

AN ABSTRACT OF THE THESIS OF

Helen E. Woods for the degree of Doctor of Philosophy  
in Science, Mathematics, and Computer Science Education  
presented on January 22, 1991. Title: The Student  
Teaching Experience: A Qualitative Examination

Abstract approved:

**Redacted for Privacy**

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This study examined the experience of three secondary science student teachers from Western Oregon State College in Monmouth, Oregon during the Spring quarter of 1990. The question was: What is student teaching like from the point of view of the student teacher?

The research methodology was qualitative, more specifically participant observation, prolonged engagement, and using the Constant Comparative Model. Data sources included audio taped journals from the student teachers, transcribed audio tapes from seminars, video tapes of teaching, rich descriptions from field notes made by the researcher, a journal from one cooperating teacher, and a journal kept by the researcher.

Analysis of the data set produced 81 coding categories. A data set was marked, cut and filed under these coding categories. Patterns and generalizations were drawn from the categorized data set.

The three student teachers had widely varied

experiences. The analysis of data resulted in the generation of seven hypotheses concerning student teaching. They were as follows:

1. Student teachers react to the student teaching experience differently.
2. The student teaching experience may be so complex that a total, Gestalt, understanding of it is not possible.
3. For some student teachers, there is a critical point, called The Wall.
4. The nature of the critical point and the outcomes of the experience vary greatly among the student teachers.
5. Student teachers need a support group or support individual available during the student teaching experience.
6. The cooperating teacher(s) is/are a stronger influence on the student teacher than is the college supervisor.
7. The predictors for success in student teaching that were used in this study are likely unreliable.

The Student Teaching Experience:  
A Qualitative Examination

by

Helen E. Woods

A THESIS

submitted to

Oregon State University

in partial fulfillment of  
the requirements for the  
degree of

Doctor of Philosophy

Completed January 22, 1991

Commencement June 1991

APPROVED:

Redacted for Privacy

Professor of Education and Science Education in charge of  
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Date thesis presented January 22, 1991

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## ACKNOWLEDGMENT

The researcher would like to express her appreciation to the following:

Dr. Thomas P. Evans for his continued support, advice, and encouragement throughout the course of this research project.

Her husband who was always supportive, always there, and who has always known she would finish even when she doubted it.

Her colleagues, both faculty and staff at Western Oregon State College, and other friends for their support and encouragement.

## TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1
Problem Statement	10
CHAPTER 2 LITERATURE REVIEW	12
Review of Research on Student Teaching	12
Review Supporting Research Methodology	37
Summary	39
CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY	43
Sample and Methodology	54
The Student Teachers	56
Selection of the Study Sample	59
Background of the Study Sample	63
Data Acquisition	69
CHAPTER 4 DATA ANALYSIS AND RESULTS	80
Results	95
Student Teacher #1 - Jan	96
Student Teacher #2 - Phil	112
Student Teacher #3 - Barney	134
CHAPTER 5 CONCLUSIONS AND IMPLICATIONS	143
Hypotheses Generated by this Study	143
Hypothesis #1	143
Hypothesis #2	146
Hypothesis #3	147
Hypothesis #4	147
Hypothesis #5	149
Hypothesis #6	151
Hypothesis #7	152
This Study in Relationship to Other Studies	153
Implications for Further Research	159
Implications for Further Practice	163
Final Remarks	164
BIBLIOGRAPHY	166
APPENDICES	
Appendix A	170
Appendix B	177

# THE STUDENT TEACHING EXPERIENCE: A QUALITATIVE EXAMINATION

## CHAPTER 1

### INTRODUCTION

Practice teaching has the texture of reality;  
it gives the student the distinct sense of  
movement toward his goal - teaching...."

(Lortie, 1975, p. 72)

Teacher training programs in the United States have developed over the course of many years. Programs vary in length and scope, depending upon the level for which the prospective teacher is preparing and the philosophy of the training institution. Some programs are based on a four-year model culminating in a Bachelor of Arts or a Bachelor of Sciences degree while some are five-year or fifth year programs, typically with a Master's degree at the end. There are almost as many variations as there are institutions.

No matter what model the teacher training institution follows, three basic components that can be found. The first component can be termed a liberal arts component. This consists of a general liberal arts core of classes coupled with a set concentration of coursework in a special area. In the preparation of elementary teachers, this specialization usually provides a greater knowledge-base in

the many content areas that they must master for the elementary classroom. For those students planning to teach at the secondary level, the concentration is usually in one academic area such as social science, mathematics, or science. These courses are generally taught by liberal arts faculty and are common classes with students with other career goals in mind.

A second component of the teacher training curriculum is that which deals with educational theory and the mechanics of planning, discipline, and classroom management. It is in this setting that the student learns, usually at a theoretical level, about teaching. Developmental psychology, reading, educational media, content specific teaching methods, and learning theory are major areas of study. These courses are the domain of the education faculty and are separate from the liberal arts component.

The third component of the teacher training program is removed from the college classrooms. It is time spent in a school setting with young learners, usually at the grade level for which the preservice teacher is planning to teach. In most programs, the student is "in the field" more than once during his/her preparation. As he/she progress through these experiences, his/her responsibility in the classroom usually increases. The final field experience, often called student teaching, is most often characterized by full-time teaching in several classes



during the teaching day. The duration of this final field experience varies. It may be three months, six months, or occasionally a full academic year. It is this portion of the teacher training program that this research addresses.

General agreement among educators and the critics of education is rare, but, in the case for student teaching, there seems to be a consensus of support. James B. Conant in The Education of American Teachers (1963) referred to student teaching as the one essential component of teacher education. Yee (1969) stated that "teacher educators, critics, psychologists, state officials, and students agree that student teaching is the most significant aspect of teacher preparation ...." (p. 327).

Field interviews of inservice teachers conducted by this researcher have elicited such comments as "Get them in the field as early and as often as you can," and "Have them in the schools, in the classrooms so they can learn about how to teach today's students." When asked what was the most significant portion of their own preservice training, these same teachers frequently replied "Student teaching ... that's where you really learn how to teach."

Such general agreement from sources ranging from expert educators to classroom teachers suggests that an examination of the body of research concerning student teaching would support these comments. Zeichner (1980) was of the same opinion before he conducted a literature review for his article, "Myths and Realities: Field-Based

Experiences in Preservice Teacher Education." In that article he stated,

There have been literally hundreds of studies conducted on preservice field-based experiences. One would think that there would be plenty of data from which to draw in formulating policy with regard to those experiences. Unfortunately, this is not the case. There is a great deal of confusion and contradiction surrounding the data which do exist.  
(p. 46)

How are these confusions and contradictions manifested in the literature? Perhaps a brief look at one research study might give a glimpse of the problem.

Eklund (1983) conducted a study entitled "Elementary Preservice Teachers' Attitude Change Across an Education Sequence: A Two-Year Study" (Eklund, 1983). The researcher used the Minnesota Teacher Attitude Inventory (MTAI) to test teacher attitudes toward teaching at three points in elementary teachers' preservice training. The MTAI was administered before any education courses were taken, after the methods course, and after the completion of student teaching. The results of the testing showed that a base-level was set at the initial administration of the MTAI. Attitudes were shown to improve after the methods class but returned to base-level after student teaching. The researcher's conclusion was that there was no change in attitude across the educational sequence. The researcher was accurate in that no net change had occurred over the educational sequence. In reality, however, there had been

two changes, one after the methods course and one after the student teaching experience. Saying that there was no change is analogous to saying that a person who travels from one city to another and then back again has not travelled. The net travel may have been zero, but the person has travelled.

The kind of paradigmatic restrictions reflected in the conclusions in the study probably is an example of what Zeichner (1980) alluded to when he said,

Most studies, by reflecting the narrow assumptions of the empirical-analytical paradigm and by relying almost entirely on the pre-and post-administration of paper and pencil instruments for their data, have failed to address the most important questions related to field-based experience. (p. 46)

Tabachnick and Zeichner (1984) stated that "the existing research on student teaching has given us a very limited view of the impact of this experience on the professional development of teachers" (p. 29). "Thus, despite evidence that student teaching to some degree has a differential impact on students, our knowledge about the teaching perspectives of student teachers is limited to the gross indicators of central tendencies" (p. 30). Francis Fuller (1969) expressed her concern about the nature of research in teacher education. She remarked that "Surveys of teachers' problems have been reported, but some restrict what the teacher can report" (p. 209). She also noted that the instruments such as lists of alternatives, pencil and

paper measures of attitude and performance, surveys, reports of self-concepts, and measures of level of discomfort are all pre-written measures that limit what can be responded to and do not provide for elaboration on the part of the respondent. In her literature review, she encountered only six studies that did not restrict the alternatives that respondents could choose. Fuller and Bown (1975) summarized their assessment of research on student teaching as follows: "The whole area of teacher education should be recognized as a case of the general class of behavior: an infant substantially .... The appropriate question is not 'are we right?' but only 'what is out there?'" (p. 52). Tabachnick and Zeichner (1984) in an article from the Journal of Teacher Education stated that ...few researchers have actually looked at

what takes place during the experience itself: How students are shaped by and in turn shape the institutions in which they work...much of our knowledge about the actual impact of field-based experience is imbedded in the daily interaction in which students engage and because many learnings are often unanticipated by program designers, research on field based-experience ... generally has failed to provide us with very reliable information about what does and does not occur during formal training. (p. 46-47)

They seem to suggest that there is a need to look at the student teaching experience with a more open mind set than has been adopted by most researchers. They suggest that the type of research design that cannot allow for unanticipated events precludes access to a fertile source

of understanding about student teachers and student teaching.

Educational research has largely adopted the Naturwissenschaft model of the natural sciences. This model approaches the subject as a knowable, definable entity. It assumes that, once the characteristics of the system under study have been carefully described, all systems of the same description will behave in the same way. Educational research in the social sciences have, by and large, adopted the methodologies represented by Newtonian physics "in which it is assumed that all relevant variables could be measured objectively and all physical events were determined completely by ... preceding events" (Cziko, 1989).

This experimental design produced such unifying theories as quantum mechanics, the theories of evolution and plate tectonics, and the atomic model. Each of these is useful to the scientist because they can be universally applied and encompass vast systems within nature.

This approach to natural systems has worked well for the world of nature. But, has it fared as well in the social world, especially in research relating to teacher education and the effect and value of a prolonged field experience in the form of student teaching? The answer is no. After more than 30 years of studying the student teaching phenomenon there is a remarkable lack of a unified body of knowledge or general agreement about the value and

effect of the experience.

In light of this fact, Cziko and others are calling for a re-evaluation of the methodology used in educational research. In his 1989 article, "Unpredictability and Indeterminism in Human Behavior: Arguments and Implications for Educational Research," Cziko compared natural systems to social systems and used logic and persuasive argument to defend his premise that other approaches to educational research might be not only more fruitful, but more useful.

Cziko cited evidence from both a deterministic perspective of the universe and an indeterministic perspective of the universe. Under the former he used the evidence for individual differences. He summarized the work by Cronbach and Snow (Cronbach, 1975, 1982; Cronbach & Snow, 1977; Snow, 1977). They felt that

Considering the complexity of the constantly changing interacting factors influencing human behavior ... comprehensive and definitive experiments in the social sciences are not possible and the most we can ever realistically hope to achieve in educational research is not prediction and control but rather only temporary understanding. (p. 17)

He also included a discussion of the theory of chaos, noting that the theory is beginning to be accepted by natural scientists. However, it is still virtually unknown to the social and behavior scientists. He stated that chaos has important implications for the predictability of human behavior and educational research because it holds that even though the relationship between

two variables may be both quite simple and completely deterministic, a nonlinear relationship may nevertheless lead to outcomes that are entirely unpredictable. His arguments from the indeterministic perspective included evidence from learning and development as evolutionary processes, consciousness and free will, and quantum mechanics. Each of these areas were shown to be supportive of the position that human behavior is deterministic and predictable. His section on the implications for educational research presented a strong argument that the reliance of researchers using "scientific" methods in educational research explains why educational research has neither experienced the advances nor enjoyed the consensus that research in the physical science has enjoyed. Even Phillips (1980) who argued for certain similarities between educational and physical science research, stated that

Social scientists have not been able to discover generalizations that are reliable enough, about which there is enough professional consensus, to form the basis for social policy, and that while the situation may suddenly turn around...there seems to be no good reason to expect this to happen.  
(Cziko, p. 23)

With this pessimistic assessment of the nature and value of behavioral research conducted under the scientific model, Cziko went on to suggest a viable alternative. The methodology he suggested falls under the general category of qualitative research. This type of research would attempt to "describe, appreciate, interpret, and explain

the social and individual behaviors as well as the cognitive processes relative to understanding the educational phenomena" (Cziko, p. 23). He differentiated between studies at the macro level (school, community, society) from those at the micro level (individuals and their feelings, motivations, and reward systems).

#### Problem Statement

This study examines the world of student teaching from a qualitative perspective. The question is: What happens during the student teaching experience, what are the ramifications of these events, what impact do these events have on the preservice teachers, and how are these impacts manifested? In one sense, the study examines the micro level described by Cziko. It focuses on the student teacher. On the other hand, it extends to the macro level in the sense that the student teacher interacts with others both in and outside the school setting.

By looking at the student teaching experience in a more open-ended manner, it is hoped that the situational influences, problems, problem solving processes, and perspectives that are woven within the time can be observed and examined. Perhaps it can provide an insight into why other research designs have produced such varied and contradictory results.

The effect of such research on preservice teacher education can become very important. Determining the



nature of the experience, impact and benefits that accompany it, along with the pitfalls and shortcomings has always been the goal of research in the area. It seems that the picture is too cloudy and the image too fleeting with the current level of understanding to honestly make any valid statement about the nature and role of student teaching in preservice teacher education.

## CHAPTER 2

## LITERATURE REVIEW

The following review of research literature on student teaching reflects the state of the art, however, the studies reported represent only a sample of the research done in the area. The studies that are reviewed were selected because they (a) were carried out at the secondary level as was this study; (b) included and/or compared secondary level student teachers with others, i.e. elementary student teachers; or (c) studied student teachers in science. The review will demonstrate the variety of conclusions that have been drawn about student teaching and its effect on the student teacher and the student teacher's world.

A second portion of the literature review examines the question of research methodology. In it, arguments by authors and researchers that have come to question the empirical/scientific paradigm of research are presented. The questions brought forth in this section, coupled with the research review support the choice of research methodology employed in this study.

## Review of Research on Student Teaching

Francis Fuller (1969) reported on the development of her Teacher Concerns Model. She reported the results of two studies. The first study centered around counseling

seminars. In this study a counseling psychologist met with student teachers on a weekly basis for two hour sessions. The sessions were tape recorded and then transcribed. The transcribed sessions were analyzed and classified according to the main topics within them. Results of the study showed that initially (sessions 1, 2, 3) the comments were 86.24% self-centered and about the student teacher's performance. In these early sessions only 13.65% were pupil centered. Later data showed a shift away from self-centered toward pupil centered. During sessions 7-11, the comments were 35.31% concerned about the performance and 57.93% pupil centered.

The second study Fuller reported was based on written statements from student teachers. At the beginning of student teaching and then at two week intervals, the student teachers were asked to write about their present concerns. Responses were classified into categories as follows:

- (1) Where do I stand? How adequate am I? How do others think I am doing?
- (2) Problem behavior of pupils. Class control. Why do they do that?
- (3) Are pupils learning? How does what I do affect their gain? .... Of the 29 subjects, 22 expressed concern mainly as (1); six expressed concerns in both (1) and (2); one expressed concern in (2) only. None expressed concerns classified as (3) (p. 214).

Fuller concluded that this distribution supported a distinct separation between concerns for self and concerns for students.

The author reviewed the data from other investigators based upon the dichotomy of concerns. From this review and her own research, Fuller defined three stages of concern. They are the non-concerns of the pre-teaching phase, concerns with self in the early teaching phase, and concerns with pupils in the late phase.

Non-concerns are usually exhibited by students who have not yet been in any type of field setting. Concerns were rare, and, when expressed, often were vague and non-directed. When the concerns did address themselves to the teaching situation, they were often based on rumors and stories they had heard about the student teaching experience.

Concerns about self had a covert and an overt side. The covert concerns were not expressed in written form, but frequently were expressed in confidential settings. They centered around student's uncertainties of where they fit in the scheme of things and how they were doing. The overt portion of these concerns centered around questions of adequacy.

Late concerns with pupils were not often seen, but seemed to relate to understanding pupil capacities, to adjusting teacher expectations to the pupil's abilities, and the role of the teacher as a helper or a hindrance to learning.

Fuller closed her article with five implications she felt could be derived from this research. First, she asked

if her sequence of concerns were accurate and complete. Second, she wondered if the concern phase was a function of the individual, the situation, or both. Third, she asked if groups and individuals undergo the same sequencing. Fourth was a question of generalizability, and fifth were concerns related to teacher behavior, competency, and pupil learning. She also wondered if students pass through these stages in sequence, can they skip around, or be in more than one stage at one time.

Fuller also expressed concern about measurement and research design. She mused about the possibility of designing "a structured scorable concerns test which rules out social desirability as an explanation for responses...Is it possible to avoid retest effects" (p. 223)? She questioned the procedure used in previous studies. To quote, "Perhaps the procedures used still restricted the responses subjects could make. Perhaps more frequent observations are needed, rather than just one or two time samples" (p. 210).

Fuller's Teacher Concerns Model is an appealing one, especially in light of other developmental theories such as the cognitive developmental theory introduced by Piaget. It is tempting to accept the possibility of this stage theory based on the acceptance of Piaget's work.

The major research model encountered in the literature was the pretest and posttest model. Some of the studies had mid-point testing, but most did not. Many of the

studies used more than one instrument, thereby testing for more than one characteristic at a time.

Yee (1969) reported on a study where the purpose was to "test the hypothesis that cooperating teachers are a significant source of influence in student teaching and to determine the direction of causal influence" (p. 328-329). The sample consisted of 124 student teacher-cooperating teacher dyads (43 elementary and 81 secondary) and their 12 college supervisors. The sample was drawn from student-teaching personnel at the University of Texas, Austin during the spring semester of 1966. The elementary student teachers were in grades 1-6 while the secondary student teachers were in teaching specialties including art, business, English, foreign language, mathematics, music, and social science.

The instrument that was used was the Minnesota Teacher Attitude Inventory (MTAI). Terminology was modified to make the wording more general, thereby allowing for wider use. A five point weighted scoring scale was used based upon the Likert-like response choices on the MTAI. A frequency-of-change-in-product-moment (FCP) that was developed by Yee and Gage (1968) was also used. "It can be used to ascertain the source and direction of causal influence ..." (p. 329). The tests were administered at pre- and post-experience points.

The MTAI, in its modified form showed a reliability coefficient value determined by split halves of odd and

even numbers. The  $r$  values were determined from test-retest. For the total group of teachers, the  $r$  value was .88. For the total group of student teachers it was .59. Splitting the elementary group from the secondary group gave similar values. Elementary teachers showed .87, student teachers showed .57. Secondary teachers showed .88 while student teachers showed .60.

The frequency-of-change-in-product-moment (FCP) is used to ascertain the source and direction of causal influence if the inference can be made that the variables are causally related, that is no other independent variable is as potent as the two interacting variables in producing ... 'true' correlations which reflect a direct causal influence. (p. 329)

Results from the MTAI showed that elementary student teachers' attitudes scores reflected a positive shift in their attitude. Secondary students also showed a positive shift. FCP data showed that the direction of influence was from the cooperating teacher to the student teacher. The author concluded that "the attitudes of student teachers toward young people generally reflect the predominant influence of their cooperating teachers" (p. 331).

Another study, by Cunningham and Blankenship (1979), had to do with elementary preservice teachers' self concerns.

The purpose of the study was to determine which of the five factors... teacher age, teacher expertise, class size, class grade level, and subject area, would have a significant effect on the level of self concern expressed by the interns in the sample. (p. 420)

The sample consisted of 96 preservice elementary teachers at the University of Houston during the spring of 1974. The study group consisted of non-black subjects only.

In their literature review, the researchers included the Fuller Teachers Concerns. They did not introduce the student teachers to the model prior to the data collection phase of the study. Although not one of the hypotheses for the study, it was implied that verification of the model was sought.

The Teacher Concerns Check List, Form B (TCCL-B), a 56 item Likert-type questionnaire was modified to include 30 of the 56 items. The final version included those 30 items plus 20 items emphasizing Concerns About Task and Concerns About Impact. The TCCL-B has an overall internal reliability of .95, but the modified version used here has a value of .87 relating to concerns about self, .80 on concerns about task, and .77 on concerns about impact. The instrument tied in with the Fuller Model because the TCCL-B was originally designed by Fuller's team. The data were gathered from the 96 subjects as a post-test only. It was administered in one large group session after the teaching experience. The items on the TCCL-B were weighted, tallied and analyzed. The results of the post-test showed that:

(A) Differing curricular areas generated differing levels of concerns among the student teachers. Science had the lowest level with reading being second



( $F=100.6$ ;  $p=.001$  by analysis of variance).

(B) Age showed significantly as a concern about self. Those interns 25 and older consistently showed lower concern about teaching than the younger ones. (Two-factor mixed design analysis of variance, no data given.)

(C) There were no significant differences among the interns with respect to class size or grade level.

(D) Interns expressed concern about themselves as science teachers in relation to the subject the teacher feels he or she teaches best. This indicated that the interns felt more concern for their science teaching than other subjects (one-way analysis of variance, no data given).

The authors concluded that the results of the study provided strong evidence that there are relationships between and among the teacher, the student, and the lesson that have important effects on the intern and the level of self concern expressed by them. The data also tend to support the Fuller Teacher Concerns Model, according to Cunningham and Blankenship.

The effect of the college classes on preservice teachers has been the focus of several studies. A key publication on the topic was by Dan Lortie in the second Handbook of Research on Teaching (1973). He stated

... the protracted exposure to potent models leads teachers-to-be to internalize (largely unconsciously) modes of behavior which are triggered in later teaching...to a considerable extent future teacher behavior is

rooted in experiences which predate formal training. (p. 487)

Lortie (1975) expanded upon this in his book, School Teacher: A Sociological Study.

An earlier study by Hogben and Petty (1979) demonstrated a similar level of support for Lortie's view on the early origins of influence for preservice teachers. This study was carried out at Flinder's University of South Australia. It involved primary teachers in their first year of teaching, and two groups of students in their final year of university training. The authors stated that "while there was some change in student attitudes during the final university year, towards the 'progressive' orientation of the university course, this orientation did not persist far into the first year of teaching" (p. 212). This pattern has also been observed by Butcher (1965), McIntyre and Morrison (1967), and Gibson (1972).

Eklund (1983) found evidence to support Lortie's position. She studied the change in attitude of pre-service elementary teachers. Testing was done before student teachers began their education classes, after they had completed their methodology courses, and after student teaching. The study was also designed to look at the ranking of the student teachers by their college supervisors, their grade point average (GPA), American College Test (ACT) scores and the student's background. The Fishbein Model of Reasoned Action was the model for the

attitude study. According to the model, the attitude is the sum of the product of the belief times the strength of the belief. The results of the study were as follows (statistical methodology not reported):

(A) There was a low positive relationship between initial attitude measure and the ACT score.

(B) There was a low positive relationship between GPA and success as a student teacher.

(C) The pre-methodology attitude measure set a base-level. After methods courses, there was an increase in attitude measures; and after student teaching, the attitude measures returned to the pre-methodology base-level.

The author concluded that there was no significant change in attitude over the two year study. This tends to support Lortie's position that the long-term influence of role models over the teacher's entire learning experience overrides the short term influence of the college program.

Charlene Crocker (1980) tried a slightly different approach to determine the effect of preservice field experiences on teacher's attitudes, self-concept, and teacher effectiveness. She worked with three groups of teachers-in-training, each one being trained in a different pattern. One group received little field experience during a student-teaching semester at Stephen F. Austin State University during the fall of 1979. The second group was exposed to extended field experience. A third group had

extended field experience integrated with classroom activities. Other variables considered were sex, GPA, and previous field experience. The MTAI and the Tennessee Self Concept Scale were used to measure attitude and self-concept. Teacher effectiveness was rated by cooperating teachers and supervising teachers using the Purdue Rating Scale of Instruction (reliability and validity not reported). The instruments for attitude and self-concept were administered three times as a pretest, first posttest and as a final post-test. A Pearson product-moment correlation was done on the data from the Tennessee Self Concept Scale.

The analysis (no values reported) of the data revealed: (1) no significant differences in attitude or self-concept among the three groups; (2) no significant difference in attitudes with respect to the sex or prior field experience of the participant; (3) significant differences did manifest themselves with respect to GPA (the highest GPA had the best attitude); (4) no significant differences in self-concept with respect to sex, GPA, and previous field experience; (5) no significant relationship between teaching effectiveness and teacher attitudes; and (6) no significant relationship between teaching effectiveness and self-concept.

The author reported the following trends even though they were not statistically significant: (1) those participants with field experience integrated with

classroom activities showed the highest positive change in mean scores; (2) females in the study showed more positive attitudes than males; (3) students with prior field experience tended to show a trend toward more positive attitudes toward students and teaching; (4) females tended to have a better self-concept than did males; and (5) self-concepts were better for those participants with higher GPA's. A final conclusion by the author was that uncontrolled factors within the area of teaching effectiveness may have influenced the results of that area of study.

