well, I think I'll go back to school" (T3:1:3).

The statements relating to his isolation are clear and straightforward.

> Peer relationships is ... I just checked it out, and there's ------ and I and the 33 women in the building, so that's a mixed blessing sometimes. Sometimes it's a lot of fun and sometimes it's, you know. You feel like a left shoe. (T3:1:3),

and, when comparing Physical Education teaching with classroom teaching,

> Their's is an intellectual ... their's is an intellectual, sort of reinforced by some physical experiences and some hands on experiences, and ours is a very physical and sometimes we do concepts. As I say, we are one of a kind in a school, and there aren't that many elementary Physical Education specialists. That's why we were really excited to

> get networking at all. They have their own network, they have it built in, there all the time, they're on the same curriculum committees, they're all teaching Science, no matter what grade they're in. They're all teaching, so they have a lot in common. And we are really isolated, by sex now, and by subject matter, and by scheduling, you know, things like that (T3:1:6),

and finally,

> And, you know, that other thing about being, being the only guy in the building, being the only Phys. Ed.'er in the building, that I have to work on my networking a little bit more carefully, ... just doesn't fall into place as easily as it did for others (T3:3:10).

The major focus of Teacher 3's concerns seemed to be Task oriented. There seemed to be a sense of frustration which emerged from the interviews and the discussions about teaching. When asked about concerns he would pass on to people contemplating teaching as a profession, the following statement sums up Teacher 3's view of teaching:

> .... it takes effort and work. You have to be humble, and you're going to lose a lot, and you'll feel frustrated a lot, and saddened a lot by what you'll see of other people, and frustrated that you can't change situations and people. And I think you really need to be confident that your efforts will make a difference not always that ... not all the time though (T3:2:12).

Other statements relating to Self concerns, or issues of teaching survival were:

> We're getting a lot of support in inservice now so that we loners who are the only P.E. teachers in the

> building are networking with a lot of other elementary P.E. teachers through resources next door (T3:3:9),

and

> This is to support teachers, networking, inservicing, education, teacher inservice, to get better at these things (T3:3:9).

These statements of Self concerns give a strong impression that Teacher 3 felt that the solution to his problems lay in resources and processes outside himself. He mentions such potential sources of teaching support and direction as networking with other Physical Education teachers, support projects mounted by the Physical Education division of the University of Massachusetts, inservice education, and his imminent sabbatical program. Essentially he seemed to feel that the problems associated with various teaching situations would somehow be solved by his participation in such professional activities. He expresses his faith in his planned sabbatical in the following manner:

> Some people may need sabbatical more than other people. I think that to me the ... we could have signed up for it every seven years ... whether we got it or not, but you know ... . Some people have done it more often than others. It just strikes me now as, "Gee, why didn't I think of this before?" It's built in ... the renewal, the re-education training, whatever ... (T3:2:12).

Throughout the interviews, Teacher 3 identified many teaching situations about which he had concerns. A sample of these is as follows:

Safety, in gymnastics, is a big concern. Head and neck, what ... one of the things you have them patterning, or when they see each other doing other things. Some will attempt skills that they're not ready for. Awareness of safety, trying to make them more ... making independent decisions, not being told what to choose. They will copy some dive roll, or something like that, which will be above their level, and we'll get into concerns there (T3:1:4).

Baggage, that's ... that we have to deal with is, that we have these people from all over the world. There may be language that I have a problem with, relating kids to a strange, maybe scary environment. All the customs of the culture, different cultures. You know, you try to reinforce the kids of one culture by patting them on the head, and it may be a taboo in another culture, so .... (T3:1:5).

.... the extra classes would take time away from the rest of the curriculum, and that has been like pulling teeth. I have difficulty even getting time for Special Physical Education, which to me is maybe the most important Physical Education there is, and because the kids are being pulled out for ESL classes, or for Special Ed. in low areas, this is getting short shrift right now, Physical Education (T3:1:9).

The thing is that the classroom teacher has a different relationship with the kids which is a close, familiarity with the record, background, parents, things like that. We have ... well, they might have maybe 20 kids that they keep track of really well. We may have as many as 3-, 4-, 500 kids that we see. So it really makes a big difference, you know (T3:2:5).

I mean, I told the administration ... the central office here that ... don't expect planning, don't expect integration of the curriculum unless you allow planning time and meeting time among the people involved. Up front planning, you know. If you want things to happen, you have to sort of, schedule them in (T3:2:8).

.... when I teach gym, the classroom teacher, these kids are having the planning done and therefore I mean, so that any planning time I wanted to have with the classroom teachers is sort of reinforced out.

> Sometimes I do my planning when the kids are at gym. So it's sort of kind of adopt different ways. I don't know, could you translate .... (T3:3:12).

> I'm thinking that if you're a gym teacher and you're liable to teach in schools, you ought to have, it would be realistic you would be asked to coach. You would have this skills training to coach. Um, special needs kids, special needs special ed., um, schedule first. Um, if there's any special programs in English for the kids, they should be dealt with first, maybe by the gym teacher or by occupational therapists or something like that (T3:3:15).

Despite this heavy emphasis on Task concerns, Teacher 3 did indicate a concern for those aspects of teaching which affected the social needs and learning of the pupils, e.g.

> Making them feel comfortable and confident in the Gym is a big ... I feel a big need to work on that. I've tried to get a sabbatical proposal on that, specifically, making the ESL kids feel more comfortable with first encounters, coming in .... (T3:1:1).

Other examples of these Impact concerns are:

> Developing community within the school. There's parents and kids, and meeting a lot of areas of different concern in their lives. School can be a focal place for the school community .... (T3:1:7).

> Yeah, maybe, maybe dealing with levels will make the kids a happier group. Sometimes it doesn't. When you have the kids grouped sometimes they say, oh I want to be with this cooler group than the skilled group (T3:3:3).

The main feeling which emerges from the comments of Teacher 3 is one of anxiety. It manifests itself in comments relating to problems with instructional tasks. This preoccupation with Task concerns reduces the attention given to both Self and Impact concerns, though there are more of the latter than the former.

Teacher 4.

The fourth teacher was a black American female, fifty-one years of age, with fifteen years of teaching experience. She was the teacher librarian, and while she taught both in the library as well as in other classrooms, it was obvious she felt there was a major difference between her role, and that of the classroom teachers.

> Well first of all, I am a librarian, and in -------, we are called "teacher-librarians", or, recently we had a whole thing of ... Massachusetts has changed the term to "Unified Media Specialist". In response to the fact that people are expected to deal with audiovisual materials, as well as books, and this is why that is the case. As a result of this, I have days that aren't always ... each day is not exactly the same as another, as if I had a classroom of students for whom I were responsible all day long (T4:1:1).

The main impression gained from Teacher 4 was that she was very Task oriented. While this did not appear to be articulated as a "Teaching Situation Concern" or Task Concern in the same way these concerns are described by Fuller and Bown (1975, p.39),

> Concerns about limitations and frustrations in the teaching situation, about the varied demands made on them to teach, not just survive ... (about) methods and materials ....

and by George,

> .... their ability to manage the tasks involved in teaching: controlling the class, knowing the lessons,

> being accepted by students and other teachers, and winning the approval of their supervisors (George, 1978, p.2.).

the sheer amount of time given to describing the content of her teaching far outweighs references made to pupil needs, personal concerns, and other aspects of teaching. A selection of these descriptions has been included.

> .... we were talking about Black History month, and the theme that we're using at the library this year, is celebrating black women, and one of the main reasons for that is because of the fact that I had quite nice posters of black women. And ... I had some pretty good biographies, and I was trying to think of something that would not just be a theme, but something that children would get involved with (T4:1:3).

> We will help them to look at the distinction between fiction and non-fiction, and where it's located, and how the code, the call number which we say is the address of the book, how looking at that lets you know if it's in this section or in that section, and then giving them some experience with that. Then we will have them look at non-fiction materials from the point of view of gathering facts, simple facts from non- fiction material. But first of all, we will have them look at the whole book and analyze, I mean, what we call it is the book's physical check up. So that they know where to find out if the book is out-dated, where to find out who the publisher of the book is, the author, illustrator ... because these terms aren't used on the title page too often (T4:1:7).

> So what they did then was to look up books. I gave them titles of books to look up, so they had to find these particular titles on the shelf. Some of the books didn't have anything at all pertaining to games, but one was "Home Life in Colonial America", and one was called "Kids America," which deals with that. Another one was called "Chinese Games", one was on "Co-operative Games", and one was "Spanish Games". But ... and one was called "Children are Children are Children" which deals with five regions of the world from an integrated point of view. So what they had to do was look at these from the point

of view of how do you get information out of this whole thick book, when all you want is to find a game which you may be interested in. So we deal with the content, the table of contents, then we look at the index, and ... as a result of this kind of examination of several - they also looked at "Games" magazine to see if there was something in there - they each chose one game that they would write down information about it, and then we shared yesterday the information about the different games that they had chosen (T4:2:4).

They're in school to learn about being able to live, and being productive citizens, and the whole thing of having different kinds of performances, and having children, if necessary, before they took the children to the performance, go over what is proper performance behavior. If you are in an audience, how do you behave? If you just have to say something, if it's really an emergency, for example if you have to go to the bathroom, how can you deal with that, versus, if you just see something on the stage that you want to tell someone about. I think it's important that we teach children this, because I get embarrassed sometimes when we've had people here, and the students have behaved so badly, and also we've had parents sitting in the back of the auditorium talking in a way you could hear them up on the stage (T4:2:18-19).

.... then we begin to get into more specifics, taking note for example about particular things that a teacher may want to do. For example, we send out the curriculum forms periodically and then you act on these notes that the teachers send back. They may ... for example, some of them may even have a standard size page, sometimes the page is filled up and you go on the back of it in terms of what kinds of plans the teachers have (T4:3:3).

This is what happens in the school day with students. With the younger ones I will read them a story when they come in as a means of getting them settled and to expose them to the literature. After that they always have a chance to have a look for books themselves. Sometimes I will have books on the theme that was read about, for example, if there's a story with a wolf as a main character you may have other stories with wolves, or if it's a fable, you will have other fables around that they can choose from before leaving.

> Now this is basically with the young children. With the older ones is where we will be talking about the fact of dealing with the research project or what have you, going about choosing things, helping them to narrow down things, discussing the topic from the point of view of from what angle would you choose to present this whole thing. Most of the time it's too broad and they have to find ways, what aspect of this topic do you feel you can comfortably handle. Rather than, for example, they may have a set such as mammals, and it is just such a broad topic or maybe something like the civil war, World War I, or what have you. So that's where we are working. With older students you spend quite a bit of time on that (T4:3:4).

> For example, __________ has been meeting back here with her class and I really didn't think about it at the time, but she just shifted on up there, and we do this all the time. Monday, I had set up a film strip for the same group back here because there's no other dark place because the cafeteria's being used now, see and they can't go there, so I set this up and I forgot about the fact that I had a whole class coming and I had to read them a story at eleven o'clock, so this group stayed on back here and they just turned the volume down, and fortunately there were only three, so they could stay here and work, and then I read the story up front, near the other table and then when that was over we went on about doing other things, so the main thing we tried to point out is the fact it's here for everyone to use and whatever way a particular person needs to use it as long as it doesn't interfere too much, and you may have to ask someone, just as we had to ask the young ladies to move to the other table (T4:3:14).

Despite this overwhelming volume of description of the content of her teaching, Teacher 4 was in quite a few instances concerned about the Impact issues related to her clients. In terms of meeting the needs of the pupils, and matching the curriculum to individuals, she was of the opinion that

> .... with the older children it's better to have library instruction tied in to a project they have to

> do, rather than just coming in and I teach them how to use the card catalog, or how to use the reference sources or what-have-you (T4:1:5).

She also felt that

> .... it's terribly important to have as friendly a relationship with the children as possible, and show as much caring for them, but they need to know that you are the person who is in charge, so that if a situation begins to go out of hand, somebody is going ... there's somebody who knows what's happening, and will take ... see to it that things don't go haywire (T4:1:12).

