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ABSTRACT

Student teachers from Pennsylvania State University described experiences which supported or reduced their motivation to pursue teaching as a career. Data were collected from students who had successfully completed an 11 week full-time student teaching experience. The sample included 77 elementary, 92 secondary, and 28 special education student teachers. Most student teachers provided multiple comments regarding positive and negative experiences, resulting in 956 examples. Of these, there were 557 positive responses and 399 negative comments. Most positive responses came in the category of "individual interaction between teachers and student teachers," followed, in descending order, by "student feedback to teacher," "pedagogy," "achievement," and "teacher interaction with students." Categories with the most negative responses were "student behavior," "behavior management," "professional behaviors/attitudes outside the classroom," and "parents/community expectations/attitudes." Tables display percentages and ranks of positive and negative responses, and samples of comments in each of the categories are included. (CB)

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CRITICAL EXPERIENCES IN STUDENT
TEACHING: EFFECTS ON CAREER CHOICE
AND IMPLICATIONS FOR PROGRAM
MODIFICATION

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Objective:

The purpose of this study was to obtain data from student teachers on experiences in the school environment which supported or reduced their motivation to pursue teaching as a career.

Theoretical Framework:

Student teaching experiences have a mystique and myth all their own; they are anticipated and feared as a source of delight, despair, satisfaction, frustration, and exhaustion. In colleges of education and school faculty rooms, stories about student teaching are as abundant as ghost stories around a summer camp bonfire. Why so many stories?

One of the reasons is the strength of feeling student teachers have about their experiences. Almost every student teacher has some positive experiences which greatly enhance the motivation to teach and some negative experiences which lead the student to seriously consider leaving teaching. What experiences do prospective teachers view as positive? What experiences do they feel are negative? Several studies of student teaching and first year teaching provide tentative answers to these questions.

In 1974, Ryan published a study of beginning teachers which concluded that their problems fell into seven categories: students, parents, administrators, other teachers, instruction, isolation, and culture shock. This shock is associated with the realization that teaching is not as familiar or as simple as the former student expected. The physical and emotional demands of the job often overwhelm the beginner. As they discern the lack of institutional support and isolation from other teachers, beginning teachers suffer increasing feelings of uncertainty and self-doubt. Managing students' behavior and relating to students' parents prove to be additional sources of anxiety. Ryan depicts the first year of teaching as a time of frustration, isolation, and intense self-doubt.

Applegate et al. (1977) studied 18 first-year teachers more intensely than Ryan (1974) interviewing them and observing their teaching throughout the year. Patterns were again found in the problems first-year teachers perceived as important. All of the teachers reported making surprising discoveries about the job and about themselves. Unpleasant discoveries were four times more frequent than pleasant ones. As the year wore on, teachers' reactions to students shifted from enjoying students to enjoying the absence of management problems when working with students. By the second half of the year, some new teachers began to report supportive relationships with other teachers. Johnston (1980, 1981) has reported very similar results in two studies of first-year teachers.

Several studies have produced similar findings. Villeme, Hall, and Topping (1984) studied the attitudes toward teaching reported by "higher ability" graduates of teacher education. They found that these teachers felt most positive about the aspects of their roles which dealt with communication and interaction. They felt the least positive about managing student behavior. In another survey of beginning teachers, Burke (1983) found that first-year teachers felt a need for assistance with discipline and individualization. In a recent review of research on the problems of beginning teachers, Veenman (1984) noted that classroom discipline was the most frequently reported problem; motivation of students was second; individual student differences was third; evaluating students work was fourth; and relations with parents was the fifth most frequently mentioned problem. Veenman also notes that working with children, improving one's teaching skills, enjoying the teaching of a subject, "doing something worthwhile," and "vacations/working conditions" were sources of satisfaction for beginning teachers.

Are the concerns of student teachers similar to those of first-year teachers? Sullivan (1979) found elementary student teachers were most concerned about "survival" in providing instruction and discipline and indicated a lower level of concern about their relationships with other teachers. Mahan (1981) studied the concerns of elementary and secondary student teachers and found their concerns focused on instruction, discipline, and establishing productive relationships with other staff members. The responses of elementary and secondary student teachers were not significantly different and remained consistent throughout student teaching. In these two studies, the concerns of student teachers closely matched those of first-year teachers.