Sunal (1980), also looked at the combination of methods courses and field work. He published an article dealing with the effect of such a technique on preservice teacher behavior. Based on identified areas of concern, the study examined three aspects of teacher education programs. The questions to be answered were:

- (A) Does the amount of field experience involvement during an elementary methods course affect a preservice teacher's knowledge and performance in inquiry skills?
  - (B) Does the amount of field experience involvement ... affect a preservice teacher's (affective) interest and attitude toward science in the elementary classroom?
  - (C) Does the amount of preservice involvement ... affect a preservice teacher's perception and performance of role expectations and teaching behaviors in the teaching of science?
- (p. 15)

The study sample was drawn from two pools. One was from students enrolled in a 10 credit hour "traditional" methods course that was classroom centered only. The

second pool consisted of students enrolled in a 15-credit hour methods course and 11 hours of student teaching. Subjects included language arts, math, reading, science, and social science. In each case, the sample ( $n = 21$ ) was randomly selected.

Instruments were chosen to measure inquiry skills, the affective domain, and teaching behavior. For the inquiry skills, the Science Process Measure (SPM) was chosen. The affective area was measured by the Teaching Preference Scale (TPS) and the Semantic Differential for Science Teaching (SDIS). Teaching behavior was evaluated using the Microteaching Skills in Science Checklist (MSS) and the Survey of Classroom Activities for Science (SOCAS).

The SPM was reported to have a test-retest reliability of .72 (pretest) and .84 (posttest). The TPS test-retest reliability was reported at .93. The SDIS's reliability was reported at .87. The MSS rating was .85. There was no reliability figure given for the SOCAS.

The SPM is designed to measure knowledge and ability in nine inquiry (process) skill areas. The TPS involves a preference ranking of language arts, math, and social science relative to science. The SDIS uses 18 adjectival pairs to indicate attitudes toward nature, children learning science in classrooms, and teaching science to children. The MSS is an observational system including five planning and three teaching categories. SOCAS is a questionnaire to indicate perceived teacher and student

behaviors as related to inquiry (process) science. The first three instruments were administered at the beginning of the methods course, at the end of the methods course, and at the end of a term of student teaching. The fourth and fifth instruments were used only during the methods class and while the student was teaching.

Results of the study revealed that, although there had been significant pretest differences between the study groups at initial testing, they exhibited no significant differences at the end of the methods classes for problem one, knowledge and performance of inquiry skills. The same pretest and posttest results were achieved for problem two, interest and attitude toward science. The third problem, however, did show a significant difference at the posttest. The authors concluded that

Drawing upon the results of the study, it is concluded that increased field experience occurring in these treatments does positively affect a preservice teacher's performance of role behaviors in the teaching of elementary science at the end of a methods course sequence.  
(p. 20-21)

The statistical procedures followed by the author were not reported. The author engaged in a discussion of the possible influences on the study.

...there is a need to look at the quality of elementary field experiences and opportunities available...during the professional semester and student teaching. An alternative explanation for the results of the study appear to indicate that certain inhibitors or nonpositive factors are present in field classrooms....During this time

(the 30-75 hours potentially involved in science teaching) positive skills, interests, attitudes, and perceptions of the role of the teacher could have been demonstrated by inservice teachers. If the elementary classroom experience is detrimental or reinforces previous preservice skills, interests, attitudes, and perceptions, change would not appear. Effective campus experiences may have had little followup in either of the treatments ... for teacher educators ... lead to the necessity for further study and careful consideration of field classroom variables used for preservice education. (p. 22)

Austin (1981) reported the results of a study carried out at the University of Mississippi. In this case, 48 elementary student teachers were the study group. The purposes of the study were to assesses the expressed self-concept, teacher attitude, and personality of the student teachers; to determine if the study subjects showed changes in self-concept and attitude during the student teaching; and, if changes did occur, to relate the changes to Jungian personality types and/or grade range teaching preference (K-3 or 4-6). The Myers-Briggs Type Indicator measured the personality types, the MTAI was used for attitudes, the How I See Myself Scale was used to indicate self-concept (teacher, interpersonal, and autonomy self-concepts), and grade range preference was given by self-report. Values for reliability and validity were not reported. The Myers-Briggs Type Indicator did not show any relationship to teacher attitude changes or grade range teaching preferences. Results of the MTAI showed an overall improvement from the beginning to the end of student



teaching. Trends that were present, but not at a significant level were that thinking individuals (from the MBTI) had the most negative attitude changes. Participants that indicated a K-3 grade preference showed a more positive change than those indicating the upper elementary grades.

Self-concept was the most significant affective influence in student teaching. Teacher relationships and interpersonal relationships showed significant decreases after student teaching with the Jungian personality type of a judging type showing the greatest self-concept loss over the experience.

Hammer (1982) also found a decrease in attitude scores reflecting a more negative view toward pupils and teaching. Her study involved 94 subjects at a pretest and 76 subjects at a posttest. She was interested in student teachers' attitudes toward pupils and teaching, their degree of dogmatism, and their future world perspective values. She worked with Business Education majors in Arkansas, Oklahoma, and Texas. The instruments were the MTAI, Rokeach's Dogmatism Scale, Form E and Silvernail's Future World Perspective Values Scale. She gathered information concerning the environment via questionnaire.

Pretests and posttests were administered to the subjects. Analysis of the results showed that only the MTAI scores reflected a significant change. Values and statistical methods were not reported, but it was stated

that the data decreased significantly overall, however, female student teachers tended to have a more positive attitude, be less dogmatic and have more positive future world perspectives than males. Closer analysis revealed that the perceptions of the nature of the pupils to be taught became more important as the experience progressed and that the subjects felt that they were not adequately prepared for the types of students they encountered in the classrooms.

A doctoral thesis by Smith (1983) also used the MTAI to study attitudinal changes in student teachers at the University of Alabama. She used student teachers in Early Childhood Education (n = 83) and regular Elementary Education (n = 74) in two consecutive years (1978 and 1979). She administered the MTAI to the student teachers during the first and last weeks of their field experience.

Smith's results showed that there were significant attitudinal changes in the negative direction during the student teaching experience. The Early Childhood Education group showed a less negative shift than the Elementary Education group. In 1978 the Early Childhood Education group showed the greatest shift while in 1979, it was shown to be in the Elementary Education group. The statistical values and procedures were not reported.

Parkay (1982) also found a negative trend in attitudes toward professional practice, self-appraised levels of anxiety and competence, and imagined feelings as a teacher.

He administered a researcher developed Teacher Attitude Questionnaire. He did not report any values for reliability and validity in this article. The questionnaire consisted of 38 items designed to measure the three areas. During the spring semester of 1979, he administered the instrument to 67 secondary education students. Approximately one-third of the students were scheduled to student teach that semester. The rest of the 67 were not scheduled to student teach and acted as a control group. The instrument was administered as a pretest at the beginning of the semester and as a posttest at the end to both groups.

Although the method of analysis was not reported, the results of the pretest/posttest showed significant differences between the two groups. The values of the student teachers had moved toward a more structured, systematic mode. They had switched from believing that personal growth was a primary goal for their students and had moved toward goals more related to subject matter. They were less anxious about their ability to succeed as a teacher in the future. In responding to a 21 item bipolar adjective set, the student teachers showed that they had moved toward cool as opposed to warm, sharp as opposed to blurry, tight as opposed to loose, and forceful as opposed to retiring.

The author summarized by expressing the following concern about the meaning of these results:

The pattern of attitude changes among student teachers suggests that ... it ... encourages student teachers to value styles of teaching that are more custodial than those they valued before student teaching. Thus, I believe that the current practice of student teaching must be reevaluated, if it is ever to encourage students to develop teaching styles that are "open" and "humanistic."  
(p. 705)

A study by Strawitz and Malone (1984) was designed to look at attitudinal changes and shifting of concerns during a preservice methods class that included a field experience. Factors such as age, grade point average, openmindedness, and school assignment were identified as possible sources of variance.

The study sample consisted of 63 undergraduate students who were currently enrolled in three sections of a science methods at a university in Louisiana during spring semester of 1983. The students were assigned to a school for their field experience according to the section of the class in which they were enrolled. Approximately 20 hours were spent in the field classroom during which time the students observed the cooperating teacher, interviewed students to determine developmental levels and their understandings about science concepts, and taught science lessons while using discovery and inquiry techniques.

The research design was a one-group pretest and posttest design. Three instruments were used. The Teacher Concerns Questionnaire (TCQ) was used to track changes in levels of concern based on the Fuller Teacher Concerns

Model. The Science Teaching Attitude Scales (STAS) was used to measure attitude. The Rokeach Dogmatism Scale (D-Scale) was used to measure openmindedness. All three tests were administered prior to the field experience and at the end of it.

Two results were obtained. One was that there was no significant change in teacher concerns. There was no shift from self to task and impact concerns as predicted by the Fuller Model. This result was true for subjects who differed in age, grade point average, and openmindedness.

The second finding was that there was a significant positive change in attitudes toward science. Interestingly, the students varied in the amount of change depending upon the school in which they had their field experience. This difference "cannot be explained in terms of initial differences in pretest score. Differences in learning environments in these schools and in teacher attitudes toward science may have influenced student attitudes" (p. 7). This suggests support for the findings of Dinapoli (1984) as summarized later in this paper. The authors closed their paper by recommending "that attitudinal, concern, and behavioral outcomes of those (field) experiences be investigated on a more thorough and systematic basis" (p. 8).

Another study, Lawrenz and Cohen (1985), looked at the effect of methods courses on student attitudes toward science and knowledge of science processes. The study

examined two sets of preservice teachers. The first set was drawn from secondary education majors at State University of New York at Buffalo. The second set were elementary education majors from Arizona State University. "The secondary students were investigated first and the results were so intriguing that a similar investigation was conducted on elementary students to see if the same type of results would be found in a different sample" (p. 106).

The authors gave a detailed description of the two sets of study subjects including the depth and sequencing of methods courses and field experiences. The secondary methods course dealt with the nature of science, the nature of learners, the nature of society, and the nature of the profession. It included 10 hours of actual classroom experience. Practice teaching consisted of two eight-week full-time sessions, one at the high school and one at the junior high school.

The elementary program included K-8 science methods, micro- and macroteaching to in-class peer groups. It also included 40+ hours in an elementary school during the sophomore year. Practice teaching was full-time for one semester.

Two instruments were administered at three points. One testing time was prior to the methods course, another was immediately following the methods course, and the final testing was done after student teaching. The instruments administered at this point were the Science Attitude

Inventory (SAI) which is a 60-item, four-option Likert-type form that measures general intellectual and emotional attitudes toward science (reliability .93 by test-retest); and the Science Process Inventory (SPI) a 135 item, forced choice format that assesses knowledge of the universal processes of science (reliability .90 by Kuder-Richardson 20).

The results showed that both groups had slightly higher than average understanding of processes. The SAI showed a positive attitude for science in both groups except for secondary student teachers after they student taught. Elementary student teachers started with a score of 118.36 on the SAI and ended with a score of 125.36. The secondary student teachers began with a 113.8 and ended with a 54.7. Both groups showed a marked increase at the mid-point testing, however.

For the secondary students, negative attitude toward science occurred after student teaching science courses. Certainly not a desirable outcome! Why would that occur? Since the same decrease did not occur for the elementary students, it is possible that something unique in the secondary students' experience was affecting their attitudes. (p. 110)

The authors suggested five possible explanations for the divergent outcomes. They were as follows:

(1) reactions to the realities of teaching; (2) subject matter saturation effect; (3) they may be due to the quality of interactions with students from differing age levels; (4) there may be an adverse effect from two different student teaching experiences; and (5) the results may be due to a combination of the above (the authors favored this explanation).

Lawrenz and Cohen summarized their article by saying, "Most importantly the substantial decrease in the secondary students' attitudes towards science during their practice teaching must be investigated. Also research of a more qualitative nature, e.g. analyzing the student teaching situation or the methods classes would be desirable" (p. 112).

From the review of the literature, two qualitative studies emerged. One, conducted by Sitter (1981), consisted of a study of preservice elementary school teachers. The study was 20 weeks long. Five undergraduate senior interns were supervised by the researcher in the role of the clinical professor (college supervisor). Methodology included participant observation, self-reporting, and interviewing. Over the course of the study, five elements emerged as indicators of the intern's perceptions of student teaching. They were:

1. The role of the student teacher during the experience was that of a junior partner.

2. There was a perceived need to prove oneself.



This became an important goal that had implications to both the in-classroom and out-of-classroom environments.

3. In order to achieve the goal the intern had to (a) develop proficiency in teaching; (b) attain leadership/control; (c) modify personal tendencies toward types of behavior; (d) acquire their own identities as teachers.

4. Upon reaching the goal, cognitive and affective changes in the intern's knowledge, perceptions, attitudes and actions were manifest.

5. Interns left the experience with a feeling of autonomy.

Based on these perceptions from the interns themselves, the researcher concluded that the experiences of these interns did not support the Stage Theory of Fuller. This theory, based upon a 1969 study by Francis Fuller, suggested that there are developmental stages in the concerns of student teachers. These stages include the Pre-teaching phase: Non-concern, the Early Teaching Phase: Concern with Self, and Late Concerns: Concerns with Pupils.

At the pre-teaching phase, there is basically a non-concern. Concerns that do exist are ethereal and non-directed. They are usually based on rumors and stories heard from other students. Early in student teaching, the concerns are self-centered in that they revolve around how the student teachers is seen by others, and how it will

impact them at a future time. Late in the experience Fuller found that concerns shifted to concerns about the students under the student teacher's care.

Sitter also concluded that the attainment of the goal of proving oneself (#2 above) had both cognitive and affective dimensions. She also concluded that the intervention of the college supervisor, accompanied by the exercise of analytic thinking and reflection, all contributed to the personal and professional growth of the interns in her study.

Much of the information gleaned from this type of observational, inquiry-driven approach to educational research may have been overlooked by conventional pencil and paper survey methods. The ability of the researcher to be an interactive member of the situation under study gives opportunity to see relationships as they develop and to flesh out details of those relationships. The richness of the results of the study reflect these interactions and the researcher's interpretation of them.

A second qualitative study was conducted by Dinapoli (1984). It dealt with the interaction between the cooperating teacher and the student teacher. He looked at the influence of the cooperating teacher on the attitudes and behaviors of the student teacher. The study consisted of four stages: (1) acquiring conceptual tools or course work in content and education; (2) entering the field; (3) doing field work or student teaching; and (4) describing

the culture. Data gathering techniques included questionnaires, formal and informal interviews, participant and non-participant observation, and collection of written materials. One major theme emerged from the study. Cooperating teachers continued to emphasize authority and control over the situation.

Although this study used research methodologies that fall within the broad definition of qualitative research, it was probably not a qualitative study in the strictest sense. The researcher defined assumptions and objectives before the study began. In a true qualitative design, these would not have been predefined but would have emerged from the study as working hypotheses. The use of questionnaires for any purpose other than background information is also suspicious especially if they were prepared before the study began.

#### Review Supporting Research Methodology

Lanier and Little (1983), in the Handbook of Research on Teaching, third edition, seemed to express frustration with the extant research literature on teacher education. They state that

There are ... a plethora of studies demonstrating that teachers can learn all sorts of things when formally taught. Emanating from an apparently defensive posture, numerous studies show that teacher education can make a significant short term difference. Many researchers have administered pre- and post-instructional measures of knowledge and attitude in

search of some selected change following one or another instructional treatment. They find, predictably, that prospective and practicing teachers can 'learn new tricks,' and master all sorts of subject matter knowledge and skills of the trade ....we already know that teachers, like other normal human beings, are capable of learning new thoughts and behaviors in ways that conform to a set of generally accepted principles of human learning. (p. 528)

In referring to the paradigms used in educational research, Lanier and Little stated

...our observations and belief that the study of social entities such as teacher education is apt to be advanced least by adherence to the classic natural science modes of inquiry. Meaningful isolation and control of variables in complex social affairs is rarely, if ever, possible and is not recognized, therefore, as a particularly fruitful line of contemporary inquiry in teacher education. (p. 528)

One characteristic of the natural sciences is that each discipline tends to have a single, dominant paradigm at any given point in its history. In biology, that paradigm is currently the Theory of Evolution. Physics currently espouses the Theory of Relativity. Kuhn (1979), in his oft quoted book, The Structure of Scientific Revolutions, made this point clearly, and his followers have recognized its truth. The social sciences, however, lack this central-theory dominance. "Social scientists pursue their research activities within a framework of a school of thought that defines proper goals, starting points, methods, and interpretive conceptions for investigations" (Shulman in Wittrock, p. 5). Shulman

pointed out that Kuhn interpreted this characteristic of the social sciences as a preparadigmatic condition, and, therefore, considered it a weakness in research within the social sciences. Merton (1975), as interpreted by Shulman, disagreed with the Kuhnian position. He felt that the plurality of research design strengthens the body of knowledge within the social sciences. Merton argues for a set of competing paradigms

He asserts that the theoretical pluralism encourages development of a variety of research strategies ... Different paradigms alert research workers to different phenomena of interest, different conceptions of problem, and different aspects of events likely to be ignored within a single perspective.  
(p. 5)

#### Summary

Several points emerged from this review of the literature. The first, and probably the most significant point, is that there was a discouraging lack of agreement among the authors on the effect of field experience on student teachers. For example, studies reflecting the effect on attitudes showed little agreement. Some indicated that they found evidence for a positive effect on the student teacher (Austin, 1981; Cunningham and Blankenship, 1979; Strawitz and Malone, 1985; Yee, 1969). Some researchers reported negative changes (Hammer, 1982; Smith, 1983) while some reported no change (Crocker, 1980; Eklund, 1983). The study by Lawrenz and Cohen (1985) showed conflicting results between the two groups studied.

A second point is that there is evidence that some of the researchers are suggesting that previous research may have been flawed and are calling for another approach to educational research. Fuller (1969) hinted that research of a more open, inquiring type might give a better understanding of the field experience. Lawrenz and Cohen (1985) stated that "research of a more qualitative nature, e.g. analyzing the student teaching situation or the methods classes would be valuable" (p. 112).

Erickson (1986) referred to the history of positivist research over the last 20 years as

one of analytical bootstrapping with very partial theoretical models of the teaching process, [carried out] on the assumptions that what was generic across classrooms would emerge across studies, and that the subtle variations across classrooms were trivial and could be washed out of the analysis as error variance. (p. 131)

He went on to say

Twenty years later it seems that there is so much variation across classrooms, and so much variation in the implementation of 'treatments' themselves that large-scale program evaluation by quasi-experimental methods is very problematic. Campbell himself (1978) and Cronbach (1975) called for the use of more naturalistic observational methods - case studies done by participant observers, or 'documentation' studies, which would give a detailed view of the actual structure and process of program implementation. (p. 131)

A third point is that no unifying theories have come out of educational research on the effect of student teaching. Researchers occasionally feel that they have developed a broad theory only to have it disproven or put

under question by later studies. Fuller's Teacher Concerns Model (Fuller, 1969) is a case in point. Erickson (1986) commented that anomalous results "...suggest that while the standard work has produced some insights about general characteristics of effective training, we may have learned about all that is possible by proceeding with that theoretical framework, and the methods that derive from it" (p. 132).

As Erickson suggested, the reason for the failure to provide a unified model may lie in the research methodology. Perhaps the Naturwissenschaft needs to give way to the Geisteswissenschaft research model. The latter research philosophy stems from the 19th century German perspective of social theory. This intellectual perspective separated the natural sciences (Naturwissenschaft) from what can be called the science of the spirit, or human science (Geisteswissenschaft). The later perspective holds that that "sense-making and meaning were the spiritual or moral aspect of human existence that differed from the material existence of the rest of the natural order" (Erickson, 123). After the many attempts to determine the effects and value of a pre-service field experience for teachers-in-training that have been reviewed in this paper, what can be listed as areas that need to be further explored? It would be safe to say that we still need to know many things. What is lacking after all of this time and effort is a deep understanding of the nature

of the student teaching experience, the effect it has on the student teacher, what influences are acting on the student teacher not only within the public school setting, but from the college and other sources, what support sources are available, and which are the most meaningful, what sources of success and failure exist and how do they effect the student teacher. This list is a start, but not all-inclusive. As in many other human endeavors to achieve understanding, more questions are likely to arise as old questions are examined.



### CHAPTER 3

#### RESEARCH DESIGN AND METHODOLOGY

The research methodology is a fairly straightforward one. It is presented in light of the current lack of understanding about student teaching and its effects upon the student teacher. It is an open-minded, questioning approach.

The purpose of the research was to undertake a study of a small set of science student teachers for a time period extending from post-methodology courses through the term of student teaching. The research methodology falls under the general heading of qualitative research, but is more specifically participant observation. Data were collected in the form of field observations, audio taped journals from the student teachers, audio taped recordings of the student teaching seminar, video tapes of the student teachers, and field notes from various encounters with student teachers and cooperating teachers. This methodology was selected for this research in the hope that another investigative approach to the problem might provide a clue to answering the questions that still linger about the pre-service field experience.

Biddle and Anderson (1986) described participant observation as follows:

Participant observation is a technique in which the investigator enters the social world of those studied, observes,

and tries to find out what it is like to be a member of that world. Detailed notes are taken concerning the events witnessed, and eventually these are organized and codified so that the investigator discovers the patterns of events that have appeared in that world. (p. 237)

The choice of a participant observational format allowed freedom of interaction between those being studied and the researcher. Unexpected pathways could be identified and explored much more easily than they could under a more structured process-product format. Biddle and Anderson (1986) stated:

Three advantages are frequently cited for ethnographic methods. They do not require prior conceptualization but instead allow the discovery of truly applicable theory; they enable the investigator to understand events as they are conceived by participants; and they offer opportunity for investigations of controversial topics in depth, over a longer period of time than is generally possible with confirmatory methods. (p. 237)

Was there any evidence that a qualitative approach to this problem was warranted? Support for the methodology was found from two sources. Michael Patton, in his 1989 book entitled Qualitative Evaluation, provided a "Checklist of Evaluation Situations for Which Qualitative Methods are Appropriate." Patton stated that a "yes" response to any of the statements in his checklist indicated that "the collection of at least some qualitative data is likely to be appropriate" (p. 88). Patton's book is about qualitative evaluation of programs, but with a slight change in wording, it can be applied to educational

research. It seems worthwhile to look at the points on his checklist and argue either a "yes" or "no" response (taken from Patton, p. 88-89):

1. Does the program emphasize individualized outcomes, i.e. different participants are expected to be effected in qualitatively different ways? And is there a need or desire to describe and evaluate these individual client outcomes?

Yes, it almost goes without saying that each field experience will produce different outcomes. There is certainly a need to describe and evaluate these outcomes for the individual student teacher.

2. Are decision makers interested in elucidating and understanding the internal dynamics of programs - program strengths, program weaknesses, and overall program processes?

Yes, program evaluation and improvement and site evaluation are almost continuous in teacher education.

3. Is detailed, in-depth information needed about certain client cases or program sites, e.g. particularly successful cases; unusual failures; critically important cases for programmatic, financial, or political reasons?

Yes, again, teacher training programs can gain information from the extreme case be they successful or failures.

4. Is there interest in focusing on the diversity among, idiosyncracies of, and unique qualities exhibited by individual clients or programs (as opposed to comparing all clients or programs on standardized, uniform measures)?

Yes, the uniquenesses of a setting or of the

individual actors may have significant bearing on the outcomes.

5. Is information needed about the details of program implementation - what clients in the program experience, what services are provided to clients, how the program is organized, what staff do, and basically inform decision makers as to what is going on in the program and how it has developed?

Yes, teacher training program development and improvement are dependent on knowing these components.

6. Are program staff and other decision makers interested in the collection of detailed, descriptive information about the program for the purpose of improving the program, i.e. is there interest in formative evaluation?

Yes, program evaluation is an ongoing process in programs that involve teacher training. The world of the teacher changes and the training program must change with it.

7. Is there a need for information about the nuances of program quality, i.e. descriptive information about the quality of program activities and outcomes, not just levels, amounts, or quantities of program activity and outcomes?

Yes, the field of teacher training is under the same requirement for accountability as any other educational program. information relating to activities and outcomes are crucial to program evaluation and quality.

8. Will the administration of standardized measuring instruments (questionnaires and test) be overly obtrusive in contrast to the gathering of data through natural observations and open-ended interviews, i.e. will the collection of qualitative data generate less reactivity among participants than the

collection of quantitative data?

Uncertain, it seems logical that the least obtrusive data collection technique would be preferable, but it is not guaranteed that an observer is either more or less obtrusive in the classroom setting.

9. Is the state of measurement science such that no valid, reliable, and believable standardized instrument is available or readily capable of being developed to measure the particular program outcomes for which data are needed?

Yes, based upon the literature reviewed, there is no valid and reliable instrument currently in existence that can measure program outcomes consistently.

10. Are legislators or other decision makers/funders interested in having evaluators conduct program site visits such that the evaluators become the surrogate eyes and ears for decision makers who are too busy to make such site visits and who lack the observing and listening skills of trained evaluators?

No, legislators seem to be interested, but do not seem to desire surrogates to guide them.

11. Are the goals of the program vague, general, and nonspecific, indicating the possible advantage of a goal-free evaluation approach to gather information about what effects the program is actually having?

Yes, the goals for the student teaching experience are ambiguous. Basically, they are to provide a simulation of the real world of teaching in a guided, supportive environment.

12. Is there the possibility that the program may be affecting clients or participants in unanticipated ways and/or having unexpected

side effects, indicating a need for a method of inquiry that can discover effects beyond those formally stated as desirable by program staff (again, an indication of the need for some form of goal-free evaluation)?

Yes, Lawrenz and Cohen (1985) found a surprising decrease in attitudes among secondary science student teachers as opposed to elementary student teachers thus hinting at an unanticipated effect from an unidentified source.