Other examples of Impact concerns are:

> Because it doesn't mean the child can't do it, the child simply hasn't been exposed, and I find that when people get so involved in trying to do really great, tremendously different things, some of the basic things the children need to learn in order to function there, have just simply not been touched, and it's not the child's fault (T4:2:8-9).
>
> Also the whole thing of helping students to develop as individuals and treating as such, this is where we need to realize that all of us have our own peculiar make-up, and that should be respected to the extent that it doesn't infringe too much on other people. And I think we need to know a lot about the cultures of a lot of the students we have and also something about the families, so that we can be in a better position to help them develop more comfortably as individuals to the extent that they can, ... (T4:3:13).
>
> .... but you care about all the children in the classroom, every single one. You care about other teachers, you don't put another teacher down in front of her students, because that is the kind of thing that you wouldn't want to happen to you, and I always deal with it from that point of view, what you wouldn't want someone else to do, ... (T4:3:16).

There were very few references to any concerns about personal adequacy or survival as a teacher. In identifying problems for interns, Teacher 4 spoke of the hazards of being too friendly towards the pupils in order to win acceptance,

> .... I would say here in terms of trying to be a buddy with the children, it is one of the things that I think can develop into a real problem for the interns (T4:3:15).

She also said that one of the pieces of advice she would give to aspiring teachers would be in relation to the commitment required from teachers, and the pressure this places on them.

> It's a big commitment because I think it gets you involved in doing this extremely important thing, and you can't take it lightly, so I feel that if you want a job whereby you can work from 9 to 5 and basically leave it and go back at 9 the next morning, don't even think about teaching (T4:3:20).

However, there was no evidence that this teacher had any personal concerns of this sort about her own situation. Her major concerns related to the various tasks concerned with her role, with some consideration given to meeting the needs of the pupils, and to tailoring the curriculum to their individual abilities.

4.6.1 An Emerging Theme

Spradley (1979) speaks of the emergence of "cultural themes" which link together the various concepts, and domains of meaning discovered in any cultural setting. One of the problems in analyzing some of the statements which were made in relation to the various roles of the practicing teachers, was the strong impression that, if not actually feeling "outsiders", each of these teachers felt that their specialist status in some way limited their contribution to the overall education endeavor of the school and the pupils. With Teacher 1, this showed as a concern for her relationship with ESL and "normal" pupils, and a frustration at being unable to influence the school system in such matters as the use of native language for early instruction. With the other three, the feelings expressed were something like Self concerns, in that they related to acceptance (by the other teachers), evaluation (by staff and principal), and lack of opportunities to build up positive relationships with the pupils. However, none of the teachers actually expressed strong concerns in a way which suggested they felt any kind of threat.

It seems that a cultural theme of the type suggested by Spradley could be formulated in the following way:- **Specialist teachers are under-rated in this school.** Evidence of this was that the specialists were not involved enough in decision making, they were not consulted enough by classroom teachers, and they were not able to work with the classroom teachers in such a way that their skills and knowledge received optimum use, and their roles were perceived as complementary. Rather than being seen as a threat, this theme seemed to relate to the affirmation of professional competence - i.e. "I have knowledge and skills which are not being recognized, and used to their fullest advantage".

Examples of the way three of the experienced teachers expressed their views are as follows:

> .... Well, I'd like to be used more as a resource, like my title says, not just ... I happen to work in ... I'm assigned to the resource room, but because of the kind of work I've done, and the kind of extra course work I've done, and my own little research and stuff, to really be used as a resource in terms of how kids learn, and not just be called in to pick up the pieces after a kid's in third grade, and people are ... can't understand why they can't read yet. I'd really like to see more being involved ... being asked to be involved as a more early intervention kind of role (T2:1:7).

> And we are really isolated, by sex now, and by subject matter, and by scheduling, you know, things like that. So, we're unique in that. How we're like is ... it's funny, because this used to be a demonstration school. When I came here I was not a demonstration teacher ... that ... they were a separate entity. In another way, I just dropped by here to teach Physical Education and was gone. So I had to get my foot in the door, even to, you know, get something, you know, as an educator ... And ... you know, so that came with mixed blessings. So now we're meeting ... we meet all the time with them, we're considered the Faculty, same as them, ... (T3:1:6).

> I just don't have my own thing that I'm doing and the Hell with the rest of you. What I do, that's what you do if you are in the school, and I think that as a result of this kind of thing, the integration of the specialists is a lot easier. If you know what I have, if I know what you have, ... to be able to do ... now how can we work together to make it as productive as possible so that you can get your job done, I can do mine and make ... even make it easier in the process of working together (T4:3:18).

The development of this theme could well indicate a pathway to follow in future research. Following the work of Marso and Pigge (1989) into variables which affect the pattern of change of teacher concerns, it may well suggest that the responses of specialist teachers are different to those of classroom teachers, and that a future study should concentrate on the concerns of classroom practitioners only. It may very well be that there is no difference at all in the concerns of experienced teachers, regardless of their teaching role. Another avenue worthwhile following, is that this theme, or other cultural themes, may well hold the key to differences in concerns between experienced teachers and inexperienced teachers. However, for this study, the implications are simply that the perceptions of the experienced teachers limit the degree to which we can generalize any conclusions which emerge about the concerns of the experienced teachers.

4.7 Analysis of Student Teacher Interviews

Student Teacher 1.

The first of the two high conceptual level students, Student Teacher 1 was a twenty year old female, training as an elementary school teacher. Like the other students, she was an Education major in her Senior year, and was first interviewed while on her student teaching practice. Subsequently she was contacted on campus while completing her remaining classes. Both before and during her final interview, she spoke of her decision to continue in Graduate School, so as to acquire additional teaching expertise. She did not wish to abandon teaching as a career, and when asked to give a final comment about teaching she stated, "Except for, I hope I get out there and get a job soon" (ST1:3:11). However, the fact that she was not seeking employment at that time, may have reduced her level of task anxiety in any or all of the categories of concern.

Student Teacher 1 made a number of references to impact concerns such as individualizing instruction, meeting the needs of the pupils, and developing independent learning skills. This emphasis clearly represented the major focus of her teaching concerns. When talking about the negative effects of ability grouping, and the way the lower ability pupils saw themselves, she stated

> I just didn't like that. Like how they say, "Level 1 reading group come over to this table," and those kids know they're the smart ones, and then Level 4. Those kids know, "Uh-oh!" Things like that, like kind of like that. And then manipulatives I guess are the other things that I really ... like in the Math program I think the kids need to touch, and ... not just to do work sheets, ... (ST1:1:5).

She felt that it was also very important for First Graders to develop as independent learners, and, as part of that process, to be very clear about the expectations people had of them.

> .... it's to help them to become independent. I guess that's really important at the beginning of a first grade. I mean I don't know if it's so important once you get into the upper grades because they've usually developed their skills anyway. I

> think maybe not ... in the younger grades a lot of social skills have to be addressed (ST1:1:14).
>
> .... to know what they're supposed to be doing, because I think that's a big problem for first graders. It's not that they, you know, they want to be bad, or they want to fool around, they just sometimes don't know what they're supposed to be doing (ST1:2:10).

She was very concerned that some children tend to dominate many of the more academic areas of the curriculum, and saw the informal activities of schooling as opportunities to redress this imbalance, and for children to have the chance to succeed in a different field.

> Other parts of the day, you know, one child who dominates during reading ... you know, they're smart at reading, they want to dominate it, but the times we're coming in, at choice time, gives the other kids a chance to show their stuff, I guess. The movement activities vary a lot in kinds of evidence. You know, some kids are great in science, they, you know, can't move, and some kids that can't even read yet, seem to be the most creative in balance (ST1:3:4).

However she also spent much of her time describing aspects of her classroom experiences. The various references she made to methods, time, and pupil numbers also indicate a substantial Task concern focus. The following statements are characteristic of more task oriented concerns:

> .... like when I read now, I don't know every word. You're not going to have every word, so why not teach the kids strategies like, "Look at the picture, maybe, that will help you." "Look at the other words." You don't have to know every word to understand the text (ST1:1:6).
>
> We were doing a unit on Social Studies called "The Family", and, you know people ... kids ... people and kids would come in and talk about different

> traditions of their family, so, you know, if a parent could come in at 10 o'clock, we'd just schedule them right in at 10 o'clock (ST1:2:6).

> All the mini-lessons that we do, in our ... we direct them on special lines. Even the shadow puppet plays, we have to, sort of, ... I don't know, I guess they do a lot of work .... actually. The letter club would be a teacher directed activity. Cooperative games, even though they play them to sort of ... behind the scenes, the teacher takes real charge (ST1:3:2).

Earlier in the interview sequence, this student made several references to Self concerns. These had mainly to do with acceptance by other teachers, and being judged by them in terms of teaching effectiveness. This minor display of self doubt disappeared by the third interview, no doubt because the decision to delay entry into the workforce removed the possibility of judgment and possible rejection by more experienced teacher colleagues. An example of the type of concern expressed is

> It would reflect in my teaching if all the other teachers didn't like me and didn't like the way I was teaching. I might conform to them, and not be too happy doing it (ST1:2:15).

There is, however, very little evidence to indicate that this student had anything other than a passing concern over her acceptance by other teachers. Her main area of concern seemed to be treating pupils as individuals, and creating learning experiences through which they could develop the knowledge and skills to become truly independent. This is reflected in a solid emphasis on impact concerns, and a similar expression of task concerns.

Student Teacher 2.

This Student was twenty-one years of age, a Senior and an Education major, and was doing her student teaching when she became involved with the project. Her first interview showed a major focus on aspects of impact concerns, along with a fair amount of attention to task related issues. However, as she began to talk to peers and teachers about her job prospects in the new year, she began to become more anxious, and to express doubts about her survival in the profession. The effect of this is summed up very clearly in one comment she made in her second interview.

> I don't know, I've always been pretty sure of myself whenever I'm going to do anything. I mean, "I can do that." Nothing's ever really taken me aback. But now that it's getting closer to the time ... closer to September, when I'm going to have my own classroom. Well ... you know ... and talking to people, I think that I'm just doing a lot of thinking on my own. It's starting to eat away at me, I'm doing too much thinking. I'll just have to stop thinking about it. It's driving me crazy. I'm being too critical. I'm trying to analyze it too much. It didn't come about from talking to these people. It was always in the back of my mind, ... I always ... I didn't think about it that much (ST2:2:11).

However despite this tendency to express concern about her prospects in the classroom, Student Teacher 2 did not make any reference to self concerns in relation to any aspect of teaching until she spoke about job interviews and conversations with her peers. I would not be at all surprised if much of the anxiety generated amongst this group arose from "horror" stories of the worst experiences of graduates at interview, and the sorts of rumors that inevitably arise in circumstances of this kind. It would be a useful project for the future to try to identify the sources of "job anxiety", and the extent to which graduates' fears were based on real experiences, or on imagination or rumor.

There were many statements about meeting students' needs, individualizing instruction, and dealing with pupils on a personal basis. One example of this personalized approach was given while the student described her role during the school day.

> Someone was on the computer today, and was typing out a story. He has a deadline to get it finished by Friday, so I was helping him, doing some of the typing, to get it done, so more kids could come to the computer (ST2:1:4).

Her description of her ideal classroom contained a very clear statement of an approach to teaching which can only be described as "pupil centered."

> But, then again, depending on the age level, having the kids more as a center of their own learning and discovering things, rather than me being up in front telling them everything, and explaining everything first (ST2:1:9).

Further statements illustrated how concerned she was, both to allow students to work at their own level, and also to exercise some degree of choice in what was studied, and when it was studied.

> .... I can remember when that ... again this was a 4/5 grade classroom and there was a group of 6 kids who were working at 6th grade and above level, and we didn't want to stifle their learning, we didn't want to ... give them things that ... that wouldn't ... that would not foster their growth (ST2:2:8).

> My classroom had a "whatever" period, where either we did extra music or extra art activities, or it was time for the kids to catch up on work that they didn't get done previously, which was due. Or else, if everything else was done, they had free time. They were allowed to do whatever they liked, as long as it's within the resources of the classroom (ST2:3:6).

Another of her statements on approaches to presenting subject matter showed how her teaching was geared to meeting the needs and interests of the pupils.

> If you had to integrate library books with basals, you'd soup it up. Actually you'd take a lesson that the basal gives, and find other ways that make it more interesting and more appealing to the kids to learn the same thing. It would hit home, really make sense to them (ST2:3:14).

This Student Teacher's interview transcripts gave the impression of a heavy emphasis on task related concerns. On closer examination, this was a little misleading, because the student spent a good deal of time describing the details of her typical teaching day. There are long sections in each of the interviews describing various teaching situations, but these do not appear to reflect a high level of concern. In fact, the task emphasis of this student would appear to be slightly lower, if anything, than her Impact concerns. A sample of her task concerns is presented below. The first deals with her criticism of teaching Math from the workbooks provided:

> The teacher's edition of those Math books says to just, you know, explain to them the way that they're ... the way you multiply and then send them back to their seats and have them do these problems. There's not enough exploring that goes on, so as teacher I "soup up" these books, ... (ST2:1:6).