The research available on reactions to student teaching and the first years of teaching tend to focus on aspects of the experiences perceived as negative. There is a surprising lack of information on the experiences beginning teachers see as motivating and positive. Without more balanced information, little can be done to improve student teaching experiences unless one assumes that simply reducing the negative makes the experience more positive--not a safe assumption if Herzberg's work is valid (Herzberg, 1959).

Many of the best young teachers are leaving the teaching profession (Schlecty and Vance, 1981). State departments of education (see, for example, Pennsylvania Department of Education Standards for Teacher Preparation Curriculums) are requiring more and more field experiences in teacher preparation in an attempt to help preprofessionals make a more positive transition to the role of

professional educators. Unfortunately, there is little evidence that these additional field experiences are a positive influence on prospective teachers' skills and motivation to teach. If teacher educators wish to attract and retain the most competent prospects, they need further study of both the positive and the negative aspects of field experiences. This study attempted to elicit information concerning those experiences which student teachers found encouraging as well as discouraging.

Method and Data Source

Responding to two open-ended questions, 197 student teachers from The Pennsylvania State University described their experiences in the school environment. The questions enabled them to give examples of positive and negative experiences which affected their motivation to pursue teaching as a career.

The procedure for interpreting the responses was a content analysis approach as suggested by Holsti (1969). Interpretation consisted of identification of key ideas; corroboration of key ideas through data triangulation; and placement of key ideas into discrete categories. This resulted in the development of five main categories: Parents/Community; School Organization; Professional Staff; Students; and Self Subdivisions (referred to as subcategories) evident in each of the main categories were also identified and used for the analyses. Definitions and illustrative responses for each category can be found in Appendix A.

Data were collected anonymously from students who successfully completed an eleven week full-time student teaching field experience. Data were gathered over a period of four years at three student teaching centers. The centers included urban, rural, and suburban schools in Eastern, Western and Central Pennsylvania.

The sample included elementary (N = 77), secondary (N = 92), and special education (N = 28) student teachers. Most student teachers provided multiple comments regarding positive and negative experiences, resulting in 956 examples. Because student teachers could make an unlimited number of comments, the data had to be analyzed in two ways.

The first analysis examined the number of teachers who gave responses in each category. For this analysis, no matter how many responses a teacher made in one category, only one tally was recorded to indicate a response. For example if a teacher offered three responses in the category Students, one tally was recorded. These data are referred to as Total Teachers.

The second analysis considered multiple responses in each category. No data were disregarded for this analysis. Every response was recorded even if there were numerous statements made by one teacher in a single category. For example, if a teacher offered three responses in the category Students, all three were tallied. These data are referred to as Total Responses.

The dual analyses assured that a few teachers giving multiple examples in a single category did not produce an inaccurate representation of all teachers' responses. For each analysis, the responses were partitioned by positive and negative experiences and by elementary, secondary, and special education certification areas.

Within this structure, frequencies and rankings were calculated for main categories and subcategories. Tied ranks were assigned an average rank corresponding to the tied values as suggested by Hajek (1969). For each analysis (Total Teacher and Total Responses), the Kruskal-Wallis Test of the NPAR1WAY Procedure was run (Statistical Analysis System Institute, 1982).

The NPAR1WAY procedure performs a one way analysis of variance on ranks and the Kruskal-Wallis Test tests for significant differences in rankings. Significant differences in rankings were tested for main and subcategories within and between certification areas for both positive and negative experiences.

Results

For Total Teacher and Total Responses analyses, there were no significant differences for rankings within or between certification areas for positive and negative experiences (Tables 1-12).

In addition there was almost complete similarity in ranking between Total Responses and Total Teachers. For these reasons, and for clarity of presentation, a decision was made to focus on the Total Teachers analysis (Tables 1-6). Furthermore, since the subcategories are more definitive, a decision was made to concentrate on the Total Teachers' subcategories (Table 2).