13. Has the collection of quantitative evaluation data become so routine that no one pays much attention to the results anymore, suggesting a possible need to break with the old routine and use new methods to generate new insights about the program.

Yes, many authors have suggested the need for another approach.

14. Is there a need and desire to personalize the evaluation process by using research methods that require personal, face-to-face contact with the program - methods that may be perceived as "humanistic" and personal because participants are not preordinately labeled and numbered, and methods that feel natural, informal, and understandable to participants?

Yes, Cziko (1989), and Lincoln and Guba (1985) hold a strong opinion that, in natural settings such as those studied in the social sciences, more personal and participatory methods are required.

15. Do decision makers and information users have philosophical or methodological biases that lead them to prefer qualitative methods, thus increasing the likelihood that they will find the results of a qualitative evaluation particularly believable, credible, understandable, and useful?

No, there is still a philosophical bias against

qualitative research in education, although attitudes are changing.

16. Are decision makers and evaluators interested in increasing their understanding of the program by developing a grounded theory of program actions and effects that is inductively derived from a holistic picture of the program?

Uncertain; it would seem that educators and program developers would desire input from all sources in their attempt to evaluate and improve programs.

Based on Patton's guidelines, the number of affirmative answers given on these questions indicated that qualitative data collection techniques was, indeed, appropriate. The second source of support for using participant observational techniques came from Erickson (1986). He stated:

Interpretive methods using participant observational field work are most appropriate when we need to know about:

1. The specific structure of occurrences rather than their general character and overall distributions....
2. The meaning-perspectives of the particular actors in the particular events....
3. The location of naturally occurring points of contrast that can be observed as natural experiments when we are unable logistically or ethically to meet experimental conditions of consistency of intervention and of control over other influences of the setting.
4. The identification of specific causal linkages that were not identified by experimental methods, and the development of new theories about causes and other influences on the patterns that are identified in survey data or experiments. (p. 121)

Erickson continued by stating that observational

studies were optimally used when answering the following questions:

1. What is happening, specifically, in social actions that take place in this particular setting?
  2. What do these actions mean to the actors involved in them, at the moment the action took place?
  3. How are the happenings organized in patterns of social organization and learned cultural principles for the conduct of everyday life-how, in other words, are people in the immediate setting consistently present to each other as environments for one another's meaningful actions?
  4. How is what is happening in this setting as a whole...related to happenings at other system levels outside and inside the setting  
....
  5. How do the ways everyday life in this setting is organized compare with other ways of organizing social life in a wide range of settings in other places and other times?
- (p. 121)

These questions reflected quite accurately the areas that needed to be addressed in beginning to grasp the fundamental aspects of the student teaching experience. The close match also suggested that participant observation was a viable alternative as a research method. Michael Patton (1989) elaborated on some of the unique qualities of participant observation:

Experiencing the program as an insider is what necessitates the participant part of participant observation. At the same time, however, there is clearly an observer side to this process. The challenge is to combine participation and observation so as to become capable of understanding the program as an insider while describing the program for outsiders. (p. 128)

To expand on this idea of a duality of roles for the



participant observer, Patton quoted from Wax (1971) as follows:

Obtaining something of the understanding of an insider is, for most researchers, only a first step. They expect, in time, to become capable of thinking and acting within the perspectives of two quite different groups, the one in which they were reared and - to some degree - the one they are studying. They will also, at times, be able to assume a mental position peripheral to both, a position from which they will be able to perceive, and hopefully, describe those relationships, systems and patterns of which an inextricably involved insider is not likely to be consciously aware. For what the social scientist realizes is that while the outsider simply does not know the meanings or the patterns, the insider is so immersed that he may be oblivious to the fact that patterns exist.... What field workers eventually produce out of the tension developed by this ability to shift their point of view depends upon their sophistication, ability, and training. Their task, in any case, is to realize what they have experienced and learned and to communicate this in terms that will illumine. (p. 128)

Open-ended, inquiry-based research such as described offers challenges to the qualitative researcher that are quite different than those faced by quantitative researchers. In a sense, the qualitative researcher has the freedom to draw operational or working hypotheses, extend inquiry into realms that will provide enlightenment, and rehypothese during the entire observational period. Thus, problem definition, problem solving, and data analysis are part of an ongoing process.

Lincoln and Guba (1985) felt that the mandate that a naturalistic study shall be carried out in a natural setting, far from increasing the subjectivity of the

study and making it possible to engage in 'sloppy' research, makes demands on the investigator in terms of time, energy, and resources that usually exceed those of a 'comparable' study. The natural investigator cannot confine his or her attention to a few variables of interest, ignoring the setting because it has been so carefully controlled; he or she must take account of all factors and influences in that context. If anything may make a difference, then everything must be monitored. (p. 191)

The mandate for natural research comes from the argument that empirical researchers alter the setting in which behavioral phenomena exist to the point that generalizations of the conclusions can only apply to settings similar to the strictly controlled environment in which the behavior was observed. Lincoln and Guba (1985) stated:

It is ironic, we believe, that in their zeal to meet criteria of internal validity, conventional inquirers create (contrive) contexts that influence behavior as much as natural ones do, but produce responses that will never be found in a natural setting. Such studies may be successful in showing how respondents may behave ... but almost never show how respondents do behave in normal situations. (p. 191)

Hammersly and Atkinson (1983) expressed a similar preference for naturalistic studies in natural settings. They said

Naturalism proposes that, as far as possible, the social world should be studied in its "natural" state, undisturbed by the researcher. Hence "natural", not "artificial" settings like experiments or formal interviews, should be the primary source of data. Furthermore, the research must be carried out in ways that are sensitive to the nature of the setting. (p. 6)

It is clear that previous research on the effect and value of student teaching has not provided a unified body of knowledge nor has it produced an overall understanding of the processes and products of the experience. Designs based on the quantitative, empirical model have produced large amounts of data that are conflicting at best.

Perhaps the greatest flaw in the empirical designs is that they ignore the setting in which student teaching occurs and the nature of the individuals involved. Instead of studying the event within its natural context, those designs force the researcher to alter and control them. By manipulating the environment, the researcher changes the setting thus making conclusions pertinent only to the new, altered setting. Naturalistic studies such as those described as participant observation make a conscious attempt not to alter the environment of those being studied. The only manipulation of the environment is the presence of the researcher which may or may not influence the behavior of the study subjects. If the presence of the researcher did influence the study subjects, the design allows for the reporting of such influence.

A basic premise of the empirical studies is that the behavior of the study subjects is predictable. In science, one of the foundational concepts is cause and effect. An action or cause will always result in a predictable reaction or have a predictable effect.

The extension of this premise into studies dealing

with humans is questionable. Cziko (1989) effectively argues that human behavior is not predictable and that this fact precludes the use of the Naturwissenschaft model for research in human behavior. If he is correct, then researchers seeking predictability through quantitative studies of humans in natural settings have very little chance of succeeding. Instead, we should be pursuing pathways of inquiry that will produce at least an understanding of what has happened. Designs such as participant research represent such pathways. They recognize the need to study the nature of the study subjects and the realm in which they exist with as little disruption as possible.

#### Sample and Methodology

The question posed by this study was "What is student teaching like from the perspective of the major participant, the student teacher?" The research methodology employed in the quest for insights into this question was qualitative. More specifically, it combined participant observation with the Multi-Site, Constant Comparative Model described by Bogdan and Biklen (1982).

Participant observation is defined by Bogdan (1972) as "research characterized by a prolonged period of intense social interaction between the researcher and the subject, in the milieu of the latter, during which time data, in the form of field notes, are unobtrusively and systematically

collected" (p. 3). Patton (1989) identified five dimensions or variations to observational field methods. These can be listed as counter-points of a continuum. The counter-points are as follows (modified from p. 138):

(I) Role of the Evaluator-Observer:

Full Participant Observation VS. Onlooker Observation as an Outsider.

(II) Portrayal of the Evaluator Role to Others:

Overt Observations (all participants know that observations are being made and who the observer is) VS. Covert Observations (participants do not know that observations are being made or that there is an observer).

(III) Portrayal of the Purpose of the Evaluation to Others:

Full explanation of real purpose to everyone VS. False explanations (participants deceived about evaluation purpose).

(IV) Duration of the Evaluation Observation:

Single observation of limited duration VS. Long-term, multiple observations.

(V) Focus of the Observations:

Narrow focus (single element or component of system observed) VS. Broad focus (holistic view of the entire program and all of its elements sought).

The portions of the counter-points that describe this study are as follows: full participant observation; overt observations; full explanation; long-term, multiple

observations; and broad focus, holistic view. All participants, that is, student teachers, cooperating teachers, and college supervisors, were cognizant of both the presence of the researcher and the purpose of the study. The time period involved, March, 1990 through June, 1990, included multiple contacts with the participants in the classroom and outside of it. The major question posed by the researcher dictated a holistic approach to the study and allowed for various forms of data gathering.

#### The Student Teachers

The researcher would normally have served the research subjects in the capacity of college supervisor during their quarter of student teaching. It was felt that the role of supervisor had the potential of hampering the openness and trust needed for free exchange among the participants. For example, if a student teacher and cooperating teacher found that they were unable to communicate, the college supervisor's role would become that of a mediator. The supervisor would intervene constructively to identify and reduce or eliminate the factors leading to the breakdown of communication.

In a similar situation, the role of the researcher, as a participant observer, would be quite different. It would become the domain of the researcher to observe and record the processes and techniques of the intervention implemented by the college supervisor. They would observe

the impact of these interventions on the student teacher and the cooperating teacher in an effort to document the process in that setting.

No one person could effectively fulfill the requirements of supervisor and researcher in such a case. If an attempt to do so were made, it would most likely fail, and it, surely, would have an impact on the outcome of both the study and the resolution of the communication problem.

The researcher made arrangements for the student teachers comprising the study sample to be supervised by another faculty member, but in a related academic area, mathematics. The researcher traded supervisory duties with the other faculty member's student teachers. The researcher served as college supervisor for the other six science students that were in the field Spring Quarter.

The three study subjects had previous experience with the researcher in other settings. All three had been in her geology class and had taken Special Secondary Methods: Science from her. She had also served as advisor for the two male student teachers. Over the course of these previous encounters, a certain degree of rapport had developed between the researcher and the student teachers, as well as among the student teachers themselves. This history and rapport led to the development of a high degree of trust, especially between the researcher and the study subjects. This degree of trust manifested itself in the

freedom with which the student teachers discussed matters that had profound effects on them personally and, potentially, professionally. Erickson (1986) discussed the need for an element of trust in participant research.

Trust and rapport in field work are not simply a matter of niceness; a noncoercive, mutually rewarding relationship with key informants is essential if the researcher is to gain valid insights into the informant's point of view. Since gaining a sense of the perspective of the informant is crucial to the success of the research enterprise, it is necessary to establish trust and to maintain it throughout the course of the study. (p. 142)

The Multi-Site, Constant Comparative Model format was utilized because the three student teachers were all in different schools. All three were in the same city, Salem, Oregon, but two were at the middle school level, and one was at the high school level.

The Constant Comparative component was selected because it involved simultaneous data collection and analysis. This allowed for the formation of working hypotheses and the inclusion of data sources other than those identified in the original research design. Bogdan and Biklen (1982) noted that the "constant comparative method is a research design for multi-data sources, which is like analytical deduction in that the formal analysis begins early in the study and is nearly completed by the end of data collection" (p. 68).



### Selection of the Study Sample

Western Oregon State College (WOSC) offers secondary teaching endorsements in many academic areas. In science, endorsements are given in Biology and Integrated Science. Those working toward endorsement in Biology will be licensed to teach any science in grades 5 through 8 and any science except for Physics and Chemistry in grades 9 through 12. Students working toward the endorsement in Integrated Science will be certified to teach all science grades 5 through 8 and any science except Biology, Physics, and Chemistry in grades 9 through 12. Students have been allowed to work toward procuring both endorsements, however, this will become more difficult after Fall quarter, 1990 when a new teacher education program will be implemented.

Before the student teaching quarter, students had at least one field experience in secondary schools. Secondary Block (Block), a 13 quarter hour class, entailed both theory and practice. Students spent a minimum of two hours per day in a classroom for the quarter (a quarter is 10-12 weeks long). Their classroom duties and responsibilities for the quarter included working one-on-one with students, acting as a teaching aid, and, usually a limited amount of actual teaching experience. Theory was covered in a traditional lecture format or in small group settings for another two hours per day. Learning theory, planning, discipline, management

techniques and other skills were covered in that setting. Depth and quality of the experience varied depending upon the school, the classroom teacher, the college supervisor, and the student.

Placements for the student teachers were applied for and finalized during the previous quarter. Formal application to the schools were made through the School of Education's Field Placement Office. Before final placement, the students were interviewed by the school, usually by an administrator and at least one teacher, and were given an overview of their anticipated duties and teaching responsibilities. Teaching materials such as texts and curricula were given to the student teacher at that time. There was a one week vacation between quarters during which the students could begin to familiarize themselves with the teaching materials. The study group of three individuals was selected from a pool of nine science student teachers that were scheduled to student teach Spring quarter, 1990. The nine student teachers were placed within a radius of 30 miles of the WOSC campus in Monmouth, Oregon.

The three study subjects were selected from the larger group following a process of elimination and rationalization. Three of the nine student teachers were eliminated from the study because they were student teaching in more than one academic area. One was also seeking an endorsement in Health, one in Social Science,

and one in Mathematics. These people were required to meet the requirements set by two college supervisors, one in each academic area. It was felt that this dual set of requirements placed a variable into the student teaching experiences that might complicate the acquisition and interpretation of data. Those student teachers with only one college supervisor had a less complicated set of requirements and the possibility of clearer, more direct connections seemed better. For this reason, student teachers in more than one academic area were eliminated from the study. Note that Biology and Integrated Science were considered one academic area because they were both in science and were both supervised by the same college faculty member.

Many of the student teachers were placed in small communities that were far apart. Time was a critical factor because the researcher was teaching and supervising a full load. Therefore, it was felt that time spent traveling was time wasted. Far flung localities were discarded and a close grouping among the study group was preferred to reduce nonproductive travel time.

Another factor that was considered was the rapport and level of trust that seemed to exist between the student teacher and the researcher. As noted earlier, trust is an essential component in participant observational research. The study subjects selected had to be students that knew the researcher fairly well, and both they and she felt that

open communication could be optimally established.

After this process of elimination, three student teachers were selected for the study. They were Jan, Phil, and Barney (all pseudonyms). Each one was contacted and briefed about the study. They were told that previous research about the effect and value of the student teaching experience were ambiguous and sometimes contradictory. It was explained to them that the majority of the research that had been done was quantitative and that this study was designed to look at the experience from a more descriptive or qualitative point of view. The study was described to them in terms of the requirements that would be placed on them and how they were above and beyond the requirements placed on other student teachers not in the study. Basically, they were asked to keep a more detailed journal than others (actually an audio taped journal), they were to plan to be video taped, expect to see more of the researcher than in a normal situation, and be willing to communicate openly with the researcher. All three of the student teachers agreed to participate in the study. They seemed eager to engage in the data gathering process and they felt that they might learn more about themselves in the process.

The student teachers were all placed in schools within the Salem School District, Salem, Oregon. Salem School District is one of the largest in the state. It is composed, at the secondary level, of five high schools, and

six middle schools. The curricular philosophy of the district mandates that the curriculum be lock-step. Each of the subject area classes in each of the schools are to be synchronized such that the same material is being taught in each corresponding classroom at the same time. For example, all biology classes in all of the high schools study plant anatomy at the same time. Thus, if a student were to transfer from one school to another within the district, they would suffer no interruption in their education since the new school would be studying exactly the same content as the old school. The match between philosophy and reality is closer in some schools than others within the district. Along with the lock-step curriculum, the district administers a self-generated, district-wide evaluation instrument to its students. These are administered by the classroom teachers, but results are collected and analyzed at the district level. The evaluation instruments were developed by teams of teachers from within the district. Print-outs of the test results are distributed to teachers and administrators in the district for various applications.

#### Background of the Study Sample

Jan, the only participant that was placed in a high school, is a young woman in her middle thirties. Born in Maine, she graduated from high school in 1972 and attended the University of Maine at Orono, entering as an education

major. She planned to become a high school biology teacher at that point. She transferred from Orono to the University of Main at Portland-Gorham in the fall semester of 1973. Her declared major was again in education. She attended there until the end of the fall semester, 1974. In the fall of 1975, she returned to the University of Main at Orono, but, instead of re-entering in education, she changed career plans and entered a two-year program in Animal Medical Technology. She said she let people talk her out of going into teaching at that point. She completed an Associate of Science degree in May, 1977 with distinction. Her grades had varied somewhat during these years, but she completed the Associate degree with a 3.20 GPA.

Over the next few years, she worked as a medical technician for veterinarians, married, and moved to Salem, Oregon. Once in Oregon, she continued to work in veterinary offices and teach medical terminology at Trend College, a small, private business college in the area.

In the spring of 1988, Jan entered Western Oregon State College where her goals were to complete her Bachelor's degree and become a secondary biology teacher. While at WOSC, she completed over 100 quarter hours of credit and maintained a 4.00 GPA. She completed a teaching major in biology and fulfilled the requirements for a Basic Certification in Secondary Education.

The school in which Jan was placed is the oldest high

school in Salem and draws students from some of the lower socio-economic sections of the city. The mix of students ranges from high-middle class to very low economic levels. The facility is well maintained and is functional for its age.

Jan was placed with two cooperating teachers. Both of the teachers were male, Mr. D and Mr. H, and both were near retirement. Mr. D had been at the school for his entire teaching career of 30 years. The teaching styles of Mr. D and Mr. H were similar. They were structured, but were continually trying to improve their teaching. On one of the visits by the researcher, Mr. D was in the preparation room trying a new technique for paper chromatography. His comment was "After 30 years I may find a way that the students can get good results."

The researcher has had several other student teachers with Mr. D and Mr. H. During the researcher's internship at North Salem, Mr. D had been one of her master teachers.

Jan was assigned to Mr. H's classes for two periods, second and third, and to Mr. D's classes for fourth and fifth. All four classes were Biology. They were sophomore level classes although they did have a few upperclassmen that had failed the class in previous years.

Jan is a small woman, slight of build, with blonde hair and a healthy, ruddy complexion. She is energetic and enthusiastic about life and all that she becomes involved in. As a hobby, Jan has worked in training and showing

dogs, a compliment to her work in the veterinarian's office. She and her husband live a quiet life-style. They are both interested in nature and have set up bird-feeders around their home.

Barney is another student who has returned to school in order to teach secondary science. He, unlike Jan, had previously completed a Bachelor of Science (B.S.) degree. He received a B.S. from the College of Forestry in Resource Recreation Management from Oregon State University (OSU) in June, 1988. While at OSU, Barney's academic record showed a student that faltered somewhat initially, but settled down to be a fairly successful student. His overall GPA was 2.53, reflecting a slow start, but a stronger finish.

Barney came to WOSC during the summer of 1989. He entered a special post-baccalaureate program culminating in Basic Certification in Secondary Education. His subject area was biology. While at WOSC Barney performed at an above average level in both his academic courses and his education courses. His GPA at WOSC was 4.00.

Barney was placed in one of the six middle schools in Salem District. It, at one time, had a bad reputation. The students were poorly behaved and discipline was lacking. In the last few years it has drastically improved its image. The students now are well behaved and seem to have a pride in the school. Teachers are supportive of the students and the administration is supportive of the



teachers.

Barney was placed with two cooperating teachers. One of them, Mrs. T, was a classmate of the researcher during their preservice training. She is a dynamic teacher and has worked with several student teachers from WOSC. She believes in hands-on and inquiry learning. Her classes respond well to her and meet her expectations.

Mr. S, the other teacher, has had at least one student teacher with the researcher previous to the term of the study. He is quiet, structured, and organized. His classes rely more on the lecture/worksheet format, but he does use hands-on to a limited extent. Students like him and he seems to genuinely enjoy them.

One unique feature of Barney's placement was that another science student teacher from WOSC was placed with the same two cooperating teachers. The placement of two student teachers in the same academic area in the same school with the same teachers is very rare in the history of the college. There is no policy against such an arrangement, but it has not been done.

In the mornings Barney taught two periods of Physical Science and in the afternoon he taught two periods of Life Science. The other student teacher taught the mirror image of Barney's schedule.

Barney is married with no children. He is in his mid-thirties. He graduated from a high school in Beaverton, Oregon, a suburb of Portland, Oregon's largest city, with a

GPA of 2.77. He is a quiet, introspective individual, tall, blonde, and insightful.

Phil, the third member of the sample group, can be categorized as being more of a traditional student. He was born in Idaho in 1967. His family moved to Eagle Point a few years ago. Phil graduated 28th out of 203 from high school in that small Oregon community. He entered WOSC the Fall quarter immediately after his graduation from high school choosing to pursue a teaching major in secondary biology.

Academically, Phil maintained between a 2.60 and a 3.27 GPA throughout his five years at WOSC. His overall GPA was 3.07 at the time he entered student teaching. In science, he maintained approximately a 3.50 GPA.

Beginning in the fall of 1987, Phil was a Resident Assistant in the college dormitories. This demanding job requires a blend of parent, big-brother, and counselor. It can be a time consuming endeavor, if done properly. Phil made every attempt to do the job properly. Phil continued his Resident Assistant duties throughout his student teaching quarter, the results of which will be included in the presentation and analysis of the data set. Phil was placed in a middle school in a lower middle class section of Salem with two cooperating teachers. He taught three periods of Physical Science with Miss W as a cooperating teacher and one period of Life Science with Mr. C as a cooperating teacher. These two teachers have

completely opposite classroom personalities even though each is considered to be a good teacher. Miss W is energetic, boisterous, and creative. She demands the best from her students and they respond to her. Mr. C is quiet, structured, and soft-spoken. He expects and gets the best from his students as well. Again, the researcher has had many student teachers with these cooperating teachers. Most of them have been somewhat older, more like Jan or Barney. Phil was the first traditional student teacher with whom they had been involved.

Phil was deliberately placed with Miss W. He had indicated during the methods class that he thought teaching would be easy. He felt that the short days, working with a subject he loved, and summers off sounded appealing. It was hoped that by being placed with Miss W and Mr. C, he would be forced to see that there is more to teaching than he expects.

Miss W was the most cognizant of all of the cooperating teachers of the goals of this particular research. She was a fellow doctoral student with the researcher at OSU and had attended the proposal meeting at which the research obtained departmental clearance. She voluntarily kept a written journal of her own as an additional data source.

#### Data Acquisition

The data set was gathered in several ways:

1. student teacher journals - frequent entries made on audio tapes or in written form which were later transcribed.

2. video taping of the student teachers in the class room actively engaged in teaching.

3. small group seminars - discussion were audio taped and later transcribed.

4. work samples - written documents that record what was taught for a 2-5 week period and report learning gains made by the public school students.

5. field notes made while observing the student teachers, or while talking to them at the school.

6. cooperating teachers - notes made while interacting with the cooperating teachers either in person or on the phone.

The student teachers kept detailed journals of their experiences and perceptions during their student teaching. They were given the option of keeping their journals in written form or making audio recordings of their journal on a tape recorder and blank tapes provided by the researcher. By the end of the second week, all three were using the tape recorders.

The student teachers were asked to make an attempt to make journal entries on a daily basis. They were encouraged to make entries even if they were tired or their motivation was low for any other reason. The results of this encouragement varied. Jan made entries on a daily

basis for a period of time. The frequency of entries decreased to one every few days. She eventually ceased making any entries. Barney faithfully made entries up to May 7, 1990 and stopped. He recorded a summary at the end of the quarter. Phil was sporadic. He sometimes made daily entries and sometimes made weekly entries. He also made a summary tape at the end of the quarter.

Once the quarter of student teaching was over, the audio tapes were gathered and transcribed. The researcher transcribed Phil and Barney's tapes. An assistant was hired to transcribe Jan's tapes. Once transcription was completed, the tapes were replayed and the accuracy of the transcriptions verified. The degree of agreement between the tapes and the transcriptions was high. It was felt that a high level of accuracy was needed in order to allow full use of the journals as sources of data.

The products of the audio taping varied. Jan recorded over 10 hours of tape and produced over 300 pages of transcribed material. Phil's transcribed journal was over 190 pages long. Barney was not as prolific. His transcribed journal was only slightly more than 40 pages long. Both Barney and Phil produced a summary entry in addition to the daily entries. Barney's was recorded just at the end of the quarter. Phil's was recorded about three weeks after the quarter ended. The student teachers seemed to feel comfortable with the taping process as evidenced by the fact that they stayed with it and that the tapes

displayed a conversational tone. One of the student teachers even told the researcher about a student that had a crush on him. They felt they gave more of themselves more accurately than they could in writing. Phil, after a particularly frustrating day recorded:

There's certainly something to be said for this tape recorder because there's no way I could get all of this emotion and all of this frustration and the tone of voice down on a piece of paper. There's no way I would have gotten half of it down before it leaks out because there's so much to say.

Each week, all of the journals, both written and recorded, were collected. The written journals of the student teachers not participating in the study were read and photocopied to be held for later reference. After listening to the taped journals of the participants, the tapes were held for later transcription.

Another source of data came from video taping. In all cases, the video camera was set up overlooking the room and the area where the student teacher would most likely be during the course of a teaching period. The camera was simply turned on and allowed to run on the widest possible angle.