The second expresses concern at the way spelling was taught at the school where she did her student teaching.

> They're given 20 words and they have to use the words in sentences, and use them in crossword puzzles, and rearrange the words, and in word searches and things like that, and then they come back on Friday and take a post-test in the classroom. And then fine, they usually do well on the post-test, but then like two weeks later they'll have that word in their writing, and they'll like mis-spell it. So that, right there, I think the spelling program is not working, and I don't know what else there is available, but it's crazy. It's a waste of time (ST2:1:6).

The last of these examples was provided as a response to a difficult hypothetical question presented to her during a job interview. There is obviously a degree of concern about her ability to perform competently under the proposed circumstances.

> Well I had some background in reading programs, but not to start from scratch, so I came up with an answer, but I wasn't very confident about how it would go (ST2:3:16).

As was mentioned above, student teacher two experienced some traumatic interviews, and these, together with student gossip led her to express some doubts as to her personal adequacy.

> But I just need very clear, and ... I need very precise, what is expected of me. I mean I wouldn't be afraid to take a stab at something, but then I wouldn't want people to say, "Well, you didn't do that right," and to say, "Well, you didn't tell me what you wanted right." You know, I mean, ... that

> would be very ... that would be my top concern ... that I'd be able to meet their expectations (ST2:2:9).

> ST2. They were really testing me ... Oh, those interviews ... whew!
> INT. Stressful?
> ST2. That guy was grilling me. Everything you could imagine. That was just one example. I can't remember everything, so I want to forget about it (ST2:3:16).

Overall, this subject gave evidence of a moderate level of Impact concern, a somewhat lower level of task concern, and a low, but definite statement of concern about self and survival.

Student Teacher 3.

The last two Student Teachers represented the moderate Conceptual Level subjects. Student Teacher 3 was twenty-one years old, a Senior Education major, and in training as an elementary school teacher. However, even in her first interview, she seemed to be having some doubts about teaching as a career, as is evidenced by the following comments.

> ST3. Money. There's no money in teaching.
> INT. There's no money in teaching.
> ST3. The only thing I would say is that the outlook that society has on education, I don't think it's very positive, and I don't agree with it. And all my friends who say Education is easy are wrong (ST3:1:13).

Prior to the final interview, she told me that she had made up her mind not to enter teaching, and was considering Law as an alternative career. This attitude of doubt leading up to her final decision must have influenced her feelings about teaching, and there is no way of telling to what extent her concerns, or lack of concerns, can be attributed to the fact that she was not faced with the impending responsibility of her own class.

Much of the comment from this student was devoted to task related matters. However in the first interview, quite a number of statements focused on impact concerns. These comments were less frequent in the second interview, and only one or two appeared in the last transcript. This reduced emphasis may have been the result of the way the interviews were conducted, it may have been linked to the student's decision to opt out of teaching, or it may have reflected a more accurate indication of the relative concern Student Teacher 3 felt for both task and impact concerns. It could also have reflected the simple fading of the impressions of classroom experience, since the final interview occurred almost a full semester after the original one.

The following extracts provide some indication of the sorts of pupil abilities that Student Teacher 3 was trying to develop, and the needs she was trying to meet with her teaching techniques. When contrasting her approach to teaching a subject with that of her cooperating teacher, she observed that-

> I think that my work, the work that I give them, is more hands-on than what he gives them, and it's also more student ... more choice by the student (ST3:1:4).

She was also very concerned that the students should be able to follow their own interests through having some degree of choice in the tasks they had to do. This is illustrated by the following statement:

> In my Math group, usually they are working on an assignment that I've given, or we have one day a week that's "Game Day" and they get to choose games that they want to play , and perhaps do with Math. Sometimes I let them do their own assignments (ST3:1:5).

Another area which was perceived to be important is that of the isolates, and the pupils who are not generally involved with the set tasks. Her view was:

> I look to make sure that those people who generally stay on the outside of the conversation are also involved. I try to give them at least a couple of choices of activities, so that everyone will have something that they like to do. I had a debate one day, between a factory owner, striking workers, and non-striking workers during the Industrial Revolution, and found it very interesting that, like, three of the boys who never say anything, were discussing in the group their ideas of what they were going to say, and one boy who hates to write, and has the biggest mental block, was taking down notes (ST3:1:7).

Along with the policy of providing choice and variety in classroom tasks, Student Teacher 3 also showed concern for helping pupils to develop the skills of independent learning.

> I think that independent learning is a very important part of any learning, because you can't always be taught what you need to know. Sometimes you have to use knowledge that you've gained in order to teach yourself other knowledge from some other source. So learning centers reinforce the curriculum present in the classroom, but encourage independent study of it (ST3:1:13).

As well as meeting the academic needs of pupils, Student Teacher 3 also stressed the need to meet the social and emotional needs of pupils, through the development of positive relationships, and through the establishment of a climate of respect and involvement in the classroom. Her views on these matters are summed up in the following statements.

> I think the main thing would be the relationship between the teacher and the students. I think as long as you have good relations so much more teaching and so much more learning can go on than if you have bad relations, and I think that what you're talking about, good teaching, is good relations between teachers and students ... a genuine interest on the part of the teacher toward the student as opposed to "I have to teach them this today," and interest in their learning, their questions, their capacity to learn (ST3:2:14).

> Well, if your students feel like ... comfortable in their room, their work's displayed, they have mail boxes, they have their own part of the room, along with good communication between the teacher, and equality between the students and the teacher, and respect, then it makes the students more available, and more eager to learn, so it makes teaching more exciting and more interesting (ST3:3:10).

Comments about various teaching situations and practices occupy a large proportion of the transcripts. However, the statements made, and the general impression given by the student, was that this simply recognizes the way teaching operates, and is more of a response to the interviewer's request to describe aspects of teaching, than any attempt to identify real concerns about task related matters. One area that she seemed to have some concern over was that of repetitive work, and tasks which have a mechanical and/or subject orientation. The following statements provide examples of this sort of concern:

> They have a sheet that's called a Week Sheet that has all their jobs for a week, and when they complete a job, they bring it up to me, I check it over, and then sign my initials. And when they have all their jobs signed off, they're free. They can play a game or read a book. They have free time (ST3:1:2).

> I see it as "busy work". Although I feel that comprehension is important, but ... and they do a lot of reading comprehension work for their week's responsibilities, but if we had more Language Arts time we wouldn't need to do that. (ST3:1:4).

> I hate to say well there'd be three hundred vocabulary words in books that we'd have to get done by the end of the year, because I don't teach like that. I teach by, I don't know, relevancy, ... (ST3:2:15).

> And then, Science magazine. I have a hard time with it because my co-operating teacher used to make them read out the science magazines every week, and write two things they learned on their week's responsibility sheet. And I found that so horrible .... (ST3:3:7).

Other concerns expressed relate to the organization of the school day on the basis of subjects-

> It's basically a teacher decision. You know, not everyone has the same things at the same time. But, generally, you do see the day proportioned into Reading, Language, Math, you know, History, Science, things like that (ST3:2:4).

and the possibility of developing themes which incorporate social development and different activities, as well as traditional subject matter. This latter concern is illustrated by the following statement:

> .... if you're talking about integration as far as curriculum goes, then it would be a totally different

> setup. But if you're talking about integration as it relates to atmosphere and everything like that, which is kind of what this does by thematic and different learning experiences, then it would be all kind of mushed together, because it would all happen at the same time (ST3:3:10).

One of the characteristics of the interviews with Student Teacher 3 was the absence of any expressions of concern about survival or self concerns. The student appeared very confident, and obviously felt she had the teaching process well under control, as her comment about her practice teaching experience indicates.

> And I'd also like to say that my practicum experience was not typical. It wasn't as enjoyable as I would have liked it to have been, but like I said, I gained some things from it. I didn't lose a lot. I also had ... I already had my own classroom over the Summer as a pre-school teacher, so I felt confident enough in my own abilities that I didn't really need to be there (ST3:2:17).

Whether this air of confidence would have been maintained if this student had had to interview for a teaching position is impossible to tell. However, she seemed capable as well as confident, and there is no reason to suggest that she had any major fears about her ability to cope as a teacher.

In terms of an overall picture of this Student Teacher's concerns, there is a lot of comment in the interviews about task related matters, and also quite a few statements about pupil related needs. However, apart from the quantitative aspects of these comments, many of the task related segments are generally descriptive, and do not seem to reflect strong feelings about the teaching situation. The impact related statements are much stronger in terms of the feelings and beliefs expressed, and much more an integral part of the views expressed on teaching in general. This would lead me to suggest that the task concerns should only be rated as of moderate influence, and the impact concerns, despite being fewer in number, would be very much the same in terms of their relative impact on the Student Teacher's thought and behavior.

Student Teacher 4.

The last student subject, and the second in the moderate conceptual level category, was another twenty-one year old female Senior Education major, who was completing student teaching practice in a local elementary school. During her final semester, she had been interviewing for teaching positions, and while she expressed some doubts about her ability to cope in response to questions about problems and concerns, this was not a major feature of her statements about teaching.

One of the areas about which she expressed concern was related to class control, and dealt with her feelings of inadequacy in handling large numbers of pupils.

> Just even getting up in front of 28 kids, and this one would be talking over here and, just, how do you just control ... I mean the teacher could get up there and they'd all be quiet, you know, and ... I would get up there, and they'd all start talking and

> getting up out of their seats, and doing this and doing that (ST4:2:13).

Other areas of concern related to a general anxiety about the classroom, and fears that the class might not accept her.

> I'm going to have a hard time getting kids to accept me, and I'm afraid of labelling them, and I'm afraid that I won't be able to keep them busy (ST4:3:9).

> It's just starting off basically, on my own in my own classroom is just the hugest concern of all (ST4:3:10).

In general terms, Student Teacher 4 seemed to be concerned most of the time with matters that were related to teaching tasks and situations. There were a few expressions of impact concerns, but these were not a dominant feature of the student's views. A sample of task concern statements is listed below, with some showing an emphasis on time,

> Usually I'm just conferencing with the students, or just making sure their conferences, they're not going too long, because they get about five minutes per conference, so, it's a check to make sure they're not sitting on a rug talking, instead of actually having a conference, ... (ST4:1:3).

> Everything was broken up into a certain time block. Fifty minutes for Math, fifteen minutes for recess, you know, fifty minutes ... an hour and a half for Language Arts. Everything was just broken up in specific time blocks (ST4:2:4),

while others referred to a possible lack of resources,

> .... and one of the problems I think is in terms of resources, and where you go and find all these wonderful things the teachers have, and, you know, if you have a library like this one , then it's no problem to go and find the resources, because all you

> do is walk across the hallway. But what about, what about in a school that doesn't have this? (ST4:1:12),

and being unable to manage large numbers of pupils,

> I think that after a while, I'll get the handle of large numbers, or, you know, being able to work with groups, and ... but I think that classroom management is more than that. It's going to just stand out, keep going (ST4:3:11).

Her comments about impact concerns were not very deep, nor did they appear to shape the direction of her views on task related practices. She was concerned with issues of student choice,

> You know, pick out what they wanted to do, and we could have someone pick out something that they wanted to do, something that was special to them, and something that would have meaning for them, instead of saying, "This is what I'm going to do," and, you know, give them a little bit of control (ST4:1:6).

and also in developing positive relationships with her pupils. These statements illustrate this perspective:

> You know, I'd like them to have a say in it, and a decision in it, not, you know, too much, but I'd like it to be an equal relationship. And I'd like the fact that it would probably be just open, I would give them a lot of freedom (ST4:1:13).

> And underneath both the last two columns, I had good relations with kids, and loves kids. Because I think he did that, and I think to be a teacher you have to have that anyway, any good teacher (ST4:3:11).

One other area which received comment related to individualizing instruction, and meeting the academic needs of the pupils. The Student Teacher gave the following example:

> .... there was one kid that needed to be moved out of my Math group and into a higher one, because he was

> just so rapidly moving along and I know that it was just ... we were going too slow for him .... (ST4:2:7).

Probably the best way to classify the emphasis that Student Teacher 4 placed on various teaching behaviors would be to suggest that she displayed a moderate degree of concern for task related issues, a somewhat lower, but still obvious level of concern for impact related matters, and very little concern for teaching practices and situations related to self and survival.