According to the results in Table 2, the following five subcategories were found to be the most positive in supporting student teachers' motivation to pursue teaching as a career. First, (3.3) Individual Interactions Between Teachers and Student Teachers; second, (4.4) Student Feedback to Teacher; third, (5.1) Content/Pedagogy; fourth, (4.3) Student Achievement; and fifth, (4.5) Teacher Interaction with Students.

Likewise, the following five categories were found to be the most negative in reducing student teachers' motivation to pursue teaching as a career. First, (4.2) Student Behavior; second, (3.2) Professional Behavior/Attitudes Outside Classroom; third, (5.2) Behavior Management; fourth, (3.1) Professional Behavior/Attitudes in Classroom; and fifth, (1.2) Parents/Community Expectations/Attitudes.

It should be noted that overall there were 557 positive responses and 399 negative responses; an approximate 3:2 positive to negative response ratio.

Educational Importance

During the period 1984-1988, the demand for additional teachers will exceed the supply (Frankel, 1978). Many capable teachers leave the profession. In a recent national study, 57% of the practicing teachers surveyed reported that their schools had no difficulty in attracting good teachers, but 48% reported that their schools had difficulty retaining good teachers. Many in-service teachers, as well as many potentially capable preservice teachers, choose other professions for economic and social reasons (Gallup, 1985; National Educational Association, 1983). While teacher education programs can not control many of the variables which influence these choices, they can influence the quality of their field experiences. Based on the positive and negative perceptions reported by student teachers in this study, this paper suggests strategies for increasing positive and minimizing negative reactions to public school field experiences.

The most positive responses in supporting motivation to pursue teaching as a career came in the category of Individual Interaction Between Teachers and Student Teachers. This finding not only substantiates the idea that cooperating teachers are highly influential; it also suggests that some interactions with other teachers have a positive effect on preprofessionals' motivation to pursue teaching as a career. An effective student teaching program should encourage this individual interaction through providing ample time for student teachers to observe and confer with other professionals. Additionally, having student teachers observe and confer with peers during field experiences can be motivational and rewarding. Student teaching programs should capitalize on this interaction by providing training for cooperating teachers which can enable them to become more skillful in interacting with beginning teachers and encouraging them to confer daily with student teachers. These individual interactions with other professionals were perceived as more positive than participation in faculty, curriculum, and inservice meetings.

The second most positive set of experiences reported by the respondents was Student Feedback to Teacher (4.4). This finding leads us to believe that student teachers should not be expected to rely on the chance remarks of students, but rather should systematically solicit feedback from their learners about the learners' perceptions of the quality of instruction. "The Clear Teacher Checklist" illustrated in the Journal of Educational Research, (Kennedy et al, 1978) is one instrument that might be employed for this purpose. Using such an instrument would not only provide student feedback, which was a positive influence, it would provide another source of feedback for improving the student teacher's classroom performance.

The third most positive response was Pedagogy (5.1). This subcategory includes competence in the planning, delivery, and evaluation of instruction. For student teachers to feel competent in Pedagogy, attention to the following five areas is recommended: (1) effective teaching practices; (2) daily lesson planning; (3) specific feedback via supervision; (4) self analysis; and (5) long range planning.

Recent research on effective teaching has demonstrated that there are essential components in the teaching act (Rosenshine, 1983). These components may vary, but generally speaking, the literature suggests: (1) introducing the lesson; (2) stating the objective; (3) teaching to the objective; (4) modeling or demonstrating the expected learning; (5) checking for students' understanding; (6) guiding students' practice; (7) providing independent practice; and (8) taking time for closure. Preprofessionals should be helped in understanding and developing a conceptual basis for effective teaching and translating their learnings into classroom performance.

Student teachers should demonstrate their ability to plan instruction on a day to day basis. The steps in the teaching act should guide their planning. Logically, the better prepared student teachers are in planning; the better their chances of delivering effective instruction; and the better their chances of feeling competent.

The supervisor's role in facilitating the student teacher's performance has three basic components. First, the supervisor collects data on the student teacher's performance; then he/she helps the student teacher analyze the data; and finally, the supervisor helps the student teacher plan modifications in the teaching act for subsequent lessons. Like the student teacher, the supervisor should be guided by effective teaching concepts. Among his/her many responsibilities, focusing feedback on the concepts of the instructional act will be most important in increasing a student teacher's feeling of pedagogical competence.