Again, outcomes varied among the three study subjects. Phil produced the largest amount of video data. He was recorded for approximately 20 hours, representing 20 class periods or 100 hours of teaching time. These recordings were done throughout the quarter and accurate records of

class period, date and time were maintained. Each time Phil was to be video taped his cooperating teachers would place the video camera in the corner of the room, turn it on and let it run until the tape was depleted. In this way they captured Phil engaged in teaching and interacting with the students between periods.

Barney was recorded for a total of six hours, six class periods. In his case, the cooperating teacher was in the room operating the video camera. The teacher panned the room, focused on individual students, or used the zoom feature to focus on Phil as he was teaching or doing a demonstration for the class.

Jan was only recorded twice. The tapes were of two class periods. In her case, the cooperating teacher, Mr. H, placed the camera in the back of the room. During one class period he remained in the room and manipulated the camera. In the other class period, he placed the camera, turned it on and left.

The variation of commitment to video taping may reflect the level of comfort of the cooperating teachers with the taping coupled with a lack of desire to be taped on the part of the student teachers. Phil's cooperating teacher has always video taped the student teachers with whom she works and, therefore, simply carried on a tradition already established. Barney's cooperating teachers occasionally have used video taping in the past, but have expressed no conviction that the process is of

value. Jan's teachers had never employed video taping in the experience of the researcher.

The video tapes that were procured from the student teachers were viewed two to three times. The first viewing was simply a rapid one to get a feel for the general nature of the class and the set of activities that were recorded. Brief notes were taken to indicate major activity, laboratory, lecture, cooperative learning, and special points to be observed carefully upon a second viewing.

The second viewing, of all video tapes, was conducted more carefully. Notes were taken as if the researcher were in the classroom and taking observational field notes. These notes were retained for further use. A verbatim transcript of the video tape was not made. It was felt that the tapes were available for review at any time and, therefore, careful note taking would suffice.

A third viewing of the video tapes was done only if the student teacher in the tape had made a journal entry on that particular day. When that was the case, the journal entry was read and kept on hand during the viewing for reference. It was hoped that the objectiveness of the viewing would complement the subjectiveness of the journal entry. Again, notes were taken and held for later referral.

Student teachers at WOSC are required to take a three credit hour seminar concurrently with the student teaching. The seminar has a three-fold purpose. One purpose is for



topics that represent common concerns for the student teachers to be covered in a large group setting. The topics include the job search, legal issues, certification, and interview strategies. These common concerns are addressed in full day seminars. Spring term, 1990, these seminars were held on April 10 and May 8.

On each of the large group seminar days, one and one-half hours were reserved for the student teachers to meet in smaller, content specific groups for discussion. These same small groups met weekly throughout the quarter. In science, the group met at 6:30 p.m. on Mondays except for the weeks of the large group seminar. One meeting, April 30, was cancelled due to the illness of the facilitator, and Memorial Day, May, 28, a scheduled small group seminar was also cancelled. In review, there were two large group meetings and seven small group meetings.

The second and third functions of the seminar are carried out in a small group setting. These functions are (a) to provide guidance in the production of two work samples that are a requirement for student teaching; and (b) to provide an open forum for discussion for the student teachers. The opportunity for candid discussion of problems and concerns is the only chance student teachers have to learn about the experiences of others and share concerns with them. The researcher was the facilitator for the small group meetings.

All nine of the student teachers in science attended

the seminar, and they all brought their own experiences to the discussion. Since the forum was open, the subjects discussed were almost entirely spontaneous and generated by the student teachers. It was felt that this open discussion was a potential source for further understanding of the student teaching experience, and, therefore, all of the small group sessions were audio taped. Shortly after the taping, the material was transcribed by the researcher/facilitator. These transcriptions were carefully produced. Since the researcher was present at the small group seminars, she was able to record interactions in the form of field notes as well as interpret words or comments that were unclear on the tape recording.

Again, these seminars were attended by all nine student teachers; therefore, the interactions of the study group with the other student teachers was captured. Often a comment made by one student teacher would trigger a response by another. The transcriptions were held for later evaluation.

Work samples were used as a fourth source for data. The work samples were a requirement for student teaching. The state licensing agency, Teacher Standards and Practices Commission, requires the production of two work samples. The work samples must cover a period of 2-5 weeks each. In them, the student teacher must provide evidence that their students made learning gains during the teaching of that

material. The evidence is typically some type of pretest/posttest with analysis.

As part of the work sample, student teachers are required to describe the setting. It was felt that these descriptions would reflect some of the student teacher's attitudes and feelings about the setting. For that reason, the work samples were included in the study as a source of data.

Also included in the work samples were the daily lesson plans. The usefulness of the lesson plans was enhanced because student teachers were asked to evaluate each day's lesson on the lesson plan sheet. Since these lesson plans represented self-evaluation about the act of teaching, they were included in the data set.

The third part of the work sample that was included was the reflective statement. This reflective essay discussed what the student teacher had learned while teaching the work sample and what impact that would have on their teaching were they to teach the same material again. This information was considered to be a possible source of insight and was included in the data set.

Work samples were collected for Jan and Barney. Phil did not complete the work samples and, consequently, data from that source was not available for the study.

A fifth source of information was from field notes made by the researcher during on-site visitations to the schools to which the student teachers had been assigned.

The nature of the activity determined the type of field notes that were recorded. If the activity observed involved the student teacher in the classroom, then detailed notes were taken on the spot and then later transcribed. The notes included a description of the setting, the actions and interactions with the students, and the content that was covered. The transcriptions were added to the data set for later analysis.

If the student teacher was not actively engaged in teaching and the major activity was more of a conversational one, then notes were not written down on the spot. The researcher made mental notes of the conversation and, upon leaving the school, wrote a summary of the encounter with as much detail as could be included. These were later typed and included in the data set for analysis. Any other encounters with the student teachers including telephone calls, notes, appointments or spontaneous encounters were noted and included in the data set.

A sixth source of data came from the cooperating teachers. The cooperating teacher worked on a daily basis with the student teachers. Because of this close contact, they were able to provide their view of the student teacher's progress and their interpretation of events. Again, a level of trust must exist between the researcher and the person from whom the researcher is attempting to gain insights. In this study, the cooperating teachers and the researcher had developed such a level of trust as

indicated earlier.

Because of the long relationships established with these six cooperating teachers, discussion about the student teacher, their skills, their growth, and their experiences were open and enlightening. Although the original research design called for an open format interview with the cooperating teacher, time constraints on both the part of the cooperating teacher and the researcher prohibited such a separate interview. In their place, the researcher made it a point to speak with the cooperating teacher frequently and a record of discussions was maintained throughout the quarter.

Open interviews, as described by Bogdan (1972), are often of a conversational model. They are more open and less structured than those in quantitative research because the participants know each other and communication has already been established. There is freedom to follow spontaneous strands of thought that allow the researcher to exercise discrimination in the direction to be pursued. In practicality, the serial interviews carried out in this study possessed all of the characteristics of a one-time open interview with the participants.

## CHAPTER 4

### DATA ANALYSIS AND RESULTS

In a participant observational, Constant Comparative Model of qualitative research, there are two analytic procedures. The constant evaluation of incoming data during the data gathering phase of the research and the establishment of working hypotheses represents one process of data analysis.

A second analytic phase occurs at the end of the data gathering process and involves the evaluation of the entire data set. It is at this point that metaphors, models and analogies can be established that pull together the various bits of material into a cohesive picture.

Throughout the data gathering phase of this project the researcher was involved in the analysis of the incoming data and the generation of questions and working hypotheses that would be followed. For example, each week, after the audio taped journals from the research subjects and the written journals from the student teachers that were not part of the research were collected, the researcher listened to and read each one. This process allowed the researcher to develop an early perception of trends and/or concerns that were developing.

This continuing evaluation led, in one instance, to the discovery and documentation that one of the student teachers and one of his cooperating teachers held widely

differing perceptions of the sequence of events and the timing of encounters between them. Ultimately, this breakdown of communication caused a serious confrontation between the student teacher and the cooperating teacher. The initial breakdown of communication was followed by several more instances that followed a similar sequence of events. The observation and documentation of the initial case allowed the researcher to hypothesize that another event was imminent when events began to repeat themselves.

In another instance, one of the student teachers reached a crucial point where tensions and self-doubt had reached a critical mass and the possibility of withdrawing from student teaching was seriously considered by the student teacher. The researcher recognized the symptoms from previous experiences with student teachers. In the previous cases, several paths had been taken to resolve the crisis. The researcher was able to use previous experiences as possible outcomes and carefully observe the process of resolution with this particular student teacher. It was also possible to be alert to any manifestation of a similar problem with the other study subjects.

Final analysis of the data set was done during the summer immediately following the spring quarter during which the data were gathered. Both Bogdan (1972) and Patton (1989) suggested that a period of time elapse between the completion of data gathering and the final analysis of it. Bogdan suggested that

After a long period of intensive field work on a day-to-day basis one usually needs a period of a month or so of reading, contemplating, and rest before facing the task of reading and coding the many pages of notes and other data that were collected. While it is a good idea to take a break of a month or so, I think it is important, when possible, to tackle the analysis while the data are still fresh and exciting. (p. 59)

In the case of this research, approximately two weeks elapsed before transcription of the audio tapes and field notes began.

The amount of time involved with transcribing and proof-reading the material was significant. Each audio tape was transcribed and proof-read for typographic errors. Each audio tape was then played while the transcript was being read to insure accuracy of the transcriptions.

All field notes were typed and proof-read. These transcribed notes represented a rich description of the events that were observed in the classroom. Any conversations with the student teachers, their cooperating teachers, college supervisors, or others were also included in the data set.

Notes from the viewings of the video tapes made while the student teachers were actively engaged in teaching were not typewritten, but were retained in the original handwritten form.

Patton (1989) warned that

The data generated by qualitative methods are voluminous. I have found no way of preparing students for the sheer massive volume of information with which they



will find themselves confronted when data collection has ended. Setting down to make sense out of the pages of interviews and whole files of field notes can be overwhelming. Dealing with all those pieces of paper seems like an impossible task. (p. 297)

It must be noted that this researcher came to appreciate Patton's warning.

The final data set consisted of approximately 1,000 pages of typed material including journals, seminars, field notes, and 28 hours of video tapes with accompanying notes. Of the three student teachers, Jan was the most prolific, producing over 300 transcribed pages for her journal. Phil produced approximately 200 transcribed pages for his journal, while Barney produced 44 pages. Phil provided that majority of the video taped material.

Once all of the transcription was complete, all of the pages were numbered and the lines on each page numbered for easy reference at later stages in the data analysis. Two copies of the original set were then made as suggested by Bogdan (1972) and Patton (1989). The copies were color coded. Each source was given a color. For example, all of Jan's journal was on white paper, all of Phil's on goldenrod colored paper. Other colors were green for Phil, salmon colored for small group seminar, lavender for Miss W's journal, and yellow for field notes. The original set was retained intact as a permanent record.

The two sets of color coded materials were then arranged in two different ways. One set was divided by

source. In this set, all of the material from a source, such as Jan's journal, was kept together. The other set was arranged chronologically. In this set all of the sources for any one day were grouped together. Both sets were kept in notebooks for ease in handling. At this point, the chronological set of transcriptions became the working copy for developing and formalizing a set of coding categories. The researcher began to read the transcriptions and make notes along the margin. These notes were either possible categories, or comments about the content of the transcription. Since the categories were the crux of the data analysis, they were developed carefully. The entire data set was read at least four times, accompanied by further marginal notes before a serious attempt to establish definite coding categories was made. As the process described above was carried out, major themes began to emerge. For example, in Phil's journal, the theme of "locus of control" made frequent appearances. He waivered between comments like "If it's my class, then I'll darn well do what I want and, if they don't like it, then they don't like it" and "It's pretty clear that I'm not the one in charge here." Another category that formed related to the sense of fatigue the student teachers felt. Entries related to this category ranged from long discussions about what they had done that day and how fatigued they were to one entry by Barney in his journal that simply said "I'm really tired today." That

was his entire entry for that day. At this point, a first round of marking the working copy of the data set was done. Coding categories that had been established were noted in the margins of the working copy. As the copy was marked, new categories emerged and they were added to the list of categories. Some categories that were in the original list were discarded either because they eventually proved to be part of another category or because comments related to them actually belonged in another category that was formed later. The following is an alphabetical list of the final coding categories and a brief description of them. There are 81 categories. Some of them are strong categories meaning that the analysis of the data yielded many references to them. Some of them are weaker, holding few references from the data set. For a complete list and descriptions see Appendix B.

- Administrators/Administration
- Breaking away
- Campus/Seminar
- Cheating/Copying
- College supervisor
- Compromise situation of student teaching
- Confidentiality
- Content relevancy for students
- Content/Concept
- Cooperating teacher/Power
- Cooperating teacher/Locus of control
- Cooperating teacher
- Cooperating teacher intervening
- Discipline/Control
- End is near
- Evaluation of student teacher
- Evaluation of placement
- Expectations
- Extra credit
- Extra mile
- Facilities

Grades and grading  
Health  
How I feel about teaching  
Individual students  
Job hunting  
Life outside  
Loneliness/Isolation  
Make-up work  
Management  
Mid-course correction  
Orientation to setting  
Orientation to student teaching  
Other student teachers  
Other teachers  
Paper work  
Parents  
Personal  
Personal time on school  
Personal with students  
Philosophy  
Planning for teaching  
Preparation for teaching  
Relations with staff  
Relations with class  
Research  
Rules and policy  
Safety  
Self-evaluation  
Self-video  
Student abilities  
Student as catalysts  
Student attention spans  
Student attitudes  
Student behavior  
Student goals  
Student motivation  
Student reaction to lesson  
Student reading and writing skills  
Student reaction to student teacher  
Student responsibility for learning  
Student teacher's reaction to students  
Students have a history  
Substitutes  
Teacher tasks  
Teaching methods/Techniques  
Teaching responsibilities  
Test as a teaching tool  
Tests and testing  
The little joys ...  
The Wall  
Time  
Tired  
Values

Videos/Media  
What I did today  
When I grow up  
When I was their age  
Work samples  
Workload  
Worksheets

The coding categories represented patterns that formed from the data set. These patterns were the basic structure underlying the data analysis processes that followed.

Once the working copy of the data set had been copied, a set of files was established. Each file was marked with the name of a coding category. Then, the working copy was physically cut into segments that corresponded to its coding category. Each segment was identified by paper color so that its source could be identified.

Each segment was marked for its date and page number in the master data set. In this way, any cut segment could be located in the master data set and read in context instead of being just an isolated comment. Each cut segment was placed into its appropriate file based on its coding category.

By arranging the cut segment of the data set in this manner, three questions about the data could be answered very quickly. A first question is: Does the category pertain to all three subjects or does it impact one study subject more than the others? By looking at the cut segments in a category file, one could immediately tell if the contents were all colors (all data sources) or primarily one color (one data source). For example, the

"cooperating teacher/locus of control" file contains many entries. It, however, only contains segments that were the color of Phil's entries. This indicates that this category was a significant one, but only for one of the three study subjects. The second question is: Which of the 81 categories were dominant in the data set? By looking at the number of entries in a file, and determining the sources of the entries, one could determine if the category was strong (frequent entries), general (many sources), weak (few entries), localized (one source), or a combination of the above. For example, the category "campus and seminar" had only five entries. They were from all of the student teachers. It was considered a weak, but general category.

A third question that could be answered was: Does the category span the entire term or does it appear for a limited time for a part of the quarter? By looking at the dates of the entries in a given file, the range of time over which the category was active could be determined.

From this data set in its various forms, a picture emerged of the student teaching experience as perceived and lived by the three student teachers in the study sample. That picture is discussed in detail in the following section.

Before the data analysis was felt to be complete, the product, presented in the following section, had to be validated. During the course of the study and after, three activities were carried out to increase the probability

that the findings of this study are trustworthy. These activities were prolonged engagement, persistent observation and triangulation. Prolonged engagement was fulfilled by the length of the study. It encompassed over three months. In both Jan's and Phil's cases, it entailed a longer period of time. Both of them maintained contact throughout the following summer. Jan shared her changing perceptions and goals. She also shared her written journal from her previous field experience (a previous course in which there was limited classroom experience) the quarter previous to the study. Phil worked on his work samples throughout the summer, and, as of this writing, still had not completed them, but remained in contact with the researcher.

The requirement for persistent observation was met by the numerous times of encounter and the various settings. The study subjects were observed at the school while teaching, they were visited with both privately and in the presence of their cooperating teachers at the school, they were seen at the campus seminars, and were seen less formally through office visits and casual encounters. Triangulation is a validation technique that requires confirmation of an observation from more than one source.

Triangulation of data is crucially important in naturalistic studies. As the study unfolds and particular pieces of information come to light, steps should be taken to validate each against at least one other source (for example, a second interview) and/or a second method (for example, an observation in addition

to an interview). No single item of information (unless coming from an elite and unimpeachable source) should ever be given serious consideration unless it can be triangulated. (Lincoln and Guba, p. 283)

For this study there were several avenues for validation using triangulation. Validation was established using multiple occurrences within one source and between sources. On some occasions one student teacher validated comments made by another by repeating them within their journal. Sometimes validation occurred when an observation related at the seminar was met with supportive comments from the other student teachers. Validation sometimes occurred between a journal comment and a comment made during the seminar.

Sources for triangulation included the transcribed journals from the study group, the written journals of the other six student teachers, field notes made in the schools by the researcher, recorded comments made by cooperating teachers, video tapes of the study group teaching, audio tapes of the seminars, and a set of written journals that were in the possession of the researcher from previous quarters. These archived journals extended back several years.

The field notes kept by the researcher were of two types. One was a true set of field notes that represented a rich description of the events and interactions that were observed during a given visit. They were in narrative form. An example of the character of the field notes is



reflected by the following comments:

I couldn't see Jan in the room, but there was a sub. I didn't know him. I quietly opened the door and moved down the inner side of the room toward the front and into the prep room. Jan was seated at one of the desks. The room is tall and narrow with dark glass-fronted wood cases on each side. I thought, "she looks so small and defenseless."

I entered the room and said "Hi, there."

Jan did not jump, but looked startled as if I had broken a train of thought or had pulled her from a trance. She smiled and said, "Oh, hi."

The second type of record that was kept by the researcher was more the nature of a journal or diary. It was considerably more reflective than the field notes. The value of such a format was that it provided the latitude to attempt to find patterns as they were developing or to develop working hypotheses that were followed up on at a later time. One example of an emerging pattern came early in the term when the student teachers were beginning to turn in their recorded journals. On April 3, 1990, the journal entry was

It seems that the recording of the student teaching journals is going pretty well. Barney is very factual. He doesn't elaborate much beyond what happened in the classroom that day. Phil is more eclectic and is sharing more. Jan has the potential of sharing more information. It sounds like she is using the tape as an open forum for discussion. She doesn't feel there are any restrictions. She kind of lets herself ramble. I may get a better feeling from her journal of what she perceives about student teaching.

These observations, which were strictly hypothetical at the time, proved to be true.

The researcher's journal/field notes were used as a cross check on some occasions. In one case, Phil, his cooperating teacher, and the researcher had all commented about his fatigue. On one particular day the researcher had noted that Phil's energy level was low. Phil mentioned in his journal that day that he was tired and did not feel that he could work much that evening because of it. Miss W also noted in her journal that Phil looked tired that day. Verification from three sources indicated that the fatigue was real and important in Phil's work during that time.

Another aspect of data analysis in a qualitative study is the recognition of and the accounting for discrepant cases. Bogdan (1972) pointed out that

... data that are contrary to the main thrust of the emerging analysis are extremely important and are dealt with as such. It is by attempting to account for these negative cases that do not fit the general model being constructed that the model becomes modified and expands. (p. 62)

Erickson (1986) said

Discrepant cases are especially useful in illuminating ... locally distinctive subtleties. A deliberate search for disconfirming evidence is essential to the process of inquiry, as is the deliberate framing of assertions to be tested against the data corpus. This is classic analysis, termed analytic induction in the literature of fieldwork methods. Much of this induction takes place during fieldwork, but much of it remains to be discovered after leaving the field. (p. 147)

In the overall picture, experiences among the three student teachers represent a discrepant event. Jan and Phil both experienced rough periods during the student teaching quarter. Though the details and sources of disruption differed, they both suffered while student teaching. Barney, on the other hand, experienced an almost trouble-free student teaching. He never expressed the frustrations about the students or the setting that the others did. He shared the experience of fatigue, but he avoided the problems with discipline and behavior that plagued the others. It seemed that his placement and personality meshed extremely well. The reasons behind this discrepancy were unclear, but some possible causal relationships emerged from the data. These relationships will be discussed in the following section.

A final technique of qualitative research that was used in this study was the negative case. This technique involves the development of a working hypothesis and its ultimate rejection due to the existence of a contradicting or negative case.

During the course of the months of the study there were numerous times when ideas or patterns seemed to be emerging from the data. These patterns became a template against which later data were compared. If the new data fit the template, then the pattern was considered to be strengthened. If the new data did not fit the template, then the pattern was placed in question. As time went on

and new data continued to emerge, its comparison to the templates and the degree of fit determined if the patterns were real. Eventually, if new data continued to be contrary to the templates, it was assumed that the original pattern was invalid and it was rejected.

An example of such a process was reflected in the data set. Early in the quarter, Phil began making comments that cast Miss W in a somewhat unfavorable light. He said

She keeps imposing her goals on me.

If I have to please Miss W, then I will please Miss W. If I have to do it her way, then I will do it her way.

Because of frequent negative comments revolving around Miss W and because the other cooperating teacher, Mr. C, was never mentioned, the question arose concerning the motive behind these comments. A comment from the researcher's journal was

I wonder why Phil is having so much trouble with Miss W and not with Mr. C. Miss W is a fairly direct individual. Could it be that he is responding to her as a female? It could be that we have a male-female problem.

The working hypothesis developed that Phil and Miss W were having problems communicating effectively due to some gender related problems. Included in this hypothesis was the possibility that the problem resided with Phil and not Miss W because such attitudes had not been observed in Miss W during previous contacts with male student teachers under her supervision.

As time passed, new data emerged that contradicted this working hypothesis. Phil began to comment about Mr. C as strongly and caustically as he did about Miss W.

Mr. C said that I had to do things the way he wanted. There's only one way to do them, at least that's what he implies, and that way is his way. Well, okay.

I'll do things his way just so it doesn't make trouble.

Because of the mounting evidence that Phil had similar feelings of frustration about both of his cooperating teachers, the hypothesis of a gender conflict was rejected in favor of another hypothesis that proved to be more easily supported by the evidence. The new hypothesis was that Phil was having trouble communicating with both of his cooperating teachers, but since Miss W was more vocal and open with her criticism, she was a more frequent target for Phil's comments in his recorded journal.

### Results

The results of this study will be discussed in two ways. The first way will be an in-depth description of each of the three student teachers' experiences. It will be a synopsis drawn from the data sources available. It will be described from the point of view of the student teacher as summarized by the researcher. Where the perceptions of the student teacher and significant others differ, for example the cooperating teacher, these

differences will be documented.

After the individualized description is presented, a second way of looking at the data will be described. In this examination, similarities and differences across the set of student teachers will be discussed. It is from this analysis that models and analogies are drawn. Working hypotheses are derived that will suggest the direction of avenues of exploration for future research into student teaching.

The experiences of the three student teachers in the study sample showed many differences and several similarities. Each individual possessed unique characteristics grounded in his/her personality, goals, history, and perceptions. They were placed in schools with teachers that had unique personalities, goals, histories, and perceptions. The students that they encountered had their own histories and motivations. It is not surprising that many details of the experiences were special cases within that experience.

#### Student Teacher #1 - Jan

Jan was placed in North Salem High School in Salem, Oregon. With its high ceilings, cavernous rooms, and abundance of wood, it is the oldest of the high schools in the city. It serves a student body of 1,500 drawn from a wide range of socio-economic levels.

Jan was placed with two of the eight science teachers

in the school. Both of her cooperating teachers were in biology. Students are required to complete two years of laboratory science in order to graduate from high school in the state of Oregon. At North Salem, biology is a popular course with the students. Most of them take it in their sophomore year. Jan had a few students that were in the class for the second and third times, having failed in their previous attempts.

Jan's cooperating teachers were both males. Both of them were within a few years of retirement. One of them had been the researcher's master teacher during an intern year at North Salem during her preservice training. Mr. D and Mr. H's rooms are adjoining back-to-back through a small preparation room. The rooms are set up with a permanent demonstration desk at the front, a set of movable desks at which the students normally sit and a set of permanent lab tables in the back of the room. (See Appendix A for diagrams of all classrooms in the study.)

Both of the cooperating teachers were happy to have a student teacher. They had had student teachers from WOSC on previous occasions. Some had been very successful, some not so successful; however, Jan's placement was pre-planned and looked on favorably by Mr. D and Mr. H.

During the previous quarter, the researcher had attended a science faculty meeting and had asked if any of the teachers wished to have a student teacher the following fall quarter. Mr. D said he would and that "it had been a

long time" since he had one. Mr. H was a little more hesitant because his last student teacher had not had a very successful experience. He did, ultimately, say that he would be willing to try another student teacher in the fall.

In her previous field experience, Jan had been placed in an advanced high school science class in Salem that served a high socio-economic area in the city. The building was newer than North Salem High School. The teacher was younger than either of her student teaching cooperating teachers. Obviously, the type of student was different as well.

According to her journal from her previous field experience, Jan learned many things. Firstly, she learned to stop worrying about her grasp of the content.

I shouldn't be so worried about not knowing the content. I feel confident now that I could effectively teach a physical science course .... The content is something to be totally familiar with, but I realize now that, although it's very time consuming, I can prepare myself before the classes are presented.