4.8 Comparison with Teacher Concern Profiles

The purpose of the preliminary analysis was simply to obtain a set of profiles that could be compared with those obtained by the application of the TCQ instrument during the screening process. The very rough method of establishing the degree of relative importance placed on each of the sets of concerns (i.e. lines of transcript which focused on concerns related topics, drawn only from an analysis of the final interview transcript of each subject) limited severely the extent to which any conclusions drawn from these comparisons could be accepted as valid.

Having carried out an initial analysis of the interview data, it is now possible to compare the results of this analysis with the conclusions obtained earlier. Agreement between results obtained by such different methods would be a strong indication of their validity.

4.8.1 Conceptual Level.

The first tentative conclusion from the preliminary analysis (See Figures 5 and 6) indicated that all moderate conceptual level subjects had low levels of concern for self issues, moderate to high concerns about task related concerns, and relatively low concerns for matters relating to impact concerns. The data from the analysis of the interviews appears to confirm this. Apart from lowering the task rating, and raising slightly the impact rating, for Student Teacher 3, and similarly lowering the task rating for Teacher 4, the patterns obtained from the lines of transcript from each of the third interviews appears to be confirmed.

The preliminary analysis produced some confusing results with respect to high conceptual level subjects. The experienced teachers in the study appeared to be the only group that conformed to the expectations of Fuller and her associates (Fuller and Bown, 1975). Their TCQ scores, the analysis based on lines of transcript, and the analysis of all the interview transcripts, produced profiles which have a high degree of agreement.

The student teachers, however, still present an unclear picture. Student Teacher 1's interview material shows her to have a higher impact score than the preliminary analysis suggests, and a much lower self concern rating than the TCQ profile would indicate. Since the shape of the two profiles is quite similar, one could suggest that if the self score from the TCQ were made much lower, and the other scores lowered accordingly, there would be a considerable degree of agreement between both profiles, and this would also accord closely with the interview analysis. The pattern obtained approaches that of the high conceptual level teacher subjects, and conforms to the pattern predicted for experienced teachers.

The profiles from Student Teacher 2 are much more confusing. The interview analysis suggests that the preliminary analysis profile is the better "fit" of the two, but that the task score should be lowered, and the impact score raised. There was, also, a low, but definite mention of self concerns. The TCQ profile could also be adjusted to a similar pattern by lowering the score on the self dimension. Since one of the very obvious differences between the TCQ profiles and the preliminary interview profiles is the fact that all scores on self concerns are consistently lower for the preliminary analysis, and since the interview data confirms that the self concerns for all subjects including Student Teacher 2 were at best, only low, it seems safe to assume that this low self, moderately high task and moderate impact pattern is the most likely profile for Student Teacher 2. Thus it would appear that the profile for Student Teacher 2 begins to approach that of Student Teacher 1, and strengthens the conclusion that the concerns of the high conceptual level students are more like the concerns of the high conceptual level teachers than they are like the concerns of the moderate conceptual level students.

4.8.2 The Validity of the TCQ Scores.

The preliminary analysis suggested that all subjects except the high conceptual level practicing teachers had higher self and impact scores on the TCQ than they did using the preliminary analysis. The more extensive analysis of the interviews certainly confirms this suggestion of lower scores for self concerns. The lower impact scores from the preliminary analysis for Students 1 and 3, and for Teacher 3 would also appear to fit the interview results better than the TCQ results do. These conclusions seem to support the view that the TCQ instrument may be producing inflated results for the self concern scores, and give limited support to the view that the same thing is happening with the impact scores.

4.9 Comparisons of Teaching Concerns using a Matrix

In Chapter I it was suggested that the focus of this project was two dimensional in that it aimed to examine the interaction between increasing levels of Conceptual Complexity and a proposed sequence of Teaching Concerns, (See Section 1.5 and Figure 1, Chapter I.). This was conceptualized as a Matrix with six cells, comprising three levels of Teaching Concerns, and two levels of Conceptual Complexity. In the light of results obtained so far, this structure may be somewhat inappropriate. In Section 4.2.1, it was noted that there was a positive and significant correlation between the scores for teacher self concerns, and the scores for teacher task concerns. Similarly, there was a high positive correlation (though not statistically significant) between the scores for student self concerns and their scores for teaching task concerns. It was suggested that concepts of "self" concerns might become entangled with concepts of "task" concerns. In the interview analysis, it was noted that mentions of self concerns were generally infrequent, and at a relatively low level. Therefore it would seem a possibility to utilize only four of the possible cells of the matrix, with Task and Impact on one axis, and Moderate and High Conceptual Level on the other. However, since this study has examined all three forms of teacher concerns, and there may be some pattern or relationship between them, it has been decided to utilize the original Matrix for this analysis.

It was suggested in Chapter I that the Matrix could be used as the basis for comparisons between the teacher groups in the project, and might also help indicate any patterns in changes in concerns. The conclusions drawn from the interview data have been entered on the matrix, and this appears below as Figure 4.3.

		COGNITIVE-DEVELOPMENTAL STAGE LEVEL	
		Moderate	High
LEVEL OF TEACHING CONCERN	Impact	3 Low/Moderate (T) Low/Moderate (ST)	6 High (T) Moderate (ST)
	Task	2 Moderate (T) Moderate/High (ST)	5 Moderate/Low (T) Moderate (ST)
	Self	1 Low (T) Low (ST)	4 Low (T) Low (ST)

Figure 4.3 Matrix of Teacher Concerns by Cognitive-developmental Stage Level

The first question proposed for consideration was:-

I. Is there a significant difference between inexperienced teachers with high cognitive-developmental characteristics and those with more moderate levels, in terms of exhibiting differential levels of impact concerns?

This question leads us to an examination of cells 3 and 6 of the Matrix. From the comparisons carried out above in Section 4.4, it would seem that the answer to the question would appear to be a cautious "Yes". Both the preliminary analysis and the interview analysis suggest that the moderate conceptual level subjects, though they showed evidence of being concerned about impact matters, did not show as high a level of concern as their higher conceptual level counterparts.

The second question poses the same comparison of impact concerns, but for the experienced practicing teachers. The analyses carried out above lead one to a more confident positive response. If there is anything which seems to be clearly shown by this project, it is that there is a major difference in expressed impact concerns between the two groups of experienced teachers. That the moderate conceptual level subjects had concerns about impact related issues is quite clear, as is the fact that they referred to them less, and appeared to consider them less when talking about teaching, than they did about task related concerns.

Questions III and IV look at the profiles of concerns, (cells 1,2, and 3, compared with cells 4,5, and 6) in an attempt to discover any patterns of change which might receive some support despite the cross-sectional nature of the study. Question III asks

III. Is there a significant difference between inexperienced teachers, of differing cognitive-developmental abilities, and their profiles of teaching concerns as described by Fuller?

I think it is fair to say that the interview material from all of the subjects was easy to categorize into the areas of concern described by Fuller. While there was often no suggestion that the subjects were "concerned" about what they were describing, at least not in the sense that they were worried about it, and wanted to change it, self, task, and impact topics formed the major part of the aspects of teaching that were discussed. In relation to some aspects of self and task issues, there are some references which relate to the special status of the subjects, i.e. student teachers and specialist teachers. Such references are still easy to categorize despite such minor variations in focus.

All the student teachers showed very little evidence of any concerns about self issues. As the initial approach to these students was late in their student teaching semester, and the initial interviews were almost right at the end, this response is consistent with the predictions of the Fuller model. While it would have been useful to have had ratings on self concerns before the student teaching started (Marso and Pigge, 1989, reported that the high point for self-type concerns occurs just before student teaching) there seems to be general agreement that these types of concern decrease with teaching experience.

Task concerns, however, appear to be higher for the moderate conceptual level subjects, while impact concerns seem to be lower. Whether there was any change in these levels of concern over the period of the study is impossible to tell. The later interviews built on, extended, and clarified the ideas of the earlier ones, and the interview technique does not lend itself to quantification in any meaningful way. The ratings as presented in the matrix represent more of a subjective comparison of interview material, and do not pretend to be accurate measurements.

The fourth question looks at differences between the profiles of the experienced teacher subjects. Again, self concerns are almost non-existent, except in the case of Teacher 3, who was mentioned earlier as being an anxious person. These results too, would be supported by the research. The task concerns seem to be higher, and the impact concerns lower, for the moderate conceptual level subjects. This appears to be a departure from the earlier research, and appears to be more consistent with the pattern of the moderate conceptual level student teachers. It would seem that as well as gender and field of teaching affecting the patterns of attitude change exhibited by teachers over time, we can add the variable of conceptual level.

The final question seeks some sort of generalized conclusion based on the responses to questions III and IV:

V. Do persons of like levels of cognitive-development have significant areas of agreement on teaching concerns, despite differences in teaching experience?

In the light of the information from the responses to questions III and IV, the answer has to be affirmative. Certainly the profiles for the moderate conceptual level subjects are more similar to those of each other than they are to the high conceptual level subjects who have a similar length of teaching experience. This conclusion receives some support from the data for the high conceptual level subjects, though we can only infer that the student teachers will continue to become more concerned about impact issues.

4.9.1 The Effect of Conceptual Level

The conclusions above seem to suggest fairly strongly that we are observing a differential effect related to differences in conceptual level. Hunt (1974, p.23) states that moderate conceptual level subjects are characterized as "concerned with rules, dependent on authority, (and) categorical thinking". In the scoring manual for the PCM, the following description is provided for the general characteristics of a moderate conceptual level subject:

> He is open to other people's ideas and evaluates alternatives. But no attempt is made to integrate this evaluation with the solution or decision. He is very much concerned with his own thoughts and feelings and is striving for independence. In considering alternatives, he reveals an increasing tolerance of uncertainty, ambiguity and difference of opinion.
>
> (Hunt et al, 1978, p.5.)

These characteristics can be compared with those listed for thinking at a high conceptual level. Hunt (1974, p.23) suggests that high conceptual level subjects are "inquiring, self-assertive, questioning, (and) have more alternatives available," while the manual for scoring the PCM (Hunt et al, 1978, pp.5-6) describes the characteristics of the high conceptual level person as one who-

> .... considers and weighs alternatives, then decides upon the best possible solution to a particular problem. In doing so he shows concern for his own and other's ideas and feelings, and about the possible consequences of his decision. Where possible, he seeks a compromise which is suitable to all concerned. But he is secure in his independence and is aware of himself, of his relationship with others and how they view him. He will not compromise his values, principles or beliefs to please others or to conform. By the same token he will accept full responsibility for the consequences of his decision.

The major difference between these conceptual level perspectives appears to be that those operating at the higher level not only exhibit an awareness of the alternative solutions available, together with concern for the ideas and feelings of other people, but that they actually try to make compromise decisions that are the best course of action for all concerned. Having made such a decision, the individual is prepared to accept the responsibility for the outcome. At the lower level, there is also a consideration of alternatives, though some "outside " solution is usually sought, rather than a compromise being synthesized. The individual too, is more concerned about her/his own thoughts and feelings in terms of outcomes, rather than the possible consequences for others. In essence, the higher level orientation would result in a confident and self-assertive "other" orientation, while the lower level would take into account the views and feelings of others, but would basically seek solutions on the basis of a "self" orientation. In terms of teaching attitudes and practices, this would mean that the higher conceptual level teachers should exhibit more of a concern for the "others" in their relationship, i.e. a pupil oriented set of attitudes, while the more moderate conceptual level teachers should tend to behave in a more teacher oriented way.

In the terms of this study, "pupil oriented " translates almost directly to impact concerns, while "teacher oriented" refers to self concerns and task concerns. The results of both the limited quantified preliminary study, and the more comprehensive interview analyses, both indicate that higher conceptual level subjects do have higher impact concerns scores and lower task concerns scores than do their moderate level counterparts. These findings are strong indications that conceptual level has a major influence on the concerns of teachers.

In terms of changes in patterns of teacher concerns, and it must be remembered that any conclusions drawn from a cross-sectional study such as this must be regarded as tentative inferences only, it would appear that teachers with moderate conceptual level scores have similar patterns of concerns despite differences in the time they have been teaching. The results also suggest that student teachers with higher conceptual level scores will continue to become more concerned about impact issues as they become more experienced, while those with moderate conceptual level ratings will exhibit more of a middle range of impact concerns. In terms of task concerns, the higher level student teachers will probably retain a moderate level of concern, while the moderate level teachers will become less concerned about task related issues, but still rate higher on these than their higher conceptual level counterparts.