Supervisors act as models when they analyze observational data. Student teachers will develop that skill through observing a role model and through practice. Student teachers' ability to analyze their own behavior may be the most important skill acquired because it enables them to autonomously improve their performance. Practice in self analysis through video and audio taped lessons is important in developing this skill. Practice through observing and providing systematic feedback to peers also increases a student teacher's ability to analyze his/her own instruction (The Pennsylvania State University, 1984). Simple methods of systematic observation should be a part of every student teaching program. If we expect teachers to be decision makers in the classroom, then they must be able to analyze and adjust their own teaching.

The final area which contributes to student teachers' feeling of pedagogical competence is long range planning. Previous research (Levin, 1981) has indicated that student teachers found unit planning to be of significant value in increasing the student teachers' feelings of competence.

The fourth most positive response in motivating student teachers occurred in the subcategory of student Achievement (4.3). Naturally, the pay off for any teacher occurs when they are able to see the results of their instruction in student achievement. This is also true for the student teachers who answered this questionnaire. Student teachers need to implement frequent and varied evaluation techniques that expand evaluation beyond the typical paper and pencil tests (Gronlund, 1976). Student teachers should be aware that evaluation serves purposes other than simply deriving a grade. Evaluation, when used for diagnostic purposes, serves to help the teacher plan prescriptive instruction. Effective assessment guides planning and maximizes the chances for successful instruction thus increasing pedagogical effectiveness.

The fifth most positive response occurred in the subcategory of Teacher Interaction with Students (4.5). This subcategory dealt with experiences student teachers had with students outside of the classroom. This would suggest that student teachers should interact with students in settings less formal than the academic classroom. A student teaching program should consider making participation in an extracurricular activity a requirement. While these experiences are most easily arranged at the secondary level, we would encourage participation in extracurricular activities at the elementary level as well.

In discussing the experiences reported as most negative, it is uncertain whether reducing these experiences will lead to increased motivation by the student teacher. It is obvious however that reducing the number of negative experiences may reduce the amount of frustration encountered during the field experience.

Two subcategories which are closely related were ranked one and three in terms of most negative experiences. These were Student Behavior (4.2) and Behavior Management (5.2). As defined in this paper, Student Behavior refers to students' disruptive behavior while Behavior Management refers to the student teachers' perception of competence in managing student behavior.

Behavior management is widely recognized as a problem for student teachers. Student teachers must control common off task behaviors (Shrigly, 1985), as well as chronic disruptive behaviors (Levin et al, 1985). Two essential prerequisites to the effective use of management techniques: (1) realistic expectations about the range of student behaviors, and (2) the design and communication of classroom guidelines. These guidelines should be few in number; they should describe the behaviors necessary for learning to occur; they should be based on mutual respect between the student and teacher; and they should insure the protection of property as well as personal safety. While knowledge about management techniques can be acquired through coursework, the techniques can only be refined and mastered by performance in the classroom. Feedback from the supervisor and cooperating teacher is essential in developing and maintaining effective classroom management strategies.

Teacher preparation programs should provide study in classroom management concepts and techniques prior to and concurrent with field experiences. Student teaching programs should assist students in translating theory in classroom management into class performance. Initial planning that includes the establishment of guidelines for classroom behavior prior to assuming specific teaching responsibilities may help in reducing the negative influence of classroom management on a student teacher's development.

The final three subcategories may be beyond the control of any student teaching program. Professional Behaviors/Attitudes Outside the Classroom (3.2); Professional Behavior/Attitudes in the Classroom (3.1); and Parents/Community Expectations/Attitudes (1.2) were reported as most negative second, fourth, and fifth respectively. One way to reduce the negative effects of these experiences is to inform the student teacher of their existence and to provide them with a variety of strategies that can be used when confronted with the negative behaviors and attitudes (Travers, 1977).

Needless to say, the cooperating teacher plays a critical role influencing the extent to which these last three factors, as well