She learned that her presentation style was formal and felt that she might need to develop ways to fit her style to the teaching situation in which she found herself.

I also learned that I am very formal in my presentation of material. I think I need to learn how to vary my style to fit the class, but it was what I felt comfortable with considering the abilities of the students I was with.

She learned that input from other teachers either as



sources for new teaching ideas or simply as a support group is important.

Interacting with the other teachers was also very helpful. They tried to help me through all the ups and downs and were very encouraging.

She closed her journal by saying

I really enjoyed working in this classroom with what I consider to be a great teacher. I learned how science can be fun and very challenging at the same time. ... I will always remember this experience in the most positive of ways.

During the week of vacation between Winter and Spring quarters, Jan met the cooperating teacher from her previous field experience outside of the school. He asked what she was going to be doing. She replied that she was going to student teach. The teacher groaned and told her that, when he did his student teaching, it was the worst three months of his life. With this mix of enthusiasm and foreboding Jan waited the week and went to North Salem High School.

Jan was given periods 2, 3, 4, and 5 to teach. Periods 2 and 3 were from Mr. H and periods 4 and 5 from Mr. D. On the first day in Mr. H's classes, she walked into an on-going laboratory on dissecting the fetal pig. On the second day, Mr. H was gone and she had her first encounter with a substitute.

Over the course of the quarter, Jan had several experiences with substitutes, more than either of the other two student teachers. On her first encounter, March 27, 1990, she had the option of teaching her assigned classes,

but relinquished the class to the substitute and acted as a helper. Excerpts from her journal read

The substitute taught the class. He knew the kids .... I thought it was very chaotic and I didn't feel comfortable stepping in so I just circulated. ... Things got very out of hand in my estimation. I heard things got worse 3rd period so I guess I helped some, but it was not encouraging at all.

By May 1, 1990, she had had more experiences with substitute teachers and was expecting one the next day. Her attitude toward working with the substitutes had changed.

Mr. D is not going to be here tomorrow so I'm interested to see what the substitute is going to be like. It's not a problem now because I feel like it's my class. The substitute is just there watching my teaching style, and, if he doesn't think it's the best, well, it seems to be working for me.

On May 8, 1990 she said in her journal:

I hope that the substitute we had in Mr. D's class isn't the one we have tomorrow. If so, I WILL do it my way.

By May 8, 1990, she had developed almost an insensitivity to the substitutes.

... one day we had subs in Mr. D's class and subs in Mr. H's class and I'm in the little workroom in the back ... it was just like I was in the middle of two classrooms with 60 people yack, yack, yacking. It was incredible. I thought "what's going on?" and I peeked in and "oh, subs."

Jan was well aware that there was a strong possibility that she would be substituting upon completion of her program. She always talked to the substitutes, asked them

questions about their experiences, and tried to learn enough to determine if she would be able to do it.

Well, I talked to the subs, it's kind of funny because you get to talk to them, and I asked them how they liked it. Usually I ask them after one of those wild classes. They seem to be quite resilient about it, "oh, no problem."

As far as her feelings toward student teaching, Jan had what might be termed a roller-coaster experience. One day would be a smooth, rewarding time and the next would be a down-turn due to student behavior, attitudes, or simply due to her own self-evaluation. Through all of the short-term ups and downs, a larger pattern emerged. It is documented by the following excerpts from her journal and seminar notes.

On the Friday before she was to take over her classes (March 30, 1990), she recorded in her journal:

I didn't sleep ALL night - I kept reviewing lesson blocks, anticipating student responses and literally making myself sick. I got up at 2:00 for Advils and water hoping my head would stop pounding and thinking before 6:00 am. It didn't but by 7:00 my headache was gone and I somehow made it out the door.

In seminar the following Monday she said:

That was my first week. I'd go in there all excited and then all of a sudden, ugh, I've got to get up there? [her voice indicating a real hesitancy to do so]

May 1, 1990 she recorded:

Actually, I'm feeling better about student teaching. I'm enjoying myself immensely

now. I feel like ... because I spent after school and all weekend, I'm planning out ahead of time. ... I feel really good about what we're going to be doing each day. ... It's going much easier, and so I have a chance to relax and maybe watch baseball while I'm grading papers. ... The first three weeks I was teaching, it was just survival, keeping my head above water. Now it's enjoyable.

On May 4, 1990 she recorded:

Today is Friday. I didn't talk yesterday. I'm real tired. As a matter of fact, today I disliked very much being a teacher. I'm not sure if it's just because of the weather, or because of my classes, or what it is.

On May 14, she recorded:

Well, this is Monday. ... I had the most horrendous weekend of my entire life. I got into a mind set where I worried about everything that was going on from Friday. I slept three hours, grand total, all weekend. [I] seriously was considering checking into the hospital. ... So today I couldn't make up a lesson plan for the week, this weekend, I was almost in a coma, worried and sick and nervous, and I actually didn't think I was going to make it in on Monday.

On May 18, 1990, she recorded:

Wednesday was exhausting, but not too bad. Monday I didn't sleep too well. Monday night I felt a lot better and I know I didn't sleep well because I was wound up from seminar. Tuesday I didn't sleep well .... Wednesday I slept somewhat better. All in all it was a good week and I don't feel quite as bad .... I'm still kind of feeling like who would ever want to do this in their right mind. Who would ever want to teach a bunch of kids like this. I only have four classes. I can't imagine having six classes of the same thing going on all day long. I wouldn't be able to function after five.

At seminar on May 21, 1990, she was told by another

student teacher that she had thought about her all week. Her response was "... it was a struggle, but I got through it. It's still not good."

The weekend of May 12, Mother's Day weekend, was a critical one for Jan. That Friday she had a confrontation with a female student in her 4th period class who was defiant when she was asked to sit down. When the student turned in her test, she had written a note to the effect that she saw absolutely no relevance for biology, she didn't like it, and nothing the teacher did would make her like it. At first Jan set the incident aside, but, as is documented, it continued to work on her subliminally.

By Monday, May 14, 1990, she had resolved some of her conflict, but at a cost. She lost four pounds over the weekend. She got only three hours of sleep. She recorded in her journal:

I couldn't eat, was totally devastated,  
couldn't get it out of my mind, couldn't  
function.

Jan reached out for help. She did not contact her college supervisor. Had she wished to reach the researcher, it would have been impossible because she was out of town. She contacted her sister who is an elementary teacher in the Salem School District. Her sister's experience and guidance were sources of strength and logic during her crisis.

She told me that what I needed to do was  
make a plan. Just start a plan of what  
I needed to take steps doing [start

planning what steps to take next], and that I couldn't deal with this alone. I had to get some support and I had to let people know what was going on. ... She encouraged me on and said that people do this, and years later, you know, you could teach for fifteen years and you're going to hit The Wall again. So there's never any end to that. But, once you've done it, you know you can get through it.

Jan went through a process of self-evaluation. She wrote down what she thought she was doing right and what she thought she was doing wrong. She tried to follow her sister's advice and plan for the following week with limited success.

I was definitely over emotional about it, and I was definitely hard on myself, but most of it was a big giant ball that just snowballed to the point that it was just out of my hands. My body was in emotional shutdown. I couldn't do anything about it three days. Friday night was bad. Saturday was the absolute worst. Sunday, I made some progress because I made some plans ....

After the weekend of anguish, she did return to the school.

I'll tell you, everything this morning (Monday) was a step forward. Putting on clothes. Taking a shower. I didn't think I was going to make it. I tried to eat. I ate a banana at 4:00 this morning, and I tried to eat a piece of toast so I'd have some energy this morning. I could just choke down two bites.

I did it to myself, and I know I did it to myself. It's horrible to hit The Wall, but I'll never, ever let that happen.

Now I know you can't do it alone.

I learned one valuable lesson, I will never, ever, ever leave on a Friday in the

condition that I left last Friday. If it means going down to the office and talking to the principal, and crying on her shoulder, or finding another staff member, I can't deal with this on my own. I thought I would be able to forget it, and I couldn't.

Ironically, on Monday, when Jan spoke to the student that had been defiant, the student told her that she did not mean to attack Jan personally, she had just been having a bad day.

So, here I find out I almost ended up in the hospital because I was worried about dealing with one student who was having a problem, and it wasn't even related to anything that I did, or could have changed in any way!

During this period of stress, that Jan called The Wall, there were other sources of support. Her cooperating teachers, especially Mr. D, helped her through.

I think that Mr. D really realized I was on eggs today (Monday). He saw me on Friday crying, so he knew that it was really hard. I explained to him this morning that I almost quit, and that I wasn't even going to come in, and I was counting up the days to see if I could quit and still graduate. He said "Well, I know I told you not to worry, but I want you to know that we're always here. You need to talk it out before you go home, and you need to leave it here, because you can't do it again. We're here for you. You've just got to ask to get help."

Mr. H, Jan's other cooperating teacher was not quite as perceptive. On the researcher's last visit to the school at the end of the quarter, Mr. D mentioned that he was pleased that Jan had "stuck it out" and had not quit.

Mr. H's eyebrows went up and he said, with a gulp, "Jan almost quit? When?"

She also got encouragement from another teacher in the faculty lounge. This teacher told her of his experience in a new school. He had been teaching for seven years and was transferred within the district. One of his classes drove him to tears as well, and he pulled through. He told her that he enjoyed teaching now. This discussion gave her hope as well.

Interestingly, Jan, who had been extremely dependable in making journal entries, producing over three hundred transcribed pages, stopped recording as of May 21, 1990. This fact is not to suggest that she abandoned her commitment to the project, on the contrary, she continued to communicate with the researcher, but she did so through the small group seminars and personal communication rather than through the audio taped journal.

Jan's cooperating teachers played a strong, but subtle role in her student teaching. They never demanded that Jan teach their way or use their lesson plans. They encouraged her to explore on her own, but were there as resources for her. Even so, she never truly felt that she had achieved peer status with them. When asked about three quarters of the way through the experience whether she felt more like a student or a teacher, she replied "neither." All through her time at North Salem High School, she never called either of her cooperating teachers by their first names.



Every reference was of Mr. D or Mr. H, never their first names.

She said at one time that some of this feeling of formality was due, not to lack of warmth among them, but more because of their age and experience. She respected them. The three did have a good rapport among themselves, however. On April 23 she recorded:

Mr. H and Mr. D are much more relaxed with me now, and I feel that things are going much better. Learning [about] somebody in the beginning, and plus they must have been feeding off my nervousness and thinking that I was really nervous. Now that I'm more relaxed, they're more relaxed and I'm getting a lot more information out of them.

Jan spent a good deal of time thinking and talking about what she was teaching. One of her major goals was to make the subject matter interesting to the students and of some relevance to them. In the segmented data set gathered for this research, the file entitled "Content Relevancy for Students" is comprised almost exclusively of comments from Jan's journal.

Jan made an effort to learn about her students. She wanted to mesh their interests and abilities with the material to be learned.

... they probably won't be reading newspapers. I need to make an impact and make it (ecology) seem important to them in some way.

I think I'll try to focus on local issues and just ecosystems here in Oregon instead of going out of the state to describe different areas. I think that for the additional information I'll try to stick

right in their own school yard, in their own back yards because they seem to be not really thinking about other issues. I don't know if they don't care, they just don't seem to like it, or that it pertains to them at all.

I know there's one student that's very much into hunting. If you even mention eastern Oregon he'll perk right up. Well, he's probably the lowest scoring student in the classroom. So, I've been trying to use examples of things in eastern Oregon because then he'll listen.

As far as behavior (as a topic), I think I'd rather focus on something that they may have more experience with. That's kind of why I wanted to go to human behavior rather than something like birds, or grey legged geese because they could kind of compare humans and primates.

She was constantly baffled by the lack of motivation she saw in the students. She recognized that peer pressure among the students was against her.

They're so easily distracted. Peer pressure is a big, big factor in those two classes (4th and 5th periods). A lot of times what I do has little influence because peer pressure is so strong.

She also recognized that socialization was a strong motivator for the students. She was keenly aware that, if given the chance, the students would talk among themselves rather than remain engaged in the tasks of the classroom.

I'm trying to find out what motivates these students. It's pretty difficult when what really is motivating to them is socializing.

My findings are that they spend an awful lot of time socializing, and despite how many times I remind them of the clock, and that I was going to grade hard on the labs,

they don't really seem to care about their grades.

Jan learned that she needed to plan around the effect of the need for social interaction. When she realized that she could not reassemble the class after they had been released to work on their own, she adjusted to it by not releasing them until all pertinent business of the class had been accomplished.

Part of the problem rested in the fact that it was Spring quarter, the end of the school year. This situation, completely out of her control, frustrated Jan. She noted:

I feel like I'm beating my head against a brick wall. No one seems to want to learn anything and they're not concerned about their grades AT ALL.

They just don't seem to have any interest in ... as far as they're concerned, it's over. They finished it. They don't have any interest in finding out where they're wrong or learning anything.

I'm worried. How can I teach these students anything with the attitudes some of them have? I really am concerned. How can I make any difference at all in the last nine weeks?

Jan felt many pressures during her student teaching. She worked long hours during the weekends and in the evenings. The only time she mentioned her spouse was when he commented that she looked tired. Her journal entries frequently included comments about fatigue either due to lack of sleep or because she had been so thoroughly involved in her teaching.

I was really tired today, all day, because last night, actually all Thursday nights lately, I haven't been able to sleep real well. I'm not sure what in my schedule is keeping me up on Thursday night. Last night I watched the clock turn from 1:00 to 5:00 to 6:00 when I got up.

All in all, I just am exhausted. When I came home today Rod (her husband) said I looked like I'd been wrung through a wringer. That's just how I felt.

The reason I didn't talk about it (the day before) is I came home and I was just totally exhausted. I ended up coming home, taking a walk with the dog, and getting some more greens and pine cones and things for the labs. I got home late, about 6:30, and, by the time I finished getting everything together, I just fell into bed at 9:00 and didn't talk to the tape recorder.

Jan was keenly aware that the student teaching experience was important to her future in the teaching profession. Although she had good rapport with her cooperating teachers, she was aware that their opinion of her teaching could have an influence on her future.

Even though she was planning to look for a teaching position for the following year, she was not able to put energy into setting up a placement file and establishing her credentials. She plainly did not have the energy.

... and I don't know if it is a good feeling or not, but I get the feeling that everything rides on your student teaching experience. You want to do a good job, and do the best job you can because you may get recommendations that get you a job. But, on the other hand, I'm trying to do the best job I can ... so I don't need the extra pressure of knowing that my future job is going to depend on how I do in this student teaching situation.

I guess I just don't need the added pressure thinking about a job right now. I know I should be thinking about it all along because what I'm doing today may influence later on. It may be a recommendation or something I could use. I hope it's not too late at this point. I will keep my feelers out ... but as far as actually going out there and pounding the pavement, I hate to market myself in the condition I'm in right now because I just really don't know what the day is going to bring, or what tomorrow is going to bring. I feel like I'm trying to juggle too many things.

At the end of the quarter, Jan was not totally convinced that she wanted to teach. She was not concerned about the quality of the recommendations she would receive from her cooperating teachers. She simply was not sure she could meet the demands of the profession and meet her own high goals. She knew she had other employment avenues open to her. She contemplated the possibility of substituting. Over the summer, she had many applications, but she waived over completing them.

Immediately after student teaching she and her husband went on a week-long trip. They went to a wild life preserve in a remote part of the state. Upon their return, she wrote a note to the researcher saying that she was "ready to beat the streets" for a job now. At last contact, she was preparing for an interview for a high school biology position in one of the smaller school districts near Salem.

## Student Teacher #2 - Phil

Phil was placed at Waldo Middle School (Waldo) in Salem, Oregon. The school was built in the 1960's or 70's. Its one-story design gives it a sense of space. The science classrooms are designed with open space in the middle for individual student desks or tables with counter space on the periphery of the room that can be used for displays or as space for students to carry on laboratory activities. The rooms are dominated by large, raised, and fixed demonstration tables at the front.

Phil was assigned to two cooperating teachers, Miss W and Mr. C. They had both been teaching for quite some time. Mr. C was nearing retirement age while Miss W was at about mid-career. Their rooms were adjoining through a small storage room that also served as Phil's office for his quarter of student teaching. The personalities of the two teachers were reflected in the type of displays and ancillary materials they had distributed about the room.

Mr. C's room was well-ordered. The front demonstration desk was clear of miscellaneous materials. He had posters on the walls that pertained to his subject, Life Science.

Miss W's classroom was less ordered. In every corner there was some science-related object or poster. A skeleton resided in the front of the room. It sported a red bandana and hats that were confiscated from boys in the class. (It was against school rules for boys to wear hats

in the building.) She frequently had her pet iguana sitting on a heating pad in the back of the room. There were toothpick bridges that had been constructed by students in past years displayed on an iron beam that ran across the room.

In previous years, the researcher had had several student teachers placed with these two cooperating teachers. Most of them had been non-traditional students. Of the last three, all had been older than average. Their student teaching experiences had involved a great deal of close work between the cooperating teachers and the college supervisor, in these cases, the researcher in this study. In all of these three cases, the student teachers successfully completed student teaching and all three are currently teaching in Oregon.

Miss W specifically requested that her next student teacher be a "normal" one. When asked what she meant by the word "normal," she replied, "One that is younger, not a returning student." In response to her request, Phil, a young man in his early twenties, was placed at the school for his student teaching.

In spite of Phil being a "normal" student teacher, his student teaching experience was not a particularly rewarding one for him or his cooperating teachers. It was fraught with unmatched expectations between them, mis- or non-communication between them, and power struggles that would surface intermittently. The result of the experience

was that Phil chose not to seek a teaching position for the fall of 1990; and, as of this writing, he has not completed the written requirement, the work samples, for the quarter, thereby failing to meet the requirements for graduation. He worked over the summer in a city park in Portland, Oregon, and, at last contact, was pursuing long term employment with the Oregon State Police. Phil's experience proved difficult to report because his own feelings vacillated frequently. The seesaw effect can be seen in the following dated quotes from Phil's journal which reflect his feelings about his cooperating teachers and the control of the classes he taught:

April 19, 1990 - I decided that, if they're (the cooperating teachers) gonna tell me it's my class, then, by golly, it's gonna be my class and I'm gonna do what I want, and I figure, if somebody had a problem with it, I would justify it afterward rather than ask permission first.

May 3, 1990 - ... and then she turns around and puts her goals upon me. Fine, if it's her goal, great, and, if that's what she wants me to strive for, great. ... but it's not my goal ....

May 11, 1990 - ... and, if Mr. C says that right now I have to please him, well, right I will please him and run the class the way he wants it run.

May 23, 1990 - I'm not Miss W and I'm not going to teach my damn class like her. There's just no way that can be expected.

May 23, 1990 - And another thing I need to do is get up the nerve to tell (Miss W) that I'm gonna do it the way I'm gonna do it and I'm not gonna put in 20 hours a day for this damn student teaching



experience.

July 23, 1990 (Summary Entry) - The negative part of the experience comes in with the interaction with the cooperating teachers and the time that was required, and, I guess, again, I think that some of that time requirement ties back to working with the cooperating teachers.

I still think I can do it because I don't think the general flaw lies just within myself. The problem that I had, the flaw that I had, was working with the system that I was placed into.

Generally, the problem between Phil and his cooperating teachers was one of communication. Phil was a quiet individual. He shared his feelings only with people with whom he was comfortable. It was fortunate that a high level of trust had developed between Phil and the researcher. If this had not been the case, his journal and other modes of sharing would not have been enlightening in relation to this study. Because of his openness on the tapes and his hesitancy to talk openly in one-on-one encounters, the taped journal probably acted as a vent for frustrations and emotions he would not or could not share any other way.

An example of the differing perceptions of situations based on communication can be presented in a series of events that occurred at the first part of May, 1990. Miss W was concerned that Phil was not keeping up on his grading of student work. Her journal entry reads

May 1, 1990 - Asked Phil for a list of students missing assignments. He needs

to keep up on his records - and call parents.

May 2, 1990 - Still no list - I'm not sure if he isn't caught up or what.

May 3, 1990 - No list yet.

May 4, 1990 - Everyone visited today. He seems to be doing okay until I asked if he had called. Phil hadn't called any parents - he needs to do this. I'll try to encourage him to get going. His lists weren't up to date. Geez, this is totally unacceptable. I need to know that the students are keeping up.

On May 4, the researcher visited the school. She arrived at the end of fourth period, just after Phil had finished teaching his last class for Miss W that day. While she was speaking with Phil in the prep room that served as his office, Miss W came in and spoke to both of them. She seemed a little flustered, but the researcher was not sure why. After a few exchanges, she asked Phil if he had "the list." He replied that he did not have it completed. At this point, Miss W became animated and said, "you need to have that done. I have waited and now I need it. The students need to know where they stand." She continued to explain that the paper work and grading were as much part of teaching as the actual classroom time. Phil sat in his chair with a neutral look on his face, but his color was rising. When Miss W finished and left the room, Phil looked at the researcher and said, "We'll talk after school about that. We'll talk about it." He seemed upset, but would not discuss the matter further.

After observing Phil's life science class (Mr. C's),

the researcher sought out Miss W. At this time, Miss W explained that the list of deficient students had been requested several days before and that Phil had not produced a complete list. The list he gave her was incomplete and not up to date. She had tried to use the list as a data source for talking with students individually and had encountered so many errors that she abandoned the activity. She commented that Phil seemed to be tired most of the time. Indeed, her journal is replete with comments relating to Phil's appearing to be tired as evidenced below.

April 20, 1990 - Phil seems tired.

April 24, 1990 - He looks tired.

May 10, 1990 - He looks tired

May 21, 1990 - He really tried to sneak out of teaching today - maybe he's tired.

Phil's perspective of the sequence of events is somewhat different. In his journal of May 2, 1990, one day after Miss W reported that she had asked Phil for a list of names, his journal reads as follows:

After class I kept myself busy until about 3:30. Couldn't find Miss W. I figured I could get out of there by 3:00 and get home to make some phone calls and stuff I needed to do and then, just after 3:30, Miss W came back and said "you need to get me a list by tomorrow of people that have more than three assignments overdue." And I went 'oh, great' because I knew there were quite a few who hadn't finished it last six weeks.

I was there until 6:30 going through who had assignments overdue .... Then I went through the roster of all the kids in school

... called parents ... So as much as it was a pain to do it, it wasn't negative to have made the calls, but it certainly would have been nice to have been notified before 3:30, when I was ready to go out the door that I needed to do this and I needed to make phone calls tonight and everything else.

Comparing Miss W's journal entries quoted above, and this entry alone, one can determine that the dates do not match up. Miss W reported that she first asked for the list on May 1st, while Phil's entry shows he was not aware of the request until late on May 2nd. Communication appears to have broken down.

According to Phil's journal, he made up the list of students with delinquent assignments and called parents on the evening of May 2nd, but according to Miss W's journal, she was under the impression that he had not even made up the list as of May 4th.

This breakdown of communication occurred at least two more times throughout the quarter. One incident dealt with lesson plans and one with the disappearance of equipment from the school. All of the cases seemed, from Phil's perception, to be centered around Miss W, and not Mr. C. It is the opinion of the researcher that both Miss W and Mr. C were involved in the situations. Mr. C, on two occasions, talked to the researcher about concerns related to Phil's student teaching.

May 1, 1990 - I'm a little worried that he is not keeping up with things. He seems tired and distracted sometimes.

May 31, 1990 - I'm just afraid he doesn't

understand the commitment to this job. He doesn't seem to give it first priority. He is always late or behind on what he needs to get done.

Such concerns were either not communicated to Phil, or he chose to ignore them. At any rate, they never surfaced in personal conversations between Phil and the researcher nor did they appear in his taped journal entries.

Lesson plans were a constant source of frustration for Miss W. Her journal entries reflect her concern.

April 23, 1990 - Phil needs to work on pacing his lessons.

April 26, 1990 - Phil needs to get organized. His lessons need to be tighter.

April 30, 1990 - Phil did his plans. They need to have more substance. He needs to break away from my lesson plans and do his own thing. ....He has activities planned, but not under objectives. If I ask why a certain lesson is important, it usually comes down to the point of "because I said it was." Maybe just maturity.

May 18, 1990 - Phil is still not completing his lesson plans in a complete fashion. Doesn't write objective, so his lesson today just floats around the objective without a true conclusion.

May 29, 1990 - Didn't have lesson plans today. I told him he needs to have his plans completed before he teaches. He was angry, but went back to his desk and did the best lesson plans he has done all term - complete and neat.

Miss W felt that she was clear about her expectations for lesson plans. In a conversation with the researcher, she reported that she had "requested that Phil put more substance in his lesson plans." She felt that he

was under-planning and that was leading to long periods during the class periods where no teaching was occurring.

On April 4, 1990, she reported in her journal

He [Phil] spends too much time at the beginning - needs to get students started on notes, then do the roll sheet.

Phil was never quite sure what Miss W wanted for lesson plans. From early in the quarter, his perceptions differed from his cooperating teachers'. On April 16, in large group seminar he remarked

I have one more pet peeve before we go on. Remember Block? I had it last term and we learned all these things about how to write lesson plans the right way and use behavioral objectives. "The student will ..." or something observable. I wrote out all these nice objectives when I first started doing lesson plans. It was like, "well, that's not really what I want. I want like big generalized goals, statements. The student will understand how to balance equations." Okay. If what they say is true, that, if you don't use something, you'll lose it, well, it's gonna be gone by the end of this term, guaranteed. Because it's not what either of my teachers want or use.