4.10 Summary

Data was obtained from eight subjects (four experienced teachers and four student teachers in the senior year of their education studies) in three sets of interviews which used the ethnographic techniques of Spradley (1979). In a departure from strict ethnographic methodology, the interviewer deliberately sought to have the subjects make judgmental statements about teaching, student teaching, their "ideal" classroom, and their teaching concerns.

A preliminary analysis was carried out using lines of transcript as a measure. Only the final interview transcripts were analyzed. This preliminary analysis indicated that there appeared to be discrepancies between the data from interviews, and the scores from the TCQ.

Except for the higher conceptual level practicing teachers, all subjects received higher ratings on self and impact concerns from the TCQ instrument than they did from interview. It also appeared that the moderate conceptual level subjects, both students and teachers, showed remarkably similar patterns of concerns, with low self concerns, moderate-high task concerns, and relatively low impact concerns. For high conceptual level subjects, scores for impact concerns appeared to be considerably higher than those of their moderate conceptual level counterparts

A detailed analysis of the interview material was undertaken, and the results drawn from this analysis were entered on a matrix with conceptual level as one dimension, and teaching concerns as the other, (See Figure 4.3). An examination of these findings led to the following set of conclusions:

(i) Conceptual level appears to be a significant factor in differences between the profiles of teaching concerns exhibited by student teachers. Those with high conceptual level scores appear to have higher impact concerns and lower task concerns than those with moderate conceptual level scores.

(ii) Conceptual level appears to be a significant factor in differences between the profiles of teaching concerns exhibited by practicing teachers.

Those with high conceptual level scores appear to have higher impact concerns and lower task concerns than those with moderate conceptual level scores.

(iii) The profiles of concerns of moderate conceptual level subjects are more similar to the profiles of other moderate conceptual level subjects irrespective of teaching experience, than they are similar to the profiles of high conceptual level subjects with similar teaching experience backgrounds.

(iv) Based on the conclusions above, it is highly likely that, with further teaching experience, the high conceptual level student teachers will continue to develop higher impact concerns and lower task concerns than their moderate level counterparts. This suggests that moderate conceptual level beginning teachers will not follow the pattern of change of concerns predicted by Fuller's theory.

(v) Because the behaviors of high conceptual level and moderate conceptual level subjects in general seem to be compatible with teaching orientations focusing on impact concerns and task concerns respectively, it is highly likely that the variable cognitive-developmental level (as measured by conceptual level) has a significant influence on patterns of change in teaching concerns.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 Review of Objectives

In Chapter I the point was made that calls for sweeping changes in teaching and teacher education are quite often made on the basis of conventional wisdom, faith, or expediency, and that there is often no justification in research terms for the changes sought. While the supporters of the Holmes Group report (1986) and the report of the Carnegie Forum (1986) have pressed for "radical" changes, theorists such as Hawley (1986), Soder (1986), Koehler (1985), and Guyton and Antonelli (1987) have suggested that there is a need to both re-examine current research, and to conduct new research in areas where we have little knowledge.

One aspect of teacher education which was seen to require further investigation was that of "teacher professional development" (Hawley, 1986; Koehler, 1985). Feiman-Nemser and Floden (1986) describe three distinct research traditions which focus on this aspect of teacher education. Of these, the area of cognitive-developmentalism (Glassberg, 1979; Sprinthall and Thies-Sprinthall, 1983) and the area of teacher concerns (Fuller, 1969; Fuller and Bown, 1975) were seen to have similarities, and to have the potential to offer some direction for change in teacher education. The current study thus set out to investigate the relationship between a cognitive-developmental stage theory (Hunt, 1978), and a set of phases, or clusters, of different teaching concerns which seem to follow a stage sequence related to teaching experience (Fuller and Bown, 1975).

The objectives of this study were set out as a set of practical questions (See Chapter I). These questions are:

1. Are there significant differences in the way teachers at different cognitive-developmental stages perceive their teaching concerns in the phases described by Fuller? Do they see their concerns in Fuller's terms at all?
2. Do only those teachers who have attained the higher cognitive states achieve the "later concerns" phase described by Fuller, when they are concerned with their impact on learners? Or is this stage of presumably sophisticated professional behavior independent of such cognitive operation?
3. Is this impact concern the major concern of experienced teachers? Is this the major difference between the concerns of pre-service teachers, and experienced professionals? Is this cluster of concerns a function of cognitive-developmental stage level?

5.2 Results of the Study

In Chapter III the methodology of this study was described and justified. Because of research which challenged the stage sequence proposed by Fuller (Adams, 1982; Marso and Pigge, 1989) and cast doubt on the validity of the section of the TCQ which measures impact concerns (George, 1978), it was decided to use a proven qualitative technique, the ethnographic interview (following Spradley, 1979) to gather data on teacher concerns, while at the same time not being restricted by the rigid guidelines of a formal ethnography. The value of such interpretive studies is attested by Erickson (1986), and Locke (1989).

A cross-sectional study was undertaken, using a group of twelve experienced elementary school teachers, and a group of ten senior education majors who were in the latter stages of their student teaching program when the study was begun. On the basis of extreme conceptual level scores (the two highest and two lowest in each group) four subjects were chosen from each group, and interviewed three times between the final weeks of their seventh semester, and the last week of their eighth and final semester. The data from these interviews was transcribed and analyzed in Chapter IV. In terms of the questions posed above in Section 5.1, the following conclusions can be drawn:

1. Are there significant differences in the way teachers at different cognitive-developmental stages perceive their teaching concerns in the phases described by Fuller? Do they see their concerns in Fuller's terms at all?

Commencing with the second question first, it was stated that during the analysis, it was very easy to categorize the responses of the subjects according to Fuller's categories. However, this is no guarantee that the teachers themselves saw teaching in Fuller's terms at all. The fact that all teachers at all stages of experience in this study showed evidence of all types of concerns during interview (except Teacher 1, who spoke of having self concerns early in her teaching career, but gave no indication of such concerns during her interviews) showed only that they understood the concepts of teaching concerns. Therefore we can make no firm statement on how teachers see teaching concerns based on the results of this study.

However, the results clearly show that cognitive-developmental level has more effect on how teachers view teaching concerns than teaching experience (see Chapter IV). Both high conceptual level and moderate conceptual level subjects showed patterns of teaching concerns which were more similar to their conceptual level peers than to their colleagues with similar teaching experience, but differences in conceptual level. These similarities were more obvious in the moderate conceptual level group than they were in the high conceptual level group.

2. Do only those teachers who have attained the higher cognitive states achieve the "later concerns" phase described by Fuller, when they are concerned with their impact on learners? Or is this stage of presumably sophisticated professional behavior independent of such cognitive operation?

This question cannot be answered from the information provided by this study. It seems that all the subjects, both high and moderate conceptual level, and both inexperienced and experienced had concerns of all three types defined by Fuller. We can infer from the results obtained in Chapter IV that the higher conceptual level students will demonstrate the pattern of change predicted by Fuller, while the moderate conceptual level students will not. It would seem from these results also, that there is limited support for the results obtained by the TCQ. There is obviously a strong concern for impact issues shown by inexperienced teachers and experienced teachers alike. Similarly, self concerns are felt by teachers at all levels of experience. However, there are major issues of concurrent validity, as the interviews showed lower levels of impact concerns for student teachers, and much lower levels of self concerns for all subjects, than the ratings obtained by the TCQ.

An alternative hypothesis, which seems well worth following up, is that experienced teachers may fall into two categories, which, based only on the results of this study, could be designated "task oriented" or "impact oriented". These teachers may develop an approach to teaching, or gravitate to a field of teaching, that is consistent with their teaching concern orientation. It is noteworthy that in this study, while all the experienced teachers were specialists, those teachers rated as high conceptual level provided services of an academic nature, (ESL and Special Education), and dealt directly with the problems which are the focus of impact concerns. The moderate conceptual level teachers, on the other hand, provided services which are commonly regarded as enrichment or support services, (Physical Education and Teacher Librarian), and consequently did not have the same direct responsibility for meeting the personal, social, and academic needs of the pupils. Such a hypothesis is consistent with the sorts of results being obtained by Marso and Pigge (1989) for the "field of teaching" variable. The confounding factor is, however, whether conceptual level or one's chosen field of teaching is the primary cause of a different pattern of emphasis in teaching concerns.

3. Is this impact concern the major concern of experienced teachers? Is this the major difference between the concerns of pre-service teachers, and experienced professionals? Is this cluster of concerns a function of cognitive-developmental stage level?

From the results of this study, the answer to the first part of this question must be "No". Experienced teachers may also have a major focus on task issues, if not from a desire to change them, then certainly from the perspective that such issues have a big effect on the way the teacher operates. In response to the second and third parts of the question, impact concerns do appear to be the major area of difference between inexperienced teachers and high conceptual level experienced teachers. However, this difference is not quite so evident with moderate conceptual level experienced teachers. Therefore, in one way or another, the development of impact concerns is very much a function of cognitive-developmental stage level.

5.3 Constraints, Limits, and Complexities

There are very many factors which have to be taken into account when assessing the value of this study and its contribution to teacher education. One of the foremost, and perhaps the major issue is its format. Qualitative research has basic design features which raise grave doubts as to its validity and reliability. Locke (1989, pp.11-13) addresses some of the more serious questions which have been raised in this respect. In particular, he suggests that validity is one issue that must be decided by the reader. If the approach I have taken, the methods I have used, the information I have obtained, and the conclusions I have drawn, seem to elicit some degree of agreement on the part of the reader, then the validity of the study, and its wider applicability resides in this agreement. For myself, however, I can only claim that this is my interpretation of the information I obtained from interviews conducted with student teachers and experienced teachers in Massachusetts in 1987-88.

I must further qualify my findings by indicating that I commenced the study with the intention of exploring the relationship between the cognitive-developmental level of teachers, and its relationship to teacher concerns. Specifically this was narrowed down to the relationship between conceptual level (Hunt et al, 1978) and phases of teacher concerns (Fuller and Bown, 1975; George, 1978). There is no guarantee that these theories are truly representative of the areas selected for study, nor that any relationship between data based on such theories can be generalized to any significant degree. In particular, there are doubts raised by the assertion that the Paragraph Completion Method does not discriminate well between mature subjects (see Chapter III), that research has not established a sequential development of teacher concerns, and that the validity of structural-developmental theories of social-cognitive development is in question (see Chapter II).

Another limitation which must be considered is the cross-sectional nature of the study. While it was noted in Chapter III that this form of organization represents a common and well respected approach to research, the issue of comparability of subjects is always present, and must be considered when any conclusions are drawn.

One final area which may be seen to have a major bearing on the acceptance of the findings of the study, is the use of subjective ratings of levels of concern for the purpose of comparison. Both the TCQ and the PCM are instruments which attempt to quantify certain aspects of human thought or belief. The degree to which they have been judged to be successful is represented by the measures of validity and reliability presented in Chapter

III. However, in processing the material from the interviews of subjects in this study, I have attempted to establish levels of concern as low, medium, or high, or as some intermediate variation of these ratings. Such ratings are based entirely on my impressions of what the teacher was trying to communicate at the interview, together with an analysis of the words from the interview transcripts. Where possible, examples have been provided from the transcripts, but in most instances, the interpretation is mine, and this constitutes either a strength or a weakness of the study, depending very much on where the reader stands on this particular issue.

These limitations have not been raised in any effort to diminish the value of the findings of this study. On the contrary, considerable time and effort was spent in the earlier chapters justifying the structure of the project. However, I would be failing in my duty as a researcher if I did not point out issues which may have a major bearing on the interpretation and application of results.

5.4 Future Research

Over the course of this study, a number of issues have been raised which would profit from further research. Some of these arose from the recognition that aspects of the present study were weakened by gaps in current knowledge, and through the use of methods and instruments which were not entirely appropriate for the task. Others were simply seen as areas of knowledge where further expansion through research was seen to be of value in its own right.

One of these issues is the status of Fuller's teacher concerns theory as a structural-developmental theory. Koehler, in reviewing research on differences in teacher behaviors which seem to be related to teaching experience, suggested that there may be a cognitive-developmental process operating which makes teachers become "more efficient and global in their thought processes" (Koehler, 1985, p.27). Early research by Fuller and her associates seemed to support this view, but Fuller herself expressed some doubts as to whether the levels of teacher concerns were true stages, or simply clusters of concerns (Fuller and Bown, 1975).