Phil did not mention that Miss W was communicating a problem with lesson plans after that point. The only time he mentioned them again was on May 30, 1990. (Miss W's journal reports this incident as having occurred on May 29, 1990.) On that day, Miss W asked to see his lesson plans for the day.

I went to get them. She followed me in. I couldn't find them anywhere in my grade book. I was sure I had put them in there this morning. Apparently, I left them in my desk, and .... It went on and she said

"oh, if you don't have them, you can't teach today." At first I was insulted that she didn't believe me that I had done the lesson plans and I was hurt that she would just take it away .... So I, at that point, said "okay, well, whatever. I will go and sit down and write whatever I had planned for them to do and I will present that to you and .... Do with it what you want." ... I wasn't going to fret over it any longer than I had. ...She did have me teach. It went really well.

Miss W's entry concerning the same incident was as follows:

May 29, 1990 - Didn't have lesson plans today. I told him he needs to have his plans completed before he teaches. He was angry, but went back to his desk and did the best lesson plans he has done all term - complete and neat.

Phil was concerned about how others perceived him. On May 31st Phil made an entry into his diary expressing a concern and curiosity about what people said about him in private.

Maybe an insight, this may just be my warped personality, or maybe I'm just suspicious, but I wonder what people say about me; both Mr. C and Miss W, and, particularly what they say to you as a supervisor, and other people. ... It's not so much that I think people are saying bad things about me, but things that are being said, you know, it would be nice to hear the good things that are being said and also things that may not be mentioned that would be good criticisms for possible improvement.

Phil's concern about what people were saying about him proved to be prophetic. An incident occurred during the quarter that impacted his trust in both his cooperating teachers and the researcher. From the cooperating

teacher's standpoint, it cast a pall on the quarter that never cleared. For the researcher, it severely taxed the parameters of the participant observational study by allowing only observation of the events and prohibiting intervention. For Phil, it was a personal insult and the penultimate negative blow in his experience.

On May 14, 1990, the researcher met with the WOSC faculty member that had taken over the supervisory duties for the three student teachers in the study group. He asked if she had been out to the school at the end of the previous week. When she replied "no," he suggested that she go out and ask what was going on. He did not elaborate. He left the comments at that point.

On May 15, 1990, the researcher visited the school. During the course of conversation, a concern of Miss W's emerged. Several triple beam balances were missing from the school. Another student teacher had reported that she saw someone loading them into a van and that that person looked like Phil. Miss W had talked with the other student teacher, with Mr. C, and the principal of the school. Phil was only a suspect. The evidence against him was circumstantial, and no formal accusations were made. None of the school personnel confronted him with their suspicions at that time. The researcher could not react as a supervisor. If she could have, she would have intervened to bring the suspicions into the open and work them out. Instead, as an observer, she could only document how the



situation was handled and how the different participants behaved. The original design of the study, and the rationale for removing supervisory duties from the researcher, proved to be well-founded.

Phil knew nothing of the suspicions held by his cooperating teachers until June 5, 1990. At that time, he was formally observed by Miss W, and, after the observation, they engaged in an oral review. During that review, they engaged in a discussion about some pieces of electronic equipment that were missing the day before. When Phil asked if Miss W thought he had taken the electronic equipment,

she said 'no, you need to take better care of things and make sure that the students are getting them back.' And, no, she didn't think that I had taken the voltmeter, but, and this is what really totally caught me off guard and really upset me, she mentioned the fact that back about Mother's Day time and the week before that, when there were some triple beam balance scales missing, I think about 6, ... that I had been a suspect, and totally unbeknownst to me, apparently some other student teacher had mentioned that they saw a student teacher loading one into the back of his van. ...Further, it came out that it was discussed with you [the researcher], and I assume Mr. C, and also with Mr. M [the principal], and I don't know if it was discussed with the vice principal .... I feel like I haven't been tried so I'll be assumed guilty, or, if there's ever a doubt, ... they don't know for sure that I didn't take those.

Maybe I'm just being paranoid again, but I seem to recall that some point back I made an entry about being concerned about the things said behind closed doors. Then I was referring to the things you, and Mr. C, and Miss W would be saying, but, oh, I guess that applies because you were aware

of it.

I don't know what more I can say about it. I don't think it was very fair of Miss W not to mention it, and I honestly don't think she would have said a damn thing about it, if I hadn't asked about the voltmeter. ...I feel something was kept from me that I needed to know.

The feeling of hurt and breach of trust remained.

Even in his summary journal entry of July 23, 1990, his last comments were

I'm still pretty ticked at not being told about the balance that I supposedly walked out with from the school too. It concerns me that I might have been prejudged and left with the conclusion that "Phil took it, probably, but we can't prove it" .... I still believe that, if I hadn't asked her or been concerned about the missing ... stuff from the electricity unit, that nothing would have ever been said and I would never have known, and that's not what I would conceive of being fair to another person. I think that it's fair to let somebody know. It's not fair to let them go on and be unaware that they were a suspect or are a suspect or whatever the case may be.

The official college supervisor, the mathematics faculty member, was not involved in this incident. He did not interact with the school staff nor the student teacher. The researcher explained that she could not intercede and act as supervisor, but this did not prompt any intervention on the part of the supervisor. His impact on the situation was not a factor.

The May 15th visit was the first time that Miss W expressed serious frustration with Phil's behavior and commitment to teaching. She reported that he was more

tired than usual and seemed preoccupied. She said

I tried to find out what was bugging him, but he wouldn't say anything. On Mother's Day (May 13, 1990), he came to the house with a bouquet of flowers. He looked like he was about to break down. Just as he started to talk, some one came down stairs, and the mask went up again. He never did tell me about it. I thought maybe he was going to tell me about the balances, but he didn't say anything. The chance was gone.

It should be noted that the weekend of Mother's Day, May, 13, 1990, was the same weekend that Jan hit her crisis point, The Wall, as she called it. Phil also was at a crisis point, but did not share with anyone. He did not have the support group that Jan had, and, therefore, battled through the encounter with The Wall alone.

Miss W and the researcher both recognized that Phil was having more problems than he had earlier in the quarter. He began to fail to meet his responsibilities. Miss W noted in her journal of May, 7, 1990, one week before Mother's Day that

Phil was late again. He needs to get going earlier. He is tired looking. Lesson plans for today were sketchy.

On May 8th, Phil was scheduled to attend a full-day, large group seminar on the WOSC campus. His cooperating teachers took over his classes for him. His lesson plans indicated that they were to give a test on that day. Miss W's journal reports that

Phil didn't leave the tests so that I could give Chapter 5 test. No tests,

even though he had it on his lesson plans.

Phil did not attend the full-day seminar. He did not contact either his college supervisor or the researcher informing them why he was going to miss.

On the following week, during the small group seminar held on May 14, 1990, the researcher commented that the group had missed him the week before. He simply replied, "You didn't miss much." A few minutes later, while conversing with Jan, the researcher, and one other student teacher, he announced that he did not plan to seek a teaching position the following academic year. The comment slipped by for the moment. It was made while Jan was describing the trauma of her experience over that same week end.

The researcher went to Phil's school the next day, May 15, 1990. Phil was in the prep room. When the researcher asked if he was okay, he responded, "Yes, I am just tired." When asked about the decision he had shared the evening before, he responded

I just decided that, after five years of college, I would rather flip burgers at McDonalds for a year than teach. I need some time off. I don't think I can work this hard for a year right now. I can survive with a job I can leave and not worry about.

He recorded in his journal on May 23, 1990

I am not going to come out of here with a negative attitude, deciding that I'm never going to teach again because I can't stand the teaching and I can't

stand the kids. That's not what is going to happen to me. Deciding that I don't want to put in the time and the work that it's going to take next fall is one thing.

I have invested five years of my life for this damn degree and I have invested too damn much of my hard earned money into my schooling .... I have formed the opinion that a lot of these teachers ... who work the students hard and who work their student teachers hard are maybe not the ideal people to place student teachers with. I have learned a lot, and rightly so. I've gotten a lot from that, but there are things that I can't handle right now and that the "you need to do it this way. You need to do it my way" type of thing ....

Phil did not experience the concentrated emotional trauma that Jan did when she hit The Wall. In his case, the pressure built slowly and culminated in a career decision that may have long term effects. The question arises about the role that Jan's support group played in her passing through The Wall without a totally negative attitude compared to Phil's lack of outside support, his failure to respond to those around him who did try to open the doors of communication for him, and how this influenced his ultimate decision not to teach the following fall. In Jan's experience, that support group was critical. If her sister had not insisted that she return to the school and work her way through the situation, she very likely would have voluntarily terminated her experience and decided to seek another career. Phil essentially had no one. He internalized his feelings and never developed any means of venting his feelings except through his journal. This did

not help him through the crisis or open any lines of communication because he did not turn his journal in to the researcher until after the crisis had passed and the damage was done.

From that point on, Phil's experience in student teaching became more and more difficult and his attitudes more and more negative. Time constraints and pressures from outside began to wear on him. The following quotes are typical of the last part of the quarter.

May 23, 1990 - Today I found myself in the midst of Egg Babies, which is a pain in the royal rump. .... I will never do it again, except if I have an elite class of students .... I feel like I was not given a choice to do this.

I've had enough of this after school crap. I've had about enough of this after school everything. I'm not going to be a baby-sitter when I'm a teacher.

The biggest problem as far as the work load goes is that I have enough from school to keep on top of, but I'm not getting more than 4, sometimes 5, hours of sleep at night, yet I'm still not able to work on my work samples and I don't know when I'm gonna get them done.

I have gobs of 8th grade homework to correct tonight. Again, ... there's no choice. So, the result is over load on Phil. No sleep for Phil.

The last week of school the week of June 4 through 8, was a bad one for both Phil and his cooperating teachers. He had arranged ahead of time to be finished at the school on June 7th. He had made an agreement with Miss W and Mr. C that he would have his grades completed and turned in to

them Thursday morning, June 7th. On June 6th, Wednesday, he took the grade sheets home with him and planned to work that night until he had the grades for all of his students finalized. According to his journal of June 8, 1990

I stayed up Wednesday night plugging away and plugging away, and, at some point, after about two-thirty, I fell asleep on my couch. I didn't wake up until, oh, it was about noon when I woke up ....

Phil did not contact his cooperating teachers that day, Thursday, to tell them that he would not be taking his grades to them until Friday. It was the same evening that Miss W called the researcher. She had tried to reach the college supervisor, but was unable to contact him. She was upset, not simply because of the grades, but because of Phil's lack of professional courtesy to contact them.

Phil's journal entry was

At some point during the afternoon Miss W called me and left a message on my machine and she did not leave a number where she could be reached. ... I tried to find her number, but it wasn't in the grade book where I stuck it. Mr. C's was still there, but hers was not so I did not contact her that evening.

Friday morning, when Phil did go to the school to turn in his grades, both Miss W and Mr. C were upset with him.

Miss W's journal entry was

Still isn't here as of 1st period, no answer at home. Mr. C is livid - the office is mad.

Phil came in at the end of 1st period and apologized for not being here yesterday. He still hadn't done the grades and didn't

have the grade cards with him. Mr. C and I both talked with him. Mr. C summed it up - "Phil, your lack of courtesy (not calling), your irresponsibility leads us to conclude that, even though you may have some undeveloped aptitude for teaching, your maturity in handling yourself causes us to question your dedication to our profession, teaching."

Phil did leave and come back later with the cards.

In this instance, Phil's journal and Miss W's journal matched as to the events that occurred that day. Phil's record of events is excerpted as follows.

I first went to Mr. C's room. ... He told me I was kind of in dutch with Miss W because I hadn't shown up and that it really looked like my dedication was questionable and that was all he said, really.

I couldn't argue with anything she [Miss W] said. It was my screw up and I wasn't there Thursday morning. I didn't get up Thursday morning. ... It's almost like she was wanting me or waiting for me to make some excuse and there was really no excuse to make. She later kind of probed and probed. "Are you having relationship problems?" or this or that. All I could say was 'no.'

Listening to Phil's taped journal entry for June 8, 1990 is a painful experience. The emotion in his voice, the anguish it suggests cannot be reflected in a typed report. Suffice it to say, he was in severe emotional distress. Coupled with the pressure from school, the next day, Saturday, was Graduation day at WOSC. When he recorded the tape, he was not sure if he would pass student teaching or be allowed to march for graduation.

He left the school and ordered flowers for Miss W and



the secretaries at the school. He said in his journal that

I stopped and sent flowers to each of the ladies in the office and flowers to Miss W, as I had planned to do and then went back to Monmouth ....

Uhm, right now, I'm trying to concentrate on the fact that Miss W told me she'd see me at graduation. ... I said "we'll see. I'll wait and talk to [the researcher]. ... We'll see what she has to say." She said "well, everybody deserves their graduation." I'm really not sure what her point was. Just that I'm still gonna graduate.

Phil did contact the researcher that Friday night. He related the events of the day. The researcher assured him that he would be able to go through graduation, but that he would receive an "Incomplete" in student teaching until he turned in the two work samples that were required by the Oregon State Teacher Standards and Practices Commission. He did march on Saturday, but, as of this writing, he has not turned in his work samples, and, therefore, has not officially graduated from WOSC.

The last contact the researcher had with Phil was in the middle of the summer. At that time, he sent all of his video tapes, and the last two audio tapes to her. There has been no direct contact since then. During the month of October, 1990, the Oregon State Police contacted the researcher for a reference for Phil. He was applying to their Cadet Program.

Phil's summary tape, made just before he sent the materials in the summer, approximately July 27, 1990, was reflective. Several major points came out of it. One

major point was Phil's analysis of the effect of having an outside commitment while he was student teaching.

... it's very important to schedule your student teaching when it best suits you, when you will have the most time to do the student teaching stuff, as opposed to meeting other responsibilities. A large part of the stress that I ran into was that I had already made a commitment to be a RA [Resident Assistant]. I could not side-step that responsibility and I did minimize what I did, and minimize the time I spent doing RA things, but there was a certain amount of time that I had to do, and I won't say that it affected the quality of my student teaching, but it did affect the amount of stress I felt, the amount of sleep I could get. I think that being an RA and student teaching during spring term was a very fatal mixture.

He came away from the entire situation with a negative feeling toward both the experience and the people involved with it.

Right now, I'm very drained by the experience, and very emotionally or mentally tired.

My thought on it now is ..., oh, I guess I've grown a little bit bitter about the whole situation and that's probably not fair towards them, but the more I look back, the more I kind of have a negative feeling about a lot of things which I didn't perceive that long ago. But, now, in the present, I kind of felt there were a lot of things that I do not like as I perceive them now.

He did report some positive impressions from the experience.

In the classroom, teaching, doing the preparation, planning things out, trying to anticipate problems, trying to anticipate what will be hard for the kids to grasp, all of that really excited me and I really, really, truly loved it.

I really felt good about the student contacts, the things I learned, the things I was able to help the students learn, and I really enjoyed getting to know them.

A large part of his summary tape concerned how he felt used by the situation. He felt that the cooperating teachers benefited both time-wise and workload-wise by his presence. He tried to counter-balance that with what he felt he got out of the experience.

I think that part of the reason I feel so much negativity ... from the whole student teaching experience is because I feel like I was used in some ways. It's kind of illustrated by what Miss W got from having me as a student teacher, and I guess I should compare equally what I got from being a student teacher and having her and Mr. C ....

Some of the things that grated on me at certain times as I was going through it. One was ... just how much time off Miss W had as a result of having me second through fourth period every day.

Another thing was that there were supposed to be formal observations and, as far as I know, only one of them was ever done .... unless she sat in the prep room and listened to me .... And I know for a fact because Mr. C told me that he didn't do any formal observations.

Miss W didn't have to do grade books for three classes a day. She didn't have to correct papers for three classes a day. She didn't have to clean up and prepare as much because I was there and I was using the materials. ... She also had reduced tuition at WOSC .... And something about a stipend.

... I had to pay for it and pay for my gas and upgrade a wardrobe to be a student teacher in and, (laugh) yeah, I kind of feel I got the short end of the stick sometimes. Maybe it's no wonder that I

focus more on what they got from me and what I had to do instead of what I got out of it, especially when, right now and in the immediate and maybe in the middle to distant future, I see no use for what I learned because I'm not going to be in a classroom soon and may not be for a while. So that's part of why I have a lot of negative feelings right now toward the negative experience.

Phil always seemed to be lashing out at Miss W. This fact could be interpreted as a male-female problem, but that is probably not the case. The fact that Miss W is an outgoing, communicative, dynamic individual and Mr. C is quiet, conservative, and contemplative probably was more influential in controlling the interactions among the three individuals. Miss W probably spoke for both of them when she talked to Phil, but he interpreted her comments as coming solely from her. This probably was the reason Mr. C's final comment to him was a shock.

#### Student Teacher #3 - Barney

Barney was placed at Whiteaker Middle School (Whiteaker) in the northern section of Salem, Oregon. Whiteaker is situated in a moderately well-to-do area of town. It was built in the 1970's on a single story floor plan. The science rooms, though not terribly large, are designed such that the students are seated in movable desks in the center of the room and have access to laboratory stations around the periphery of the room. There is a large, stationary demonstration desk in the front of the room, and a smaller, movable teacher's desk at the side.

There are three science teachers at the school. They share teaching responsibilities for the subjects of Life Science, Earth Science, and Physical Science. Barney was placed with two of the teachers, Mrs. T and Mr. S. He rotated between them during the school day. He taught Life Science for Mr. S in the morning and Physical Science for Mrs. T in the afternoon. He was responsible for two class periods with each teacher.

After Barney had been placed in the school and had agreed to participate in the study, another science student teacher was placed at Whiteaker by the WOSC School of Education. Initially, the researcher considered eliminating Barney from the study. It was felt that the second student teacher might represent a variable that was not present with the other study subjects. Ultimately, it was decided that prejudging the effect of such a variable was inconsistent with the design of the study and Barney was retained as a study subject.

The researcher and the cooperating teachers had worked together for several years. At least one quarter every year for the last six years, the researcher had placed a student teacher at Whiteaker. More student teachers had been under Mrs. T's supervision than Mr. S's, but this fact was usually due to scheduling, not a particular preference on the college's part. The researcher had known Mrs. T for over 20 years. They had been classmates when they were undergraduates in their preservice training.

Barney was a post-baccalaureate student. He already had a Bachelor of Science degree in Forest Management from OSU. He was a tall man, lean, and well-spoken. He had a way of smiling as he spoke that put people, including students, at ease. His last name was difficult for the students to pronounce so he allowed them to call him "Mr. H" to make it easier for them. His outward demeanor indicated that he was comfortable in front of the class and that he was in control.

Barney began teaching almost immediately. One of his first experiences was a field trip with the Earth Science classes to the Oregon Museum of Science and Industry in Portland, Oregon, about 60 miles away. He immediately began analyzing his experience.

They were rather wild at first, but they settled down after awhile. They had a lengthy worksheet .... I think more adults should have attended than did. The worksheet was too long. Most kids lost interest quickly.

By the middle of the second week, Barney was writing lesson plans and teaching. Some of his preconceived notions quickly disappeared.

I found that they are much brighter than I anticipated, since I ran out of things to do.

He also learned early that preplanning and preparation are important and are the key to success in front of a class.

Preparation is everything. The more prepared I was, the easier I found it was to stand in front of the class. My prep periods have been the most valuable

time of the day to get things done. After several more days, I will be able to tailor my lesson plan to the class better.

Barney faithfully made daily entries in his journal from April 4, 1990 until May 7, 1990. His entries were usually short, compared to the other two student teachers. The transcriptions were usually no more than three pages long. The bulk of each entry consisted of comments that fell into the "What I Did Today" category.

April 6, 1990 - Today I taught Life Science periods 3 and 4, and I did Physical Science, did a review game, a version of Jeopardy. Seemed to go over pretty well.

April 13, 1990 - Today was the second day of vertebrates and we had a fish lab. ... I gave the test in Physical Science and it went real well ....

May 1, 1990 - Today in Life Science, we had an activity where we were in the library researching for a mammal project similar to a report, but in outline form.

Overall, Barney's journal and the input he gave at the seminars reflected that he had a smooth student teaching experience. He did not experience the frustrations with student motivation and behavior that Jan did nor did he develop any communication problems with his cooperating teachers as Phil did. On May 1, 1990, he noted that

The student teaching so far has been fairly easy, after I got into the swing of it, after the first week or two. But keeping on top of it's no problem. As long as you do that you're okay.

The only negative comments from his cooperating teachers related more to finesse than basic technique problems.

April 10, 1990 - He needs to inject a little more of himself into the teaching. He hasn't relaxed yet with the kids.

The kids are testing him a little on discipline, but he's holding his own.

Barney was exposed to various teaching techniques. He immediately noted that his two cooperating teachers had differing personalities and teaching styles. On April 27, 1990 he noted "It is already easy to see differences in teaching styles and classroom management."

He tried cooperative learning techniques in his classroom. This peer teaching method was adopted by the Salem School District that academic year and the teachers were learning as they practiced it. Barney's reaction to the technique was positive.

Today in Life Science we tried putting people into cooperative groups to work on a crossword puzzle exercise .... And it seemed to go pretty good. Most of the groups worked pretty well ....

The fatigue factor that figured so keenly in both Jan's and Phil's experience never surfaced in Barney's. He mentioned that he was using his free periods as preparation time, time for grading papers, and time to gather materials for his classes. In his summary tape, made June 5, 1990, he commented

I think student teachers should plan their time to get all their work done at school during the school day, not take anything home at night or on the weekend. I did that for the most part. I did everything at school. I had plenty of time during my prep periods, and that really saved me. That saved a lot of



hassle. I could have fun on the weekends instead of having to worry about getting things done.

There was only one time that Barney indicated that he was feeling fatigued. On May 2, 1990 his entry read "Wednesday, May 2nd. I'm really tired." That was the complete entry.

Barney was aware of the importance of student teaching and the recommendations that he would receive from his cooperating teachers for future employment. He noted what he thought impressed them.

I found one way that cooperating teachers are impressed and that's if you come up with any ideas that you use in your lessons that they hadn't heard before. So, they're really impressed when you come up with new ideas and you don't just use what they have done in the past. So, I'm trying to make up my own labs and worksheets and tests so it doesn't look like I'm using their materials and going through the motions.

It is interesting to note that Barney stopped recording his journal on May 7, 1990, the week before Mother's Day weekend. Mother's Day weekend was the critical point for both Jan and Phil, the weekend they encountered The Wall. Barney did not mention to the researcher that he had stopped recording. He simply said he did not have the tapes with him when he was asked to leave them with the researcher. The suggestion is that he experienced a change of behavior that coincided with Jan's and Phil's encounter with The Wall. In Barney's case, the encounter was a neutral one. He did not suffer emotional

trauma. He simply stopped fulfilling an obligation.

The researcher did not have an opportunity to ask Barney questions about the change in behavior. He avoided the issue when asked for his tapes between May 7 and June 5 by saying he did not have the tapes with him. He turned in a single tape on June 5, 1990. The tape contained daily entries until May 7 and a summary that was recorded on June 5, 1990. The researcher was not able to listen to the tape until June 8, 1990, when the gap was discovered. Barney was not available at that point because the quarter was over and school was not in session. The researcher has only seen Barney twice since that time. Unfortunately, neither time lent itself to conversation and Barney has not volunteered an explanation at the time of this writing.

In many ways Barney's experience was the discrepant case in this study. His student teaching was nearly ideal. He did not suffer the anxiety and frustration that the others felt, nor did he feel the fatigue felt by the other two. A number of possible reasons for this disparity can be explored. Barney's basic personality may have been one reason. He was a more self-actualized individual than either Jan or Phil. He was calmly self-confident both as a student and as a student teacher. An inner calmness and sense of perspective may have been a contributing factor to the differences in his student teaching experience. He recorded in his summary

I really didn't have many problems with classroom management. I didn't really have many problems at all. Maybe I was just lucky, but maybe I approached this a little differently. ... I think the only suggestion I would have for them [other student teachers] would be for them to put it a little bit into perspective and take some of it with a grain of salt and not take a lot of actions personally.

A second possible reason for his different experience might have been the school and the teachers with whom he was placed. Both teachers managed well-disciplined classrooms. The students were allowed to be children but were not allowed to misbehave. Classroom rules were strict but fair. The teachers set high goals and standards for the students. This atmosphere of expectation and support was school wide. Barney came into the classroom at the end of the year. The students were well trained by that time. It should also be noted that this philosophy matched Barney's educational philosophy.

A third factor that might have influenced Barney's experience was the presence of another student teacher not only in the same school, but in the same content area and with the same cooperating teachers. The two young men did not know each other before they student taught. Once they were in the school, they developed a close friendship. They occasionally rode to school together.

It is highly possible that the two student teachers became their own support group. Since they spent a great deal of time together at school, had the same cooperating

teachers, both taught Life Science and Physical Science, it seems likely that they had similar experiences. It also seems likely that each one acted as a sounding board for the other. When asked by the researcher if they would recommend that other dual placements be considered they said

Yes, it's really nice to have someone that knows what's going on with you and someone you can talk to without any threat.

Another clue that they had formed a close supportive relationship came from the weekly seminars. Neither Barney nor the other young man contributed much to the discussions that took place. In fact, they seemed to be shocked by the negative experiences of the others. At the last meeting, one of the other student teachers commented that Barney and the other student teacher seemed to have had the perfect student teaching experience. The other young man replied

Yes, we didn't have any of the problems you guys had. In a way, I wish we had. Now, we won't know what to do or how to handle them when they come up.

A further possible explanation is that Barney's experience was the result of a combination of these factors. All of the previously mentioned influences may have interacted to produce Barney's discrepant experience.

## CHAPTER 5

### CONCLUSIONS AND IMPLICATIONS

This qualitative examination of the student teaching experience has been a time consuming, difficult, and rewarding exercise for the researcher. As a participant observer, the researcher became involved with the study subjects and their experiences that, at times, it became difficult to concentrate on other matters of importance.

As a result of this study, the researcher developed several hypotheses concerning the student teaching experience. The presentation will begin with the hypotheses. These will then be referenced to research cited in the literature review, followed by a discussion of the implications for further research and a discussion on the implications for further practice. The final section will include comments concerning the research techniques that this researcher feels are important for the success of such a study.

#### Hypotheses Generated by this Study

##### Hypothesis #1

Student teachers react to the experience differently.

There were many commonalties among the three student teachers that might have suggested that their experiences would have been similar. Each student teacher was in the

school for the same amount of time, two of them in junior high schools. They were all in the same school district with experienced cooperating teachers. Even though they had taken different paths in the procurement of their subject matter, they had all been exposed to the same preservice training. Jan and Barney were about the same age; Phil was somewhat younger.

From the previous chapter, it is clear that each of the student teachers had a different experience during their quarter of student teaching. Jan spent most of her time preparing lessons and worrying about how her students would react to them and to her. Her major focus was on the students and her interaction with them. Her interactions with her cooperating teachers were always pleasant, but distant. She was self-evaluative and self-critical.

Phil was constantly embroiled in conflicts concerning his communication with his cooperating teachers, the demands of his life outside of student teaching, his general fatigue, and his struggle to decide the locus of control in his classes. He was unable to share his feelings with his cooperating teachers, but he did share them with the researcher via his audio taped journal, a one-way communication, at best.

Barney had a basically uneventful experience in that he did not suffer as did Jan and Phil. Communication with his cooperating teachers was never a problem. He never reported problems in dealing with his students. Only

once did he report being fatigued. He never took work home in the evenings or on weekends. He was able to keep up with his teaching duties at school during his preparation periods.

There were similarities in the experience among the student teachers, especially between Jan and Phil. Both of them had a difficult experience, suffering on a personal and a professional level. They both came away from the experience with more cautious feelings about their desire to teach and their abilities to teach, a result similar to that reported by Hammer (1982).

Another similarity was the encounter with that critical point referred to as The Wall. In encountering The Wall, again Jan and Phil had somewhat similar experiences. In both cases, tensions, either internal or external, built toward the critical point. The actual encounter was emotionally intense, and temporally brief. The outcome of the encounter varied considerably between the two, however. Barney had a change of behavior that was coincident with the critical point for the other two, but the overall effect was not as intense nor as devastating.

At this point, it is not clear whether the similarities noted in the experiences of these three student teachers would be repeated with other student teachers. Further study might lend more insight into this hypothesis.

### Hypothesis #2

The student teaching experience may be so complex that a total, Gestalt, understanding of it is not possible.

It may be that there are so many interacting factors within the student teaching experience that attempts to look at the whole experience at once presents an image too complex to be analyzed. The number of variables that enter into the setting are enormous. Not only is there the student teacher with all of his or her complexities, but there are the cooperating teachers, the individual students, the class as a whole, several classes per day, the school, the time of year, the activities within the school, parents, ancillary staff, the administration, the college and its demands on the student teacher, and the college supervisor. All of these intricate factors present a mental image of a Medusa head with each factor being represented by a single snake and the researcher, who is trying to make sense of it all, being represented by the head.

The variables previously listed were determined by using the qualitative approach. They were not predetermined and then verified. They were discovered to be important variables through the study.

Another problem with the variables is that the



variables that make up the experience are not consistent from one setting to another or one student teacher to another. If they are not consistent, then they cannot be assumed to be definable and controllable in all cases. One cannot define and manipulate dependent and independent variables if one cannot identify and define the variables. This difficulty with variables is what makes an empirical study impossible in this setting.

#### Hypothesis #3

For some student teachers, there is a critical point, called The Wall, during their experience.

#### Hypothesis #4

The nature of the critical point and the outcomes of the experience vary greatly among the student teachers.

For some student teachers, the critical point is simply a right of passage, as it was with Barney. In retrospect, this may be what one student teacher from a previous quarter was experiencing when she wrote in her journal

I don't know what happened. All of a sudden, I know I can do this. I'm not worried anymore about teaching. I can do this.

For other student teachers, like Phil, the encounter with The Wall was traumatic. Again, this type of experience may be what another student teacher from a previous quarter was

experiencing when she wrote

I can't go on with so little reward.  
I need to know that what I am doing  
is okay, that it is working.

Jan reached her encounter with The Wall when a student reacted negatively toward biology one Friday morning. She took the student's comment personally and nearly removed herself from student teaching because of it. As she commented, "I nearly checked myself into a hospital because a student had a bad day."

Phil reached his critical point during the same week. He had been experiencing frustrations with his teaching and his dealings with his cooperating teachers up to that point, but, from that point on, his actions suggested that he was increasingly unable to resolve them.

Barney's experience was more like the first student teacher. He was having no problems. He did not foresee any problems, and he knew he would be able to finish student teaching without any problems. Based on the timing of his break in participating in the study, he felt this at the same point that Jan and Phil had reached their critical point, about six weeks into the quarter.

The fact that five other student teachers in other areas within the School of Education were either removed or chose to remove themselves from student teaching the same week only lends credence to the hypothesis that The Wall exists for some student teachers, but not all.

Hypothesis #5

There is a strong need for the existence of a support group or supportive individual to be available for the student teacher.

Jan would not have successfully passed beyond her critical point if she had not been able to draw from her sister's experience and strength at that time. She trusted her sister as an experienced teacher and as one who had a vested interest in her personal and professional well-being. That trust allowed Jan to follow her sister's lead. She did not fear that there would be repercussions or reproachment, only that the support provided by her sister was sincere and in her best interest.

Phil had no such support nor would he allow anyone to help him establish it. He avoided or failed to respond to any attempts on the part of his cooperating teachers, especially Miss W, or the researcher to open avenues of communication. There is no evidence of the existence of significant others that might have filled the role. He did not talk to his parents. A phone conversation between the researcher and his parents revealed that his parents were surprised and disappointed at his decision not to pursue the procurement of a teaching position the following academic year. His father said to the researcher,

You can imagine we were a little disappointed when he said he didn't want to teach this year. He has

wanted to do this for so long. We didn't think he would change his mind.

Phil did not attend all of the small group seminars. By missing the meetings, he missed out on the rapport that was developed within the group. When he did attend, he did not actively participate at the same level as the other student teachers. Again, he did not allow any individual or group of individuals to perform any support functions for him.

Barney had a support group that consisted of another student teacher that was living a parallel life and could directly relate to his experiences. Although Barney was married, he never commented directly or hinted that his spouse was a support or a deterrent to his experience. Parenthetically, Jan was married as well, but never really mentioned her spouse as a source of understanding and support. Neither Barney's nor Jan's spouses had ever taught or been in the schools to any extent.

Barney's only comment that suggested that his fellow student teacher was a support was at the end of the quarter when asked directly about the placement of more than one student teacher in a school at one time. He replied,

Yes, it was a help. He knew what I was talking about when I was upset or was wondering about something. I didn't have to explain to him.

Barney's experience must have been tempered to some degree by the presence of another person with common experiences with whom he could communicate.

### Hypothesis #6

The cooperating teacher has a greater influence on the student teacher and his/her experience than does the college supervisor.

The influence of the college supervisor on the experience of the three student teachers in this study was slight, if not non-existent. They remarked that he had visited, but did not report that they had gained anything from his visits. On May 1, 1990, Barney commented that,

Last week I saw Dr. S [the supervisor]. He was here for about 10 minutes total. He came in, asked how things were going and said "bye" because he had to get off and see a bunch of other people, so I've only seen him twice and he hasn't observed me at all yet so, I hope he's able to come in and do that a couple of times.

Based on the frequency of comments related to the college supervisor, the contact and effect was minimal. It may be possible that, even though the researcher was not acting in a supervisory capacity, the student teachers felt their contact with her filled the need to be supervised. Further research design might clarify the situation by providing a complete split of roles so that the participants fully understand the differing roles and motives of the college supervisor and the researcher.

### Hypothesis #7

The predictors for success in student teaching that were used in this study are likely unreliable.

The quantitative predictors for all three student teachers were positive. They had all taken the required courses for their respective academic areas. They had all taken and passed all of the external evaluations that are required by the School of Education. They had all achieved the minimum grade point average in their academic areas required by the School of Education and had all, in fact, exceeded the minimum requirement. They had all received that approval of the academic departments and the School of Education to student teach.

Although all three student teachers completed their quarter of student teaching with passing grades (student teaching is assigned either a P for passing or a NP for not passing), only Jan and Barney can truthfully be considered to have passed the experience satisfactorily. They exited the experience with plans to pursue a career in teaching. That is not to imply that they exited with similar attitudes, only similar plans. Phil's experience was not successful. Technically, he has not passed student teaching because he has not completed the written assignments that accompany student teaching. He came away with a very negative attitude toward the experience and teaching. This is a negative result after five years of

college and a tremendous amount of work. This set of comments suggests the possibility that the predictors that were used were not reliable for these three student teachers.

#### This Study in Relationship to Other Studies

This study does not support Fuller's Teacher Concern's Model (1969). None of the student teachers demonstrated a sequential set of concerns that progressed from Fuller's nonconcerns through the total concern for their students. Jan moved among the three from her first day in the school. Early in her experience she began to worry about the students and their lack of skills and motivation. On April 3rd she commented in her journal,

Students were interested, but not nearly as much as I'd thought. They have trouble going beyond what we cover in class.

On April 6th, she noted,

I've noticed in the grading that I've done for Mr. D that they'll hand in a paper with one word on it.... They don't seem too interested in handing in completed work.

Throughout the quarter, she worried about the motivation level of the students and how she could overcome it. This result correlates with Fuller's third stage of concern, Concern for Students, but occurred early for Jan.

Phil began at Fuller's second stage, Concern for Self, and never progressed much beyond it. He occasionally jumped into Concern for Students, as reflected in the

following journal entry from April 19, 1990,

I was quite pleased to see the paperwork that coming in from Kathy .... Miss W, when I told her, suggested I give a Mustang Award .... tape on some candy on the award and slip it to her .... she [Kathy] seems like the type that would rather get approval from the teacher, but not be made the center of attention with peers.

In his summary tape, he recorded,

I really felt good about a lot of the student contacts, the things I learned, the things I was able to help them learn and I really enjoyed getting to know them.

He also spoke of a student who was lagging behind because English was his second language. These excursions into the third stage were few and not well developed.

Barney seemed to have jumped directly to Fuller's third stage. He immediately began reflecting on the nature of the students and their involvement in learning. Self-concerns only surfaced in the few comments he made about how to impress the cooperating teachers.

There was no sequential or definite longitudinal changes in the three student teachers. This does not support Fuller's Model.

On the other hand, the conclusions of Yee (1969) and Dinapoli (1984) were substantiated. As suggested in Hypothesis #6 and by Yee, the cooperating teachers do seem to be a significant source of influence on the student teacher. This observation seemed to be particularly true in Phil's case. Jan was influenced by her cooperating



teachers and used them as role models. Barney seemed to break away from his cooperating teacher's influence early and sought only approval from them. He did not rely on their input after a short period of time.

Phil's experience support's Dinapoli's findings that the cooperating teachers continue to emphasize authority and control over the situation. Neither of Phil's cooperating teachers completely let go of the classroom and let Phil work through his problems. From their perspective, they did not feel that he was ready to take full command. From his perspective, they did not wish to relinquish control. Differing perspective netted the same results; the cooperating teachers remained in control.

The study suggests support for Austin's (1981) conclusions to her study that (a) thinking personality types (Jungian) displayed the most negative attitudinal changes; and (b) that self-concept is the most affective influence on student teaching. The Meyers-Briggs Personality Type was not administered in this study, but the thinking personality type might be inferred from the self-evaluative nature of the journal entries from all three student teachers. Jan and Phil were the most self-analytic, Barney was occasionally so, but not consistently. Self-evaluation and self-concept are closely tied. The tie is close enough to suggest a correlation.

Hammer (1982) found a decrease in attitude scores among the student teachers in her study. More

specifically, a more negative view toward pupils and teaching was recorded through three quantitative instruments. Smith (1983) and Parkay (1982) also reported finding an increase in negativity toward pupils and teaching. This study also supports Hammer's findings. The fact that Phil decided not to seek a teaching position, largely because of the amount of work and responsibility involved in teaching, lends strong support. Jan left the experience with the knowledge that, as she said, "being small, blonde, and female will not be easy." She also knew that she had a saturation point and what to do once she reached it. Barney, of course, was the discrepant event. He experienced an overall increase in attitude toward pupils and teaching.

The study by Strawitz and Malone (1984) in which they studied undergraduate science education students and found (a) no significant change in teacher concerns, and (b) a significant positive change toward science is not supported. Teacher concerns changed over the experience, but they did not exhibit a sequential change as reported by Fuller (1969). The changes appeared to be in response to the experience and all of the actors within it. At times they appeared to be "knee jerk" concerns in response to a particular set of events. For example, Jan's traumatic weekend in response to a student comment, the weekend of The Wall was a spontaneous response to a situation. There was no attempt to assess the student teacher's attitude

toward science. That part of Strawitz and Malone's study was not addressed.

Sitter's study (1981) found that student teachers (a) saw themselves in the role of junior partners; (b) felt a need to prove themselves; (c) felt they must attain proficiency in teaching; (d) felt that upon attaining their goals, they must show cognitive and affective changes manifested in their knowledge, perceptions, attitudes, and actions; and (e) left their internships with a feeling of autonomy. This study supports the first three of these conclusions. At no time did the student teachers truly feel that they were peers with their cooperating teachers. They felt that they had to show that they could teach and that feeling did not leave throughout the quarter.

They did not reach a point where they felt that they had fully attained their goals or feel a sense of autonomy, and, therefore, Sitter's findings (d) and (e) were not addressed in the study. Time may have been a factor. Sitter's study was 20 weeks long whereas this study covered 10 weeks. Apparently, Sitter's study group was on a semester system, while this study group was on a quarter system. A longer period of time for the field experience might verify Sitter's last two findings.

A final study, conducted by Lawrenz and Cohen (1985), found that secondary science student teachers experienced a drop in attitudes toward science. This study did not address the student teacher's attitude toward science

specifically, but, if one assumes that the attitude toward science is related to the attitude toward science teaching, then this study would support that correlation. Lawrenz and Cohen's (1985) suggestions for their findings also tie relate. They were (a) different reactions to the realities of teaching; (b) subject matter saturation; (c) quality of interaction with students of different age levels; (d) more than one field experience; and (e) a combination of (a)-(d).

This study supports (a) quite well. The student teachers strongly reacted to the real world which was not necessarily as they had expected. Jan commented on the noise level, the socialization of the students, and the lack of motivation. Phil was overwhelmed by the amount of work, in general, and the amount of paper work, in particular.

Findings (b)-(d) were not specifically addressed in this study, but the idea that the overall result was the result of numerous interacting factors, finding (e), was supported.

This piecemeal correlation with previous studies serves to emphasize that there are not unifying models or theories relating to the student teaching experience and that much work is yet to be done before unity emerges.

### Implications for Further Research

The intent of this study was to explore the student teaching experience from the viewpoint of the student teacher; to learn about what factors influence the student teacher as they progress through the experience; to see it through their eyes. The study accomplished its goal, but did not provide definite "truths" that can be considered universal. That, of course, was not an expected outcome. It did, however, describe the student teaching experience for three student teachers. They revealed as much of their world as they wanted and allowed the researcher to interpret for them. Now, the challenge is to continue the work that has just begun.

Based on these statements, the first implication for further research is that similar studies be carried out in more settings with more student teachers. The basic research design is sound and can be employed in further research.

A second implication is that the hypotheses generated by this study need to be tested. More specifically, do other student teachers have any experiences in common with the three in this study? Is The Wall a real phenomenon that all participants should be on the alert for? Does the buddy system of student teacher placement facilitate the formation of a support system for the student teachers? Do reliable predictors for success exist and what are they? Can we begin to make generalizations about the student

teaching experience or is it too complex and too individual for generalizations?

All of these questions need to be addressed in future research. By using qualitative methods, other questions will undoubtedly emerge that will lead to more paths for exploration.

With this type of study and the small number of study subjects, one can be responsive to events as they occur. The study can actually be fine-tuned as it is being conducted. Perhaps one problem with some of the studies cited in the literature review, Chapter 2, was that they were handicapped by large numbers of subjects and a restrictive research design. Yee (1969) had a sample size of 124 student teacher-cooperating teacher dyads plus 12 college supervisors. Hammer (1982) had 94 subjects at the beginning of her study. Perhaps there was a wash-out effect with such a large number of subjects. With large samples it would be difficult to perceive minute features let alone respond to them. The experimental research design they employed also precluded sensing and responding to unexpected occurrence as well.

One word of caution for future researchers using the design described in this study. It is extremely important for the researcher to make his or her role as an observer clear to the study subjects, especially if the researcher's normal role would be supervisory. It should be made clear that the researcher will observe the events that occur, but

cannot intervene in them.

Phil's experience is a good example of the importance of this role clarification. It was extremely difficult for the researcher to remain as an observer while Phil was trying to work out his problems. Under normal circumstances it would have been the role of the researcher, as supervisor, to become part of the problem solving process. In the role of researcher, such actions were ruled out and observing the process was a priority. It is the opinion of the researcher that Phil did not fully understand or accept the role of the researcher as an observer and that he felt abandoned in his time of need. Roles need to be clearly defined and checks conducted to be assured that all participants clearly understand their roles.

Another important aspect of the research design is the verification via triangulation. Once a pattern is perceived by an observer, that pattern needs to be confirmed by another pathway. An isolated occurrence cannot be considered seriously, but an occurrence that repeats itself or can be confirmed by another source can be considered seriously. In this study, that confirmation was possible by way of several routes.

An example of triangulation can be drawn from Phil's experience. Phil recorded an incident that occurred in class. One of the students, Andy, destroyed a petition that one of the female students in the class was

circulating. According to Phil's diary, after some coaxing, Andy admitted to the destruction of the petition. At that point, Miss W came into the room and negotiated a fitting punishment with the student. Phil recorded,

I made them wait and shut up unless they wanted to spend some lunch time until they got quiet and then I started talking about the fact that somebody knew who had done it. .... Miss W came in about the time I started talking about this and I would not have gotten anywhere had she not stepped in .... And I probably wouldn't have been so bold as to keep the entire class....

Miss W recorded the incident more concisely in her journal.

Andy destroyed Kay's petition. Phil was livid. I helped straighten out the problem. Phil seemed relieved. Andy's just a pain. Phil is starting to assert himself.

By comparing the two entries, the researcher can have confidence that the event actually occurred and that the impressions of the incident that Phil recorded were valid as substantiated by his cooperating teacher's journal.

Within this study, there were several avenues for validation by triangulation. Journal entries among members of the study group were compared. Entries from the journals were triangulated with comments by the student teachers that attended the small group seminars. Journal entries from the study group were compared to journal entries made by student teachers that were not part of the study group. Probing questioning was occasionally used to



draw out more information and validate impressions. All in all, the validation process worked well in this study. It is important to plan for these pathways of validation while designing the study.

#### Implications for Further Practice

The implications for further practice are fourfold. The first implication relates to the selection of student teachers. There is strong suggestion that the criteria used in the selection of student teachers needs either to be revised, enhanced, or replaced. The predictors that were used in the selection process gave inconsistent results. They seemed to have little bearing on the ultimate experience of each of the student teachers. Perhaps a critical examination of the predictors will lead to the development of a more useful and reliable set.

The second implication for practice pertains to the existence of The Wall. Those people involved with the supervision of student teachers and those who are otherwise close to the student teachers should be made aware of the possibility that the student teacher might encounter The Wall. There is no guarantee that they will encounter The Wall, just the possibility. There is no standard response to The Wall, just that there is a change that occurs.

Going hand-in-hand with the second point is the need for the existence of the mechanism for establishing some type of support for the student teachers. The value of a support group or individual was clearly shown in this

study. The only student teacher that did not have a support group is the one that had the most negative experience with the most severe career altering effect. Avenues of support must be available.

The fourth component is a need for trust to develop among the participants of the student teaching experience. If trust does not exist between the student teacher and the college supervisor, then one pathway of support has been removed for the student teacher. If trust does not exist between the student teacher and the cooperating teacher, then antagonisms can develop that preclude growth and learning for the student teacher and the sense of contributing to the profession is lost to the cooperating teacher.

The college supervisor and the cooperating teacher must also develop a sense of trust. Ideally, they are both working toward a common goal. They both desire the metamorphosis of the student teacher into a new, productive member of the teaching profession. If they cannot work together in an atmosphere of trust, then the pathway to the goal becomes very difficult.

#### Final Remarks

In the scientific community, a good research project generates as many questions as it answers. That being the case, the research project reported in this thesis was a good study. It answered the question it set out to answer:

What is student teaching like for the participant? It answered the question for a small set (three) of student teachers during one quarter. Its answers may not be universally true, only for those involved.

There were questions generated by this study, more than were answered. This study has ended, but the products of the study, the answers and the questions have the potential of leading this and, possibly other researchers, to a more complete understanding of the original question. As Fuller and Bown (1979) said "The appropriate question is not 'are we right?' but only 'what is out there?'" (p. 52).

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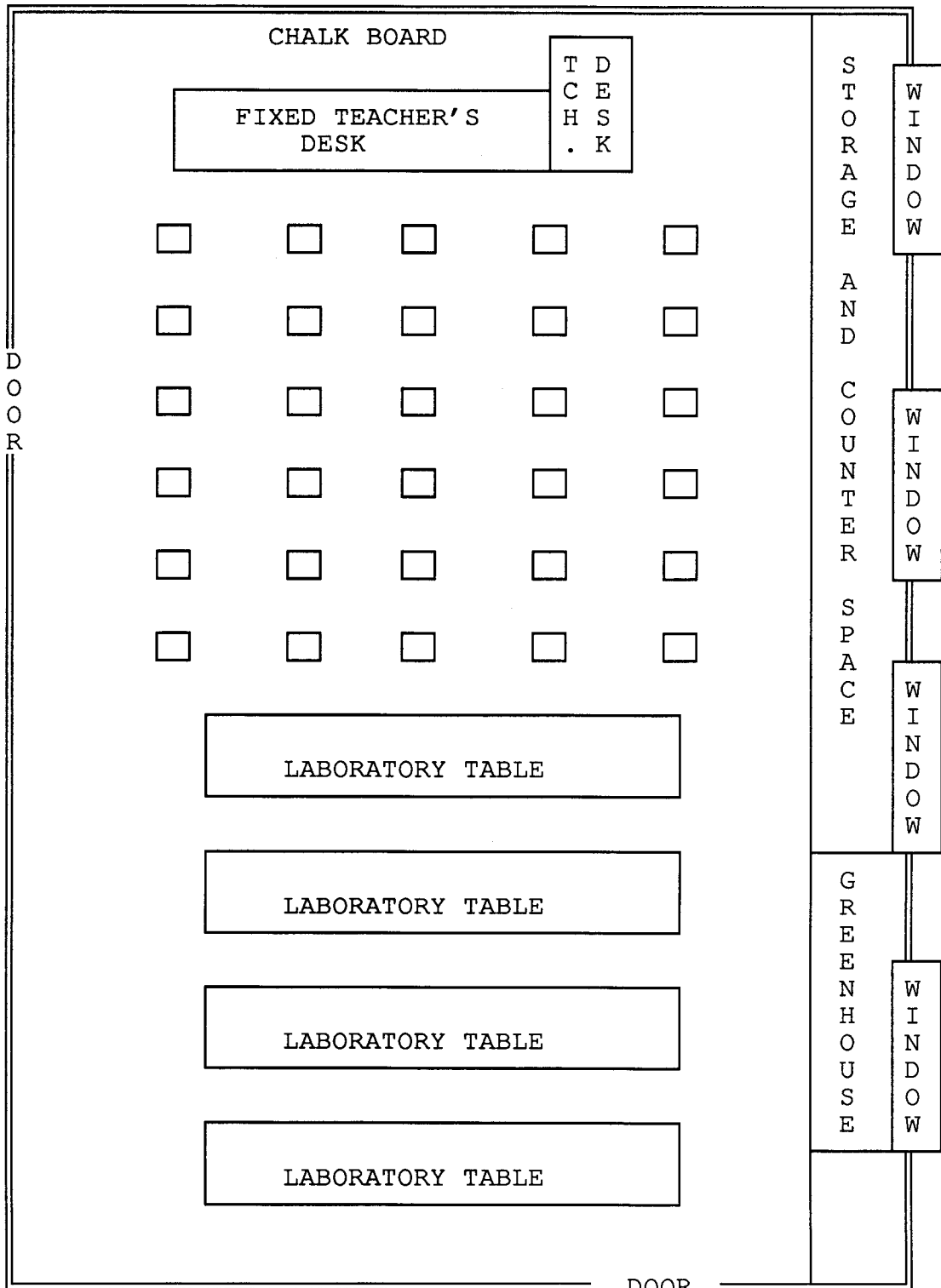
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## APPENDICES