This study would not seem to support the view that the sequence of teacher concerns is a true cognitive-developmental stage sequence. There are five generally agreed upon assumptions on which all cognitive-developmental theories are based (see Chapter II, p.23). Of these, it is not clear whether all teacher development follows an invariant sequence of self concerns, task concerns, and impact concerns. There is no certainty that the sets of concerns are hierarchically arranged, and while the literature indicates all teachers appear to have high levels of self concerns which disappear after teaching experience, the same sequence of change of focus of concern does not appear to occur with task concerns and impact concerns. It may also be that not all teachers reach what might be described as the highest level of development, that of impact concerns.

Current theories of cognitive stage development would suggest that a further area of study could be the relationship between content, i.e. the concerns which have been the focus of this study, and the forms of reasoning by which teachers develop and express such content. This raises a related issue in that if the investigation of teaching concerns is to be based on cognitive-developmental level, work needs to be done on developing an instrument which will give us a more accurate picture of adult cognitive-developmental stages. Hunt (Hunt et al, 1978) admits that the PCM instrument becomes less accurate as subjects become older, and an effective measuring device is crucial to any further research in this area.

Though the research suggests that teacher concerns theory is not a true cognitive-developmental stage theory, the point was made in Chapter II that other types of stage theories have been useful in studies of learning and teaching. While Fuller's teaching concerns have provided an important perspective on teacher development in this project, it would seem wise for ideas such as those suggested above to be investigated specifically to look at the possible influence of cognitive-developmental factors. This could enable the theory to be used much more to predict human behavior than it can be at the present moment.

The conclusions drawn from this study suggest that conceptual level is one variable which affects the pattern of change of teacher concerns. Marso and Pigge (1989) have identified other variables which also appear to influence the pattern of change in teacher concerns. One of these is the field of teaching in which the teacher operates. As the experienced teachers in this study were all specialist teachers, it is vital to conduct further studies where the effect of teaching field can be investigated and/or controlled.

Marso and Pigge also identified gender as a factor influencing teacher concerns. One could hypothesize that there are a great number of other variables affecting teachers which could similarly influence both teaching concerns and their sequence of development. Such factors as the environment of a school or school system, teacher background and training, and even the age of the teacher seem obvious areas for investigation.

Another area which must be investigated is the validity of the TCQ instrument (George, 1978). The review of research undertaken for this study indicated that impact concerns were the highest for all subjects at all points of experience, and did not tend to change. The results of this study support the fact that impact concerns were high for all subjects, but that it could be inferred that high conceptual level students would develop a stronger focus on impact concerns with further teaching experience, while the moderate conceptual level students would not.

In addition to these findings, it appears that the TCQ instrument gives an inflated value for all self concern scores as well. To have a simple, valid measure of teacher concerns would be of immense value to further research in the area. Therefore it is recommended that the TCQ should be redeveloped and refined in the near future.

As well as recommending that further attention be given to the "objective" aspects of the study through refinements to the TCQ and PCM, it may be a salutory experience to investigate emotional factors influencing the way teachers, especially student teachers, develop their concerns. The influence of "horror" stories on Student Teacher 2's concerns about commencing her teaching career (See Chapter 4) was obviously extremely powerful, and such research could prove very fruitful.

The point was made in Chapter III that time constraints limited the study. Not only was I not able to begin interviewing before student-teaching began, and hence I was unable to check on which, if any, of the subjects had high levels of self concerns, but I was unable to conduct the number of interviews recommended by Spradley (1979). To overcome this problem, tandem informants were interviewed in all categories. The time limits also dictated the use of a cross-sectional study rather than a longitudinal one. The major follow-up that I propose from this study, is to carry out a longitudinal study with two students of differing cognitive-developmental level, from before they commence their final student-teaching session until the end of their second or third year of teaching. Such a study would enable me to evaluate alternative measures of cognitive- developmental stage level, employ a wider range of data gathering techniques such as field notes and observations, and seek their responses to a wider range of teaching contexts. This will essentially provide data from an Australian setting to compare with the results of this study, and also eliminate many of the methodological weaknesses mentioned above.

5.5 Summary

This study was designed to explore the relationship between cognitive-developmental level and teacher concerns. It employed a cross-sectional approach, and used David Hunt's (1978) measure of conceptual level (Paragraph Completion Method or PCM) to screen groups of experienced teachers and student teachers in order to select subjects for interview. Following the interview technique of Spradley (1979) data was collected for a period of just over one semester, and analyzed.

The results of this analysis indicate that cognitive-developmental level has an effect on the profiles of teaching concerns exhibited by teachers, and, by inference, on the patterns of change of these profiles. In addition, the results also suggest that the validity of George's Teacher Concerns Questionnaire (TCQ) is questionable. However, considering that all of the experienced teacher subjects in this study were specialists, and that the study of Marso and Pigge (1989) concluded that the variable "field of teaching" has an effect on changes in teacher concerns, one should view these results with a note of caution.

Other aspects of the research design were also discussed in terms of their potential to limit the acceptance of, and application of, the findings of this study. The interpretive nature of the study, questions about the validity of the instruments used, the cross-sectional design, and the subjectivity of ratings of concerns were all mentioned as factors to consider when examining the results.

In recognition of the fact that this study was conceived of as exploratory, and that the findings will necessarily be tentative, a number of related issues have been identified for future research. The form and content of teacher concerns, and the further exploration of adult cognitive development were seen as useful targets for research. The status of Fuller's theory as a structural-developmental stage theory, and the relative effects on teacher concerns of field of teaching and cognitive-developmental level are also obvious areas for investigation. Other variables which could similarly influence teacher concerns were identified as age, background and teacher training, and school and school system environments. Further work in refining the TCQ instrument, and improving its validity would seem essential to future research in this area. Finally, a longitudinal study based on the current research should be undertaken in order to confirm or disconfirm the results of this study, and to further explore a teacher characteristic which may have an important influence on how teachers view their role and mission, and which may allow us to predict future directions of development in beginning teachers.

APPENDIX A

DEVELOPMENTAL RESEARCH SEQUENCE TASK

In completing each step in the D.R.S. Method, it is useful to do some writing. Beginning to write early will result in rough draft material that can find its way into the final ethnography. Of course you will be writing field notes, a journal, and interpretations that suggest themselves. Also, each of the assignments involves some writing. The tasks outlined here are designed specifically with the final written ethnography in mind. Writing two to four pages each week about topics that may fit into the final report will influence your research. These projects will stimulate you to make certain kinds of analyses and continually think about the end product of the research. These topics are suggestions; you may want to follow some or all of them, or design specific writing that fits more directly your own research.

1. Locating an Informant

The nature of ethnographic research. One cannot assume that the reader of an ethnographic description will understand the nature of the investigation. Write a brief statement that tells the reader what an ethnography is. Identify and define key concepts such as culture, ethnography, ethnographic interview, and informant. Illustrate these concepts from your own experience. Several pages about the nature of ethnography may serve as an introduction to the final report and will certainly help to clarify the concepts as you begin research.

2. Interviewing an Informant

The role of language in ethnographic research. Discuss briefly the role of language in all phases of ethnographic research. See if you can use examples of translation competence in operation from the practice interview you conducted.

3. Making an Ethnographic Record.

Beginning an ethnographic research project. Describe for a reader how you started ethnographic research. Write in the first person to test that style for the final ethnography. Include details on how you made the decision to select the cultural scene, how you located an informant, and what took place when you contacted your informant. Include your own reactions to this early phase of field work.

4. Asking Descriptive Questions

The physical setting. Describe the setting in which your informant carries out routine activities. Base your writing on observations made during interviews, visits to the setting, and the first interview. Begin by making a list of specific locales and objects. This writing task will make use of your first impressions before they fade and also bring to light needed information.

5. Analyzing Ethnographic Interviews.

Summary of the cultural scene. Write a preliminary overview of the cultural scene on the basis of the domains you have identified in your preliminary research. Write in broad terms to describe the total scene, or what you know about it. Underline all key folk terms in your writing to highlight their role in the cultural knowledge of your informant.

6. Making a Domain Analysis

Revise the summary of the cultural scene. Rewrite the paper you wrote for Step Five, adding important domains, revising the style into a coherent but brief overview of the cultural scene.

7. Asking Structural Questions

Describe a cultural domain. Select a set of terms that make up one domain or are part of a larger domain and write a description of this segment of your informant's knowledge. Show how informants use the terms in this domain in ordinary speech; give specific examples which will enable the uninformed reader to grasp the meaning of the domain.

8. Making a Taxonomic Analysis

Write a dialogue on a cultural domain. Select a domain you have analyzed and create a meaningful dialogue between two people who know the culture. Describe the situation in which they are communicating. This form of writing will enable you to experiment with a slightly different style.

9. Asking Contrast Questions

Describe a cultural domain. Select a different domain and write a formal description of that domain, making clear the meaning of terms and their relationships. Give specific examples to show some of the attributes that reveal contrasts among the terms.

10. Making a Componential Analysis

Describe the development of your relationship with an informant. Describe your informant, the atmosphere of interviews, how interviews changed, and then characterize your relationship with the informant. Include a discussion of ethical problems that have arisen and how these have been solved.

11. Discovering Cultural Themes

Describe a cultural theme. Select one or more cultural themes and write a brief paper that shows how the theme connects several domains of the culture.

12. Writing an Ethnography

Suggestions for future research. Write a brief paper that identifies several of the most important areas for future research on the cultural scene in light of your discoveries. What would you study if you had more time or recommended that someone else study in this scene?

(Spradley, 1979, pp.224-226.)

APPENDIX B

A TAXONOMY OF ETHNOGRAPHIC QUESTIONS

1.0 DESCRIPTIVE QUESTIONS
    1.1 Grand Tour Questions
        1.11 Typical Grand Tour Questions
        1.12 Specific Grand Tour Questions
        1.13 Guided Grand Tour Questions
        1.14 Task-Related Grand Tour Questions
    1.2 Mini-tour Questions
        1.21 Typical Mini-Tour Questions
        1.22 Specific Mini-Tour Questions
        1.23 Guided Mini-Tour Questions
        1.24 Task-Related Mini-Tour Questions
    1.3 Example Questions
    1.4 Experience Questions
    1.5 Native-Language Questions
        1.51 Direct Language Questions
        1.52 Hypothetical Interaction Questions
        1.53 Typical-Sentence Questions

2.0 STRUCTURAL QUESTIONS
    2.1 Verification Questions
        2.11 Domain Verification Questions
        2.12 Included Term Verification Questions
        2.13 Semantic Relationship Verification Questions
        2.14 Native-Language Verification Questions
    2.2 Cover Term Questions
    2.3 Included Term Questions
    2.4 Substitution Frame Questions
    2.5 Card Sorting Structural Questions

3.0 CONTRAST QUESTIONS
    3.1 Contrast Verification Questions
    3.2 Directed Contrast Questions
    3.3 Dyadic Contrast Questions
    3.4 Triadic Contrast Questions
    3.5 Contrast Set Sorting Questions
    3.6 Twenty Questions Game
    3.7 Rating Questions

(Spradley, 1979, p.223)

APPENDIX C

DOMAINS AND TAXONOMIES

1. A Domain

Included Terms		Semantic Relationship	Cover Term
all-night laundromat filling station mortar box flophouse orchard	box car toilets hotel lobby alley under bridge	is a kind of	flop

(Spradley, 1979, p.114)

2. A Taxonomy (See also Appendix B)

Parts of the Police Department.

<table>
<tr><td rowspan="8">PARTS OF THE POLICE DEPARTMENT</td><td colspan="3">PATROL</td></tr>
<tr><td colspan="2">ADMINISTRATIVE</td><td>Police Artist
Volunteer Services
Public Relations
Captain's Center
Records and Identification
Communications
Operations
Personnel
Training
Inspection</td></tr>
<tr><td rowspan="4">INVESTIGATIVE (Detective)</td><td>CRIMES AGAINST PROPERTY</td><td>Auto Theft
Juvenile
Burglary
Traffic and Accident</td></tr>
<tr><td>CRIMES AGAINST PEOPLE</td><td>Sex Crimes
Homicide
Robbery</td></tr>
<tr><td colspan="2">NARCOTICS</td></tr>
<tr><td colspan="2">VICE</td></tr>
<tr><td colspan="3">CHIEF</td></tr>
<tr><td colspan="3">INTERNAL AFFAIRS</td></tr>
</table>

(Spradley, 1979, p.143)

APPENDIX D

THE PARAGRAPH COMPLETION METHOD

(PLEASE PRINT)

Male ☐

Female ☐

Name ______________________________, ______________
(Last) (First)

School ______________________________

Grade ______________________________

On the following pages you will be asked to give your ideas about several topics. Try to write at least three sentences on each topic.

There are no right or wrong answers, so give your own ideas and opinions about each topic. Indicate the way you really feel about each topic, not the way others feel or the way you think you should feel.

You will have about three minutes for each page.

Please wait for the signal to go on to a new page.

1. What I think about rules ....

Try to write at least three sentences on this topic.

WAIT FOR THE SIGNAL TO TURN PAGE.

2 When I am criticized ....

3. What I think about parents ....

4. When someone does not agree with me ....

5. When I am not sure ....

6. When I am told what to do ....

[EACH OF THESE STEMS AND THE DIRECTIONS FOR COMPLETING THE ITEMS IS SET OUT IN THE SAME FORMAT AS FOR ITEM 1.]

Try to write at least three sentences on this topic.

WAIT FOR SIGNAL TO TURN PAGE

APPENDIX E

THE TEACHER CONCERNS QUESTIONNAIRE

TEACHER CONCERNS QUESTIONNAIRE

Frances Fuller and Archie George

Research and Development Center for Teacher Education
The University of Texas at Austin

1. Name ____

Male____Female____Age____Date Completed_____

2. Circle the one that best describes your teaching experience:

1. No education courses and no formal classroom observation or teaching experience
2. Education courses but no formal observation or teaching experience
3. Education courses and observation experience but no teaching
4. Presently student teaching
5. Completed student teaching
6. Presently an inservice teacher

3. If you are a student:

Freshman____Sophomore____Junior____Senior____

Graduate____

4. The level you plan to teach (if student) or are now teaching (if inservice):

Preschool____Elementary____Junior High____

Senior High____College____Other____

5. If currently teaching:

Average number of students you teach per class:____

Number of years teaching experience:____

DIRECTIONS: This checklist is designed to explore what teachers are concerned about at different points in their careers. There are, of course, no right or wrong answers; each person has his or her own concerns.

We consider you to be "concerned" about a thing *if you think about it frequently and would like to do something about it personally.* You are not concerned about a thing simply because you believe it is important -- if it seldom crosses your mind, or you are satisfied with the current state of affairs, do not say you are concerned about it. You may be concerned about problems, but you may also be concerned about opportunities which could be realized. You may be concerned about things you are not currently dealing with, but only if you anticipate dealing with them and frequently think about them from this point of view. In short, you are concerned about it if you *often think about it* and would like to do something about it.

Read each statement, then ask yourself:

WHEN I THINK ABOUT MY TEACHING, HOW MUCH AM I CONCERNED ABOUT THIS?

1 = Not concerned
2 = A little concerned
3 = Moderately concerned
4 = Very concerned
5 = Extremely concerned

1. Lack of instructional materials 1 2 3 4 5

2. Feeling under pressure too much of the time. 1 2 3 4 5

3. Doing well when a supervisor is present 1 2 3 4 5

4. Meeting the needs of different kinds of students 1 2 3 4 5

5. Too many noninstructional duties 1 2 3 4 5

6. Diagnosing student learning problems 1 2 3 4 5

7. Feeling more adequate as a teacher 1 2 3 4 5

8. Challenging unmotivated students 1 2 3 4 5

9. Being accepted and respected by professional persons 1 2 3 4 5

10. Working with too many students each day 1 2 3 4 5

11. Guiding students towards intellectual and emotional growth 1 2 3 4 5

12. Whether each student is getting what he needs....................................... 1 2 3 4 5

13. Getting a favorable evaluation of my teaching.................................... 1 2 3 4 5

14. The routine and inflexibility of the teaching situation 1 2 3 4 5

15. Maintaining the appropriate degree of class control 1 2 3 4 5

Please use this space for any comments, or to express additional concerns.

Thank you.

APPENDIX F

AGREEMENT WITH PROJECT PARTICIPANTS

SCHOOL OF EDUCATION. UNIVERSITY OF MASSACHUSETTS.

In connection with the research project THE RELATIONSHIP BETWEEN COGNITIVE DEVELOPMENTAL LEVEL AND THE CONCERNS OF TEACHERS PROJECT conducted by RICHARD IAN NISBET, I have been given a clear description of the project. I understand that there may be a direct benefit for me in that I may clarify my own expectations and concerns about teaching through my participation in the project. There may also be some indirect benefits in that the findings of the project may enable teacher educators to improve the design of both preservice and inservice courses of teacher education. It has been made clear to me by RICHARD IAN NISBET that my participation will involve only a test session of approximately 30-60 minutes, and an additional 3 hours of interview if I volunteer as, and am selected as, an interview subject. I understand that in accordance with the regulations concerning research conducted with human subjects at the University of Massachusetts, there will be no compensation or medical treatment available to me in the event of any physical injury incurred as a result of my participation in the project. I further understand that:

(a) my participation is voluntary and I may withdraw at any time;

(b) any information directly relating to me will be treated as confidential, and will not be revealed to any other person without my express consent in writing;

(c) all information that I share with the researcher will be treated with respect, and that, if necessary, pseudonyms will be used in any written reports to ensure my anonymity;

(d) I can decide not to answer any question, or not to volunteer information on any topic, without giving a reason;

(e) I can ask to correct or delete statements or actions attributed to me;

(f) progressive and final findings and interpretations will be reported to me if I so wish;

(g) the researcher will explain the research process to me, if I so wish.

PLEASE CHECK ONE OF THE STATEMENTS BELOW,(x), AND SIGN THE FORM.

I am willing to participate in the testing phase of this project only. ( )

I am willing to participate in the testing phase, and I also volunteer to be an interviewee. ( )

PROJECT PARTICIPANT

RESEARCHER

DATE

APPENDIX G

GRAND TOUR QUESTIONS

These questions were formulated with several purposes in mind. Firstly, they were designed to be open, so that they elicited descriptions of teaching that were offered from the teacher's perspective. Secondly, they were framed so as to indicate very clearly that the teacher's own words and terminology were to be used. Finally, so that the teachers might more readily identify with concerns, the second and third questions asked them what experiences they would propose for interns, and what would be their ideal teaching situation. This focus on important aspects of teaching, both real and ideal, was felt to be likely to raise concerns of various kinds.

1. I'd like you to imagine, if you could, a typical day in your classroom. Think about all the people who are there, all the things that are going on - everything that's happening. Just for now, I'd like you to imagine I'm a Martian, and we don't have schools and teachers there. We're born with all the knowledge we need to cope with society on Mars. I'd like you to try and describe to me what's happening on this typical day in your classroom. (Students were asked about a typical day in their classroom during their student teaching period.)

2. Right, I'm going to wave a magic Martian wand now, and create a situation where you have an intern attached to you - a Senior in her final year doing her student teaching. You have the responsibility of showing that teacher what is good teaching, and giving them the opportunity to practice desirable teaching behaviors. What are the sorts of things you would do in that situation? (Students were asked to imagine they were supervising teachers, and to indicate the sorts of behaviors and experiences they would stress.)

3. If you had the absolute power to create your own perfect classroom, your own teaching setting, what would you do? You could alter the school setting, the sorts of people involved, the activities, the environment, anything. How would you use them in this perfect setting?

APPENDIX H

TERMS AND CONCEPTS FOR CARD SORTING

Teacher 1.

SET 1. The Teaching Role.
more relaxed, work with small groups (2-3), not rushed to cover curriculum, limited focus (read/write/understand English), major thrust oral communication, games, concrete, hands-on activities, songs, develop sense of self, child's sense of self, increase learning, reduce stress, reduce frustration, child's comfort, child without English feels at a loss, co-teaching, initiate lessons, work with the whole class, work with ESL and general language problems, perceived as teacher, "pull-out" model, teach only ESL pupils, teach withdrawal groups, help with classroom teacher's activities, accept pupils how and where they are, language teaching skills, interactive skills, general classroom experience, deal with pupils at level they are at, be flexible, help the child feel good, feel good about working with the child.

SET 2. Prerequisites for Teaching.

know who you are, want to be a teacher, have experience of an "other language" situation, be sensitive to the frustrations of being unable to communicate, be able to accept people as equals, have respect for others, be able to show respect to children, help children to show respect to each other, stress raises "filter" effect, "filter" interferes with learning, lowering stress increases ability to learn, expect children to do the same work even if language not adequate, not enough time to help ESL child.

SET 3. Teacher Training Program.

experience in non-native language situation, acceptance and respect for others, familiarity with ESL methods, early classroom experience, participation in simulation and role play, learn skills, overcome monolingual bias, interact with different background, integrated approach to planning and teaching, emphasis not on difference/division, don't need to "cover" subjects, more natural, helps repetition and consolidation.

SET 4. Feelings about Teaching.

educators/administrators opposed to use of native language, teachers can't accept children can't work at grade level, no sense of urgency (to get it all done), guilt has gone, not creating own tensions and frustrations, relaxed and fulfilled, work with kids is done better, more time to develop work, cover material more fully, give pupils firm foundation, watch child's face light up, watch child "take off", see child using knowledge in new way, knowing you had something to do with it, sharing with other educators.

SET 5. Teaching as an Art.

a conscious choice of profession, you want to go to work, use knowledge and skills creatively, more effective as person, you have to do it (for a living), not creative, not as effective.

Teacher 2.

SET 1. The Resource Teacher's Role.

child referred, academic evaluation, write assessment, team evaluation, decide academic service, write education plan, service for kids who can't learn, used to have second class status, consultations about referrals increasing, job often perceived as easy, not in one place all day, not primary instructor of class, work with individuals or homogeneous groups, limited opportunities to observe pupils, limited opportunities to develop relationships, meetings with teachers cause scheduling problems, pupil conferences cause scheduling problems, fine tuned analysis, summary of current performance, state goals and objectives, recommended teaching, specific behavioral objectives, parent signature, parent relationship shared with teacher.

SET 2. The Reading Program.

multi-sensory language based phonics program, LEAD (Gillingham), uses most consistent spelling patterns, student paced, based on pupil interests, integrates reading/writing/spelling, "whole" language as well as systematic, integrates language/other subjects, concrete and manipulatives, resource trolley, initial sound objects, Montessori material, sandpaper letters, movable alphabet, teacher created lessons, extended sound lessons, sound themes, consonants.

SET 3. Characteristics of an Intern.

not attentive to detail, not trained in task analysis, not able to observe without intervening, plan topics based on own interests, work hard - make elaborate unit, do not figure where the kids are at, need to respect the master teacher, be responsible in communicating, follow through on arrangements.

SET 4. Training for Special Education Intern.

assign to individual or small group, give synopsis of child, show how objectives are developed, show materials used, work with resource teacher, try planning, make observational record, do an assessment, general certification prerequisite.

SET 5. Ideal Education Setting.

focus on basic skills, spelling, math, writing, self-expression, reading, individualized program, interactive technology, computer assisted learning, personal self expression, art, music, dance, opportunities to synthesize information, thematic teaching, appeal to different aspects of pupils, put things together in different ways, present different ideas/categories/connections, weave subjects together, generate more ideas, team and cooperative teaching, two or more teachers, no "all knowing" person, see things through someone else's eyes, bring regular and special education together, work in classroom, not resource room, more observation, get to know kids better, able to assess better, kids more grounded, more time for important things.

SET 6. Concerns about Teaching.

whole life isn't education, need sense of kids at different levels, teachers need to expand themselves, need to have a good sense of self, need to work with kids, need to be in a state of learning.

Teacher 3.

SET 1. Concerns of the Physical Education Teacher.

saying "Yes" to new ideas without throwing out old stuff, pupils moving big trestles, behavior plans, problem pupils - what to do next time, pupils not achieving, negative pupil attitudes, equipment safety, screws down, nails sticking out, leaking roof, repairs, keeping track of latest developments, grouping pupils, pre- and post-testing, different skill levels, different interests, some activities harder to organize, not enough time for raising fitness, two men and thirty-three women, gymnastic safety, not ready for skill, copy dangerous movements.

SET 2. Characteristics of Physical Education Teaching.

up to 33% ESL students, young parents, many different nationalities, language problems, different customs, different cultural practices, gym may be scary environment, only see pupils one and one third times/week, need to make pupils feel more comfortable, understand own body, be more creative, individualizing instruction, present movement problem, individuals find solution, P.E. is unique teaching area, P.E. not in some schools, not many P.E. teachers, difficulties in net-working, difficulties in in-servicing, have to rely on own stuff, poor communication about pupils, poor communication with teachers.