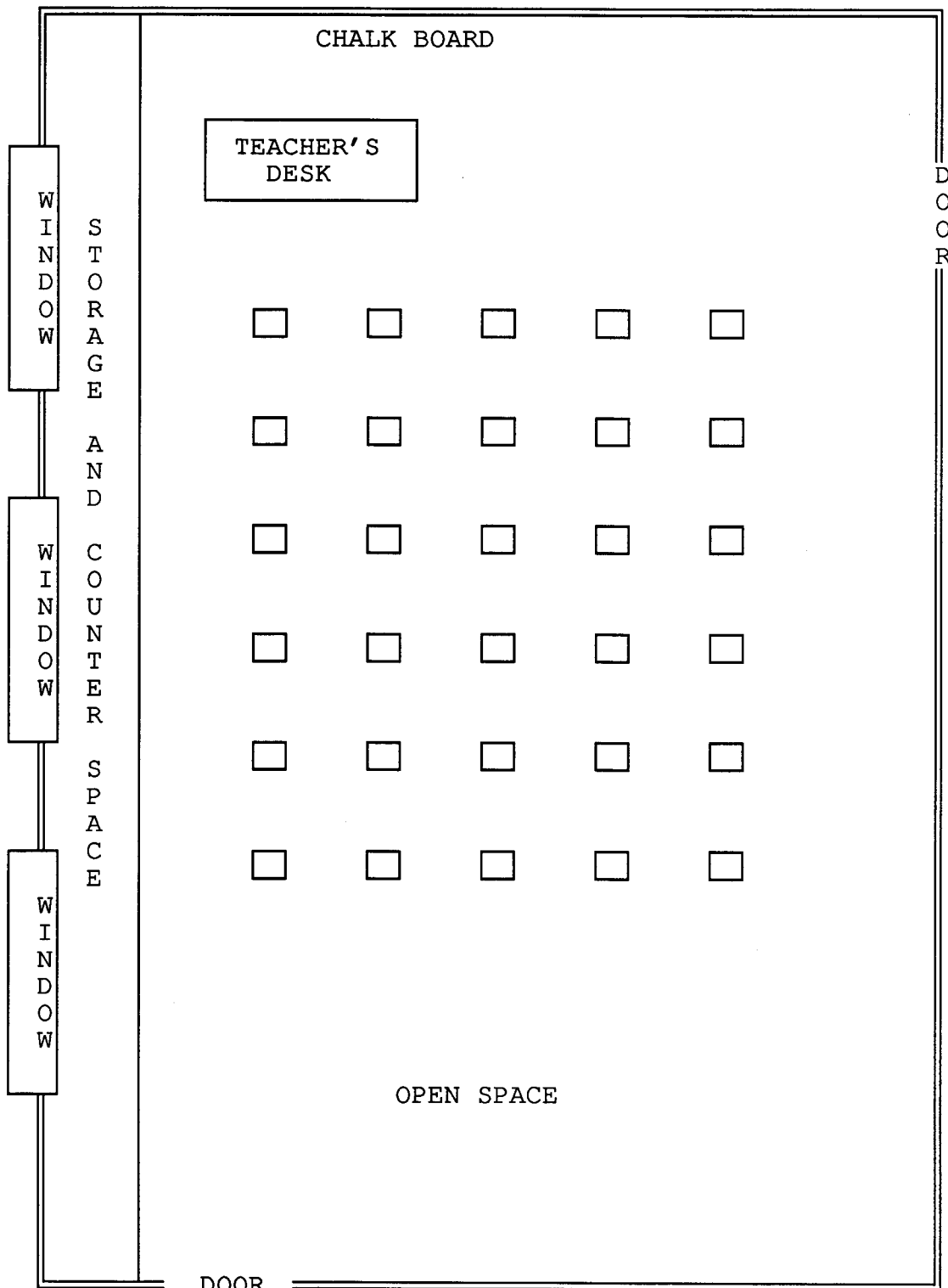
APPENDIX A  
CLASSROOM ARRANGEMENTS

ROOM ARRANGEMENT - MR. D  
FRONT



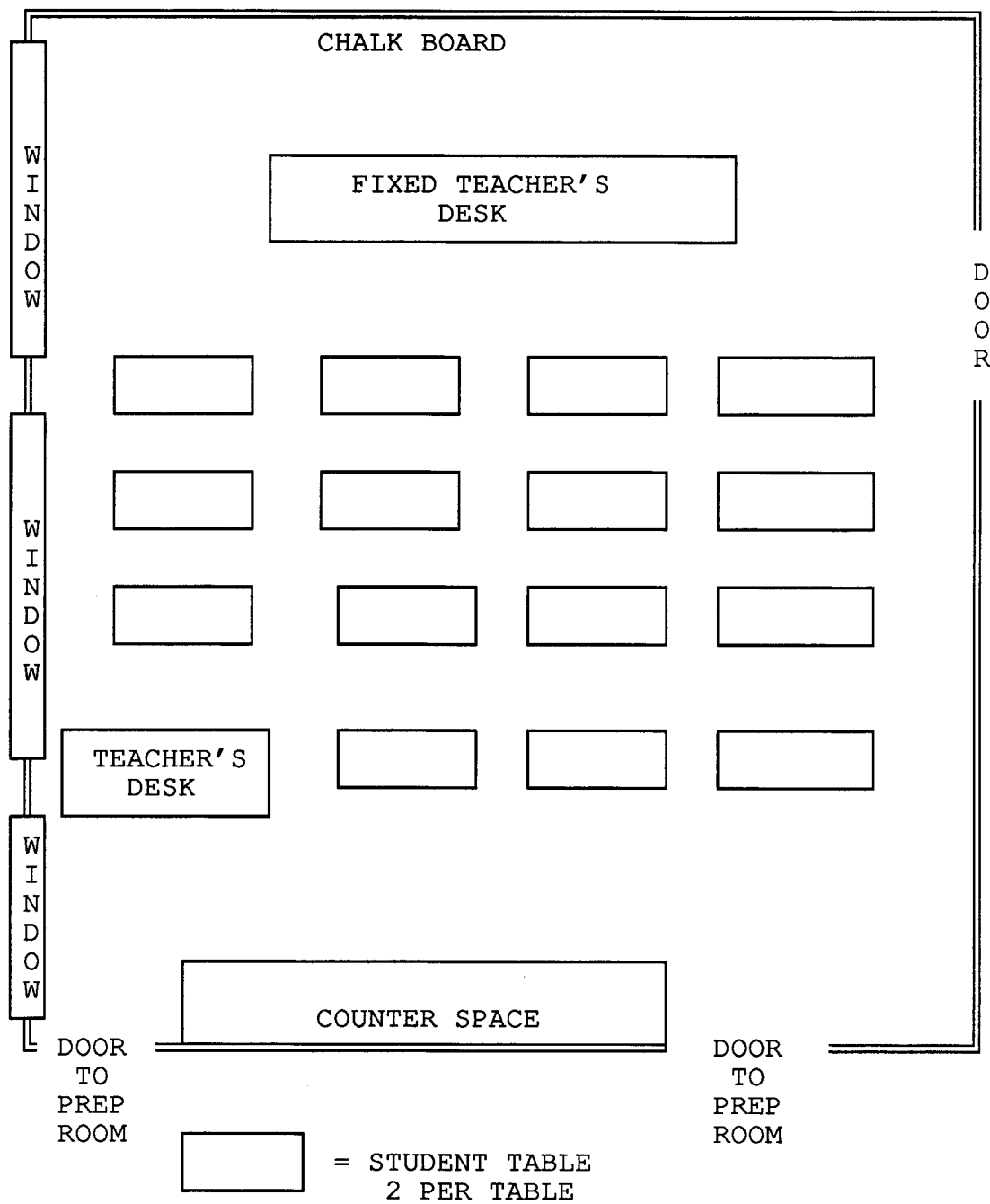
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ROOM ARRANGEMENT - MR. H  
FRONT



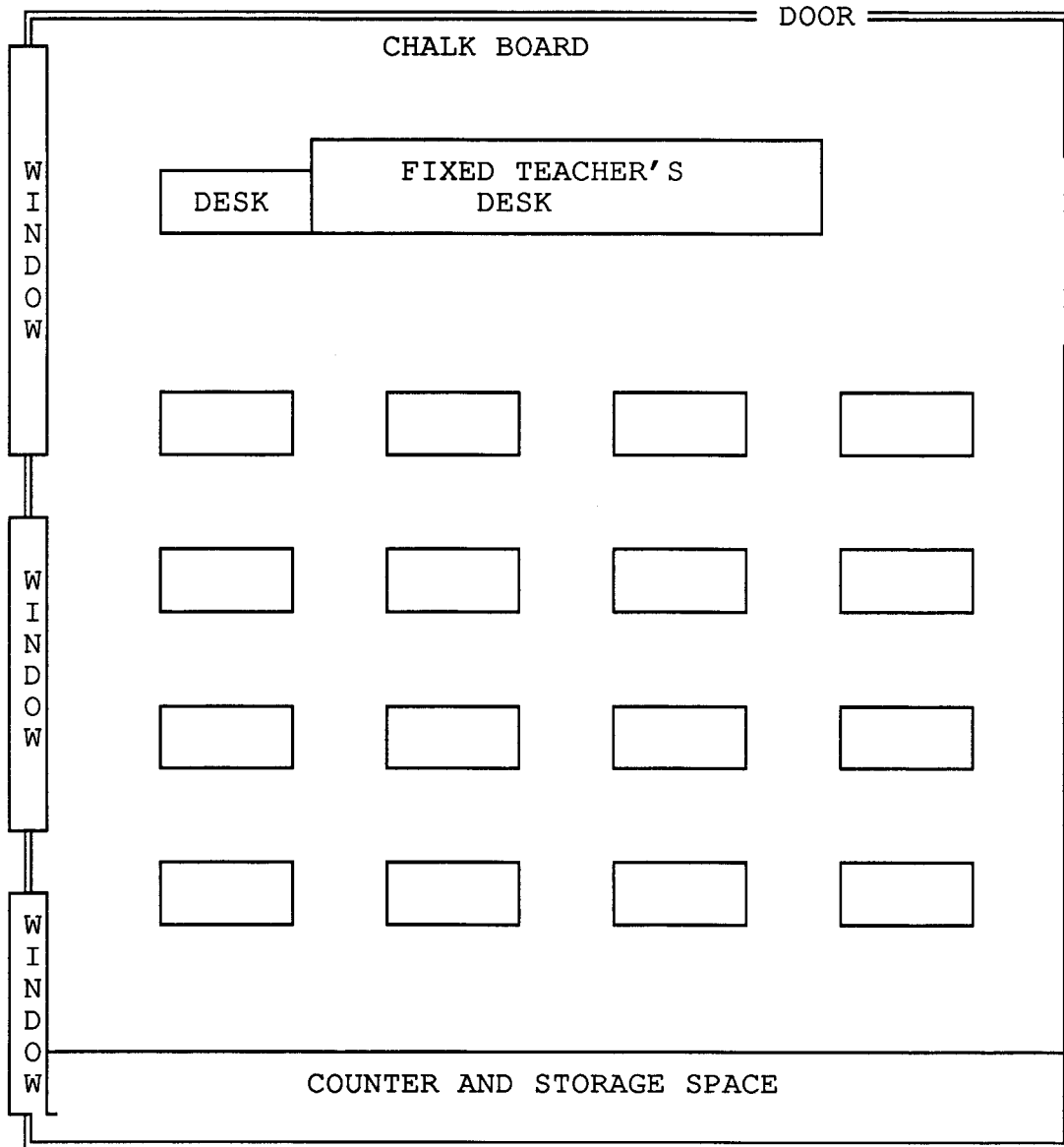
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ROOM ARRANGEMENT - MISS W  
FRONT



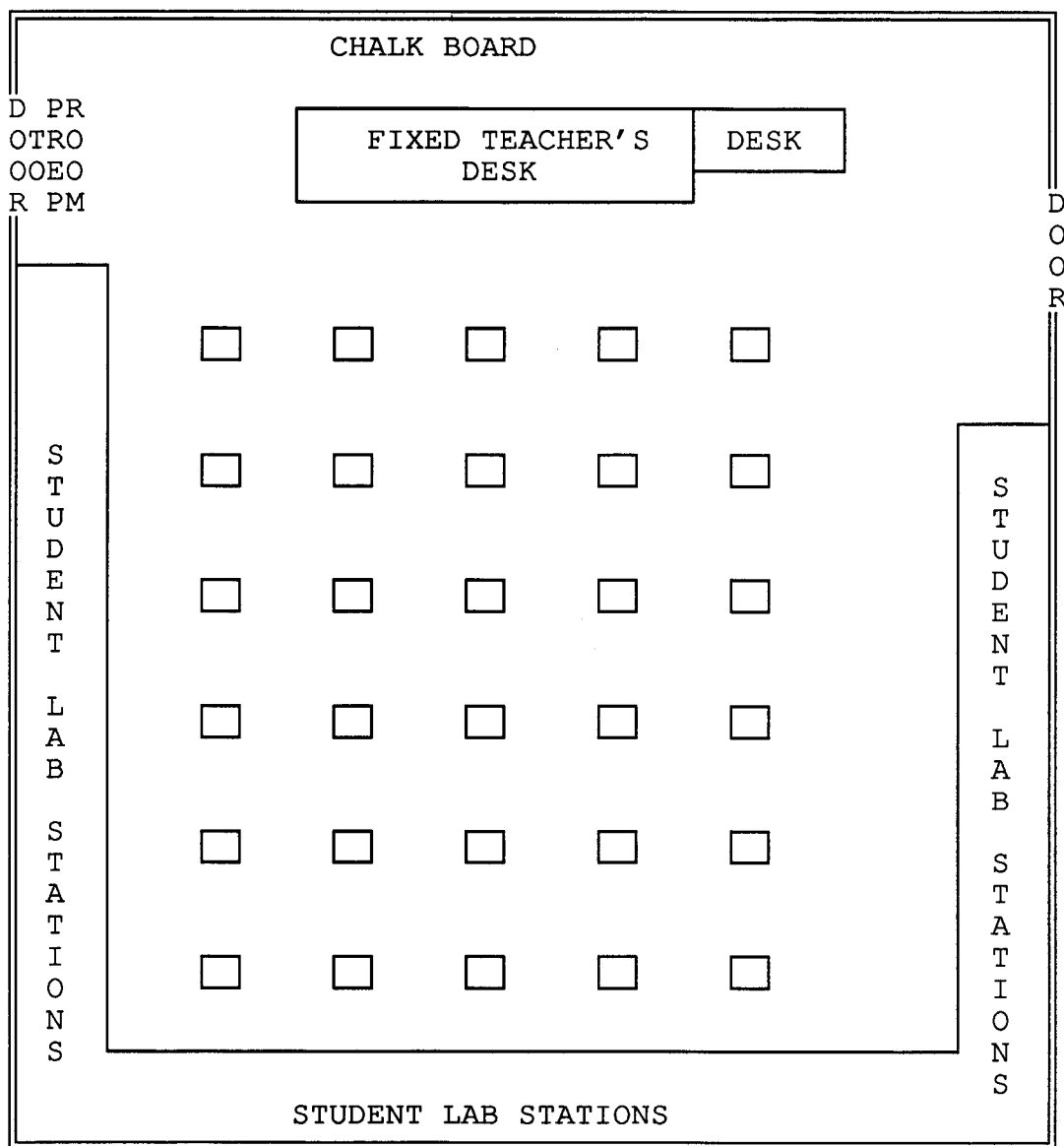
ROOM ARRANGEMENT - MR. C  
FRONT

ROOM  
PREP  
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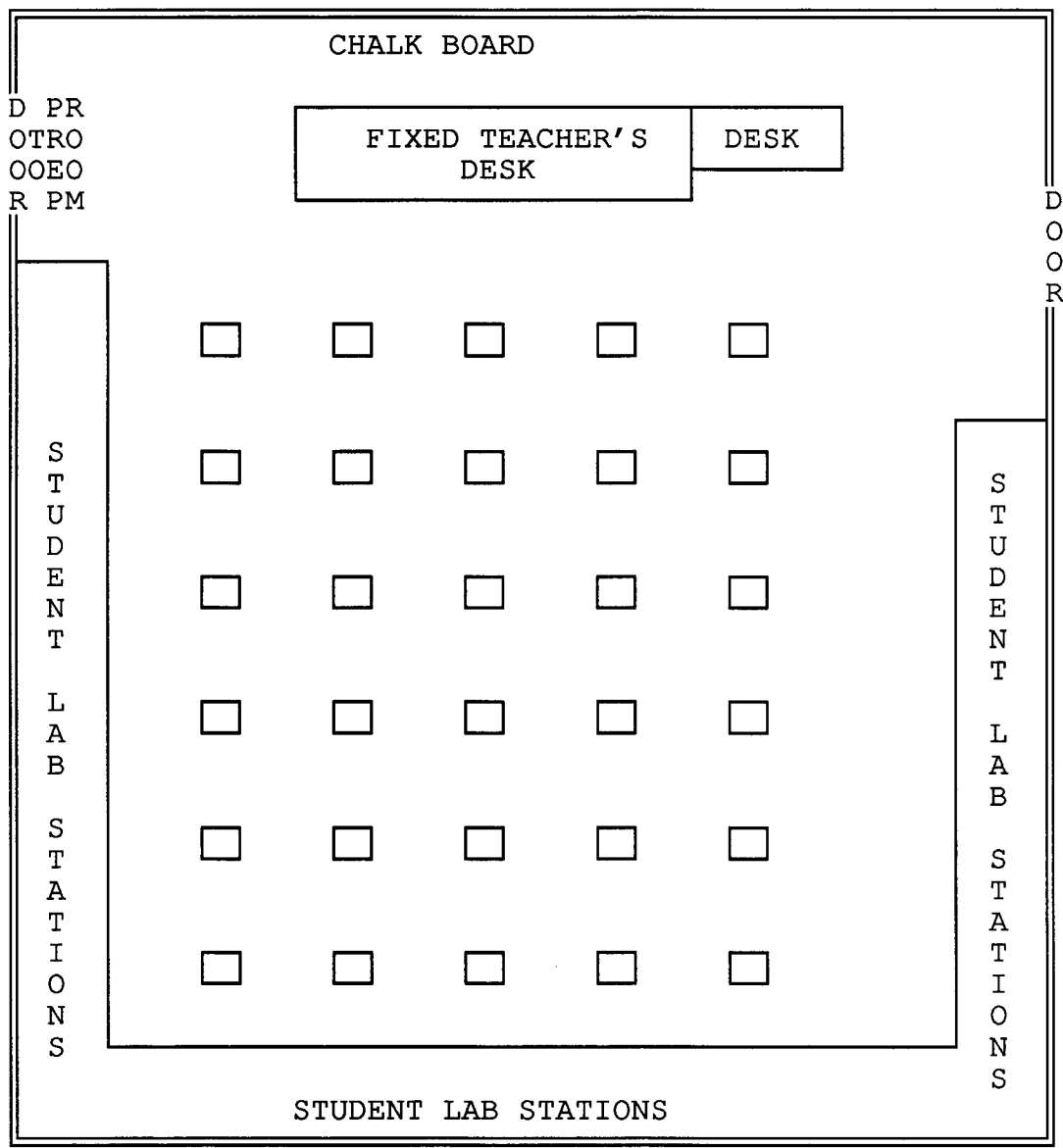
 = STUDENT TABLE  
2 PER TABLE

ROOM ARRANGEMENT - MRS. T  
FRONT



□ = STUDENT DESK

ROOM ARRANGEMENT - MR. S  
FRONT



□ = STUDENT DESK

APPENDIX B  
CODING CATEGORIES AND DESCRIPTIONS



## CODING CATEGORIES AND DESCRIPTIONS

Administrators/Administration - Comments and observations about administration policy and involvement with the faculty.

Breaking away - Making the break away from following the cooperating teacher's lessons toward independent planning.

Camps/Seminar - Comments and observations about the seminar its role and influence on the experience.

Cheating/Copying - Comments, observations, and policy relating to student cheating and copying others' work.

College supervisor - Comments that relate to the visits and input provided by the college supervisor.

Compromise situation of student teaching - Comments indicating that the student teacher understands that there are just some things they cannot change.

Confidentiality - Comments about concerns of maintaining student confidentiality in posting grades.

Content relevancy for students - Comments relating to making the material relevant to the students.

Content/Concept - Comments relating to the level of coverage, and factual vs. concept-based teaching.

Cooperating teacher/Locus of control - Comments and observations pertaining to where the control of the classroom resided; with the cooperating teacher or the student teacher.

Cooperating teacher - General comments about the cooperating teacher.

Cooperating teacher/Power - Comments about the power that the cooperating teacher could exert on the professional future of the student teacher.

Cooperating teacher intervening - Instances where the cooperating teacher stepped into a situation that the student teacher initiated.

Discipline/Control - Comments and observations related to classroom control and discipline as a control technique.

- End is near - Comments and observations that reflect the realization that the end of the quarter is coming and its effect on teaching.
- Evaluation of placement - Comments relating to the student teacher's placement in relation to their needs and expectations.
- Evaluation of student teacher - Comments about the formal observations of the student teacher.
- Expectations - Comments about the student teacher's expectations of their students.
- Extra credit - Comments and observations about the effect, usefulness, and effectiveness of extra credit.
- Extra mile - Comments and observations that reflect effort beyond the call of duty in the interest of the students.
- Facilities - Comments and observations relating to the public school facilities.
- Grades and grading - Comments about grades, grading, and grading policy throughout the experience.
- Health - Expressions of concern about the health of the student teacher, or the effect of their health on teaching.
- How I feel about teaching - Summary of how student teacher views teaching or the students at that point.
- Individual students - Comments and observations about individual students.
- Job hunting - Comments and observations relating to the process of job hunting or the requirements for procuring a job.
- Life outside - Comments and observations of the interaction of life outside student teaching and student teaching.
- Loneliness/Isolation - Comments and observations concerning feelings of isolation during student teaching.
- Make-up work - Comments relating to concerns about, student reactions to, and student teacher's feelings about make-up work.
- Management - Comments and observations concerning classroom management techniques and their effectiveness.

- Mid-course correction - Comments indicating adjustments of lessons throughout the day.
- Orientation to setting - Comments and observations about the school and the setting.
- Orientation to student teaching - Comments and observations relating to the technicalities of student teaching from the college's point of view.
- Other student teachers - Reports of interactions with other student teachers or comments on other student teacher's experiences.
- Other teachers - Interactions with other teachers in the school or other schools.
- Paper work - Comments about the amount of paper work and the effect this had on the experience.
- Parents - Comments relating to interaction with parents or parent's involvement in the educational process.
- Personal - Comments and reports on the effect of student teaching on the student teacher's personal life or comments about the personal life itself.
- Personal time on school - Comments on the effect of personal time, including weekends and evenings, spent on school work.
- Personal with students - Reports on incidents where student teachers revealed their personal side to their students.
- Philosophy - Comments and observations about the student teacher's philosophy of teaching.
- Planning for teaching - Comments and observations relating to the process of planning for teaching.
- Preparation for teaching - Comments relating to the preservice training of the student teachers.
- Relations with staff - Comments and observations relating to the interaction between the student teacher and the non-teaching staff.
- Relations with class - Comments and observations about interaction with the class as a whole.
- Research - Comments related to the research project being

carried out.

Rules and policy - Comments and observations about the process of setting rules and policies and enforcing them.

Safety - Comments related to student safety and safety procedures in the classroom.

Self-evaluation - Comments evaluating teaching or methodology.

Self-video - Comments about being video taped for the research project.

Student abilities - Comments and observations relating to student abilities.

Student as catalyst - Comments and observations of situations where students have acted as catalysts for the behavior of other students.

Student attention spans - Comments and observations relating to student attention spans and the effect on their learning potential.

Student attitudes - Comments and observations relating to student attitudes and their effect on motivation and learning.

Student behavior - Comments and observations of student behavior in the classroom and its effect on motivation and learning.

Student goals - Comments and observations relating to student's short and long range goals.

Student motivation - Observations and concerns about the level of student motivation and its effect on learning and behavior.

Student reading and writing skills - Comments and experiences involving student reading and writing skills.

Student responsibility for learning - Comments relating to the student teacher's philosophy that students have a responsibility in their own learning.

Student reaction to student teacher - Observations and comments about student response to the student teacher.

- Student reaction to lesson - Observations and comments about how students respond to lessons taught by the student teacher.
- Student teacher's reaction to students - Student teacher's feelings toward the students.
- Students have a history - Recognition that the students come to the class with personal and academic histories and outside pressures.
- Substitutes - Experiences with or thoughts about substitutes and substituting.
- Teacher tasks - Comments and observations about the daily tasks such as roll-taking.
- Teaching methods/Techniques - Comments about the use and effectiveness of teaching methods and techniques.
- Teaching responsibilities - Comments and observations concerning the various responsibilities of a teacher beside the act of teaching.
- Test as a teaching tool - Use as tests as formative evaluation tools.
- Tests and testing - Comments relating to the use and evaluation of test.
- The little joys ... - Experiences or comments from students imparting joy or a sense of achievement for the student teacher.
- The Wall - Comments that reflect the incidence of or the impact of mid-term burnout.
- Time - Comments and observations about the amount of time involved with teaching.
- Tired - Comments about physical and mental fatigue.
- Values - Comments relating to the infusion of values into teaching.
- Videos/Media - Comments relating to the use and effectiveness of media in teaching.
- What I did today - A review of what was taught during the day. An oral review of the lesson plan.
- When I grow up - Comments about how the student teacher

will do things when they have their own classroom.

When I was their age - Comparisons between how the student teachers remember school and how they see it now.

Work samples - Comments and observations relating to the work samples required by the Oregon state licensing agency and their effect on the experience.

Work load - Comments and observations about the work load related to teaching. Closely related to paper work.

Worksheets - Comments relating specifically to the use or value of worksheets as a teaching tool.