SET 3. Differences between P.E. Teachers and Classroom Teachers.

Gym time is planning time, teachers' time is totally booked up, teaching is mainly intellectual, P.E. can reinforce classroom concepts, no one in area to relate to, can relate to more teachers, have closer relationship with pupils, little information on pupils.

SET 4. Characteristics of Ideal Physical Education.

flexible scheduling, time to coach sport, 3/4 sessions a week for fitness, special needs kids scheduled first, develop team approach, experts in area lead/teach/plan, teach in different schools, reinforce networking and in-servicing, fitness training, recreation, dancing, spelunking, skiing, kayaking, hiking, many subjects, more natural approach, doesn't compartmentalize, administrator phys. ed. expert, does not hire and fire, support and feedback (advisory role), university and peer tutoring, sabbatical.

SET 5. Program for an Intern.

Lots of experience with young kids, early classroom experience, lots of transitional experiences, able to see if suited to teaching, see successes and frustrations of teaching, see problem kids, know community kids come from, linking experiences with staff, networking with the community, aware of liability , pupil safety, watch for obvious danger, supervision of equipment (attractive nuisance), equipment well maintained, plan acts as guide, plan allows individuality.

SET 6. Teaching Concerns.

need to be organized, must be able to work with people, be prepared to be frustrated and saddened, be confident your efforts will make a difference.

Teacher 4.

SET 1. The Teacher-Librarian's Role.

administration, ordering, budget, circulation, resourcing,, inter-library loan, planning, xeroxing, ordering material, teacher conferencing, A/V resources, teaching, create involvement, posters, biographies, relevance to teacher's theme, discuss theme, grades 2/3 use story, kindergarten read story, author, characters, illustrator, background, fiction/non-fiction, call number, date of publication, publisher, card referencing system, table of contents, index, browsing, headings and sub-headings.

SET 2. Characteristics of the School Day.

look through journals, select journal material, plan with teachers, xerox material, collate and distribute material, articles related to teacher/pupil projects, articles related to library, discuss topics, read stories, present themes, develop library skills, provide support to teachers, preview A/V materials, inter-library loan, act on teacher notes, formal teacher conferences.

SET 3. Problems of the Teacher-Librarian.

struggling with class, no time to plan, not enough resources for project, first students get resources, other students miss out, students frustrated, Teacher-Librarian can't help (also frustrated), library program does not work, jump on the band wagon - no analysis, not enough information to see pitfalls, skills required are above class level, project not thought through, teacher often unable to say "I made a mistake."

SET 4. Experiences for an Intern.

teacher knows everything, sit quietly while story is read, take books out neatly, class comes in in neat rows, get everything back on time, library is for teacher/pupil use, good relations with teachers, good communication with teachers, treat pupils as individuals, do not have "pets", "relaxed" enforcing of rules, help pupils develop as individuals, general guidelines for behavior, comfortable learning environment, balance between reality and laissez-faire, be willing to say "I don't know."

SET 5. Problems for an Intern.

trying to be a "buddy" to kids, being over protective of pupils, not concerned with rest of school, my children don't have to obey rules, balance - friendly, caring, and responsible, being able to say "I don't know it all."

SET 6. Characteristics of the Perfect Teaching Situation.

integration of specialist teachers, don't have to waste energy to be included, can put more energy into work, easier to make an input, principal who knows what's going on in classroom, prior classroom experience, acts as substitute regularly, teachers part of a school community, teachers respect colleagues, can't have it all own way, participate in school wide projects, closer community ties, increase range of positive relations of pupils, widen age-range experiences, engender respect for people in the community, involve school with more families (lower conflict), improve multi-cultural teaching, better understand non-American cultures, students work with parents and community, students with students.

SET 7. Teacher Concerns.

not everyone should be a teacher, big commitment, have to be fair, be vulnerable in terms of working with other people, be flexible, be able to laugh at your mistakes.

Student Teacher 1.

SET 1. Parts of the School Day.

coming in, hang up coats, attendance cards, pick a choice, make-up work, choice time, morning meeting, read a poem, sharing, choose to pass, language arts, writing, mini-lesson, letter club, expressive arts, non-competitive games, co-operative games, movement activities, teacher directed activities, individual activities, reading fairy tales, shadow puppet plays,puppet shows, basals, making murals, whole language, activities with houses, whole group activities, friend to friend reading, independent reading, child-teacher reading, lunch, recess, specials, math, group work, manipulatives, worksheets, work books, science butterflies, light, social studies, traditions, the family, me.

SET 2. Teaching Activities done by Interns.

helping kids, get kids set up, get kids focused, read with child, set writing folders out, whole group activities, kick ball person, lunch supervisor, get kids to specials, supervise independent work, how to juggle groups, how to develop independence, not run to teacher, ask peers (buddy system), how to give kids personal investment, give jobs, "our" classroom, how to effectively manage the classroom, observe different achievement levels, sit in on parent/teacher conferences, plan experiment, be aware of positive/negative remarks, do bulletin boards, send notes to parents, integrated day unit, active observing, teach groups, learn from mistakes.

SET 3. Approaches to Teaching.

sitting at desks, desks in rows, use workbooks, product stressed, basal reading, competitive, teacher directed, kids depend on teacher, rigid grading, vested interest in classroom, "their classroom", jobs to do, independent. "buddy" system, friend to friend reading, spread helpers around, what makes people feel good/bad, individual assignments.

SET 4. Ideal Teaching.

bright, happy classroom, space, science area, art area, math area, relaxing area, listening area, pattern area, different centers, good books, big books, small books, predictable books, fairy tale kits, authors under study, basals, materials to make books, happy, positive, interested in teaching, like kids, outside interests, not always serious, take risks, concern with process, creative, can work with available resources, energetic, small class, teacher aide, self contained, team teach if partner compatible.

SET 5. Teaching Concerns.

other teachers' philosophy, working with other teachers, learn from other teachers, resources, pupil/teacher ratio, system requirements, planning (time/detail), hard to plan for Grade 1, large class, small room, discouraged, affect kids.

Student Teacher 2.

SET 1.

coming in, problem solving, milling about, taking off jackets, taking seats, talking, pledging allegiance, silent reflection, math, ability groups, warm-up activity, manipulatives, explain the lesson, seatwork, writing, own topic, whole story, sharing conference, revise, teacher conference, punctuation, grammar, second teacher conference, final copy, author's circle, finished story, unfinished story, recess, reading, library books, silent reading, role model, written questions, teacher conference, checked out, language arts, ability groups, language arts books, classroom meeting, moderator, run meeting, pupil suggestions, whatever, catch up, free time, extra art, extra music, social studies, two week unit, disease, types of disease, bacteria, read aloud, story, the book, dismissal, chairs up, no paper, individuals dismissed.

SET 2. The Internship System.

observing, own classroom, other classrooms, getting involved, small groups, individual conferences, experiment, pupils, resources, staff, parents, give instructions, help kids, lead group, sit next to kids, supervise recess, last minute photocopying, not in teacher's room, not sitting at desk, problems, classroom management, parent-teacher conferencing, b--- s---, observing me teach, straight face, inadequate feedback.

SET 3. The Ideal Classroom.

very structured, open/discovery learning, schedule, pupil-centered learning, basic learning, choices, duties important (to pupils), self motivation, active involvement, ad hoc group, challenge, further growth.

SET 4. Teaching Approaches.

math, abstract, seatwork, math book, no exploring, teacher directed, spelling, spelling books, spelling work, post-tests, homework, parents, basals, dry and uninteresting, boring, not pertinent, same questions, soup up, manipulatives, see why, further application, no books, individual lists, no homework, integrate with basal, library books, trade books, reading, teacher questions, pupil choice, conferencing, checking out.

SET 5. Teaching Concerns.

expectations of teachers, expectations of kids, parent communication, job stress, interviewing.

Student Teacher 3.

SET 1. Parts of the School Day.

coming in, meeting, discussion (what to do), independent work, weekly tasks, history, technology, recess, math, introduce topic, practice, lunch, language arts, research, writing, music, gym, dismissal.

SET 2. Organization of a Quad.

big open area, half room, one teacher, 4th grade, two classes, forty-eight pupils, two teachers.

SET 3. Student Teaching Tasks.

certification, classroom management, large group, teaching, diagnostic evaluation, pupil rapport, teacher tasks, signing things off, teaching math, teaching language arts, planning, hold morning meeting, menial tasks, lunchroom duty, run off work sheets, recess duty, intern status, under co-operating teacher, don't make decisions.

SET 4. Good Teaching Practices.

pupils appear interested, can see all pupils, pupils involved, pupils busily active, pupils have products, respect other people, open to ideas, two way communication, teacher not stern, good teacher/pupil relationship, comfortable, attractive classroom, pupils look away, not all pupils can see, students not involved, lectures, teacher dominates, not all participate, doing busy work, worksheets, science magazine, bulletin boards, pupils not equal, made to feel ignorant, restricted, criticized, self-concept lowered.

SET 5. Program for an Intern.

teaching tasks, teaching skills, problems, support, run off own sheets, discuss schedule, see co-operating teacher's plan, show plans for group, discuss student needs, observe teaching, participate in classroom, co-plan group lessons, assume responsibility for group, clear expectations of goals, utilize different learning modes, evaluation, classroom management, lesson planning, lack of discussion, not equal status with teacher, have to do what teacher says, non-matching philosophies, student expected to do things wrong, teacher interested in interns.

SET 6. The Ideal Classroom.

physical, reading, relationships, communication, desks not in rows, pupils take care of room, bright, decorated room, student work displayed, comfortable, learning centers, reading area, no basals, trade books/novels, lots of reading and writing, make joint decisions, students trust teacher, two-way communication, student mail-boxes.

SET 6A. The Integrated Day.

thematic, curriculum not obvious, different activities, different learning experiences, several days work, relevant to pupils.

SET 7. Teaching Concerns.

setting up the classroom, books and resources, have pupils involved, setting up rules, discussing topics, getting to know pupils, understanding how pupils learn.

Student Teacher 4.

SET 1. The School Day.

coming in, play on computer, play games, morning meeting, sharing, announcements, math, specials, recess, snack, use computer, reading, basal, set story, workbook pages, novel, main characters, descriptive writing, context words, writing, mini-lesson, use of thesaurus, rough draft, peer conference, revision, teacher conference, final draft, illustrate, publish, social studies, reading, writing, research, bulletin boards, science, foreign language.

SET 2. Organization of a Quad.

two teachers, aides, two classes, combined classes, teaming, separate subjects, large room.

SET 3. Student Teaching Tasks.

planning tasks, plan, evaluate, place individuals, make behavior plan, write education plan, assign seats, disciplining, keep group in, reprimand, stop .. don't (desists), take privileges, praise, encourage, extra recess, extra time, special experience (cooking), teaching, make announcements, lead sharing, group discussion, lecture, set assignments, group pupils, conference, revise, hear stories, supervise pupil conferences, checking, intern's way, supervisor's way, talk to parents.

SET 4. Program for Practice Teaching.

pre-practicum, day-care supervision, "Life in Classrooms", "Diversity and Change", "Integrated Day", practicum, small group teaching, discussion with teacher, observe other teachers, observe own teacher, access to everything, resources, support, methods classes, Special Education.

SET 5. Problem Students.

personal traits, lack self confidence, lack self esteem, need extra stroke, need attention, know "I am behind", rude, talking out, pull hair, constant moving, give up on work, attention seeking, rude to adults, point others mistakes, put others down, constant, tapping, moving around, throe paper, give up on work.

SET 6. Teaching Concerns.

classroom management, concern over numbers, no experience - behavior plans, handling attention seekers, children move and talk, discipline, take away privileges, emphasize desists, emphasize reprimands, need to be more positive, large numbers, no "big class" experience, no aides, start "structured and strict", labelling, getting kids to accept, keeping all busy.

SET 7. Co-operating Teacher Characteristics.

laid back, good relations with kids, discuss anything with kids, kids can talk about problems, loves kids, gives intern responsibility, gives feedback and support, few fresh ideas, relies on work books, tired approach, do it supervisor's way, afraid to lose control, squash intern's ideas, intern can't 'try it out', energetic, varied approach, enthusiastic, able to learn from others, supportive (to intern).

SET 7A. Ideal Teacher Qualities.

energetic, flexible, prepared to change, not biassed, warm, attached to teaching, care for children, friendly and able to discipline, open mind.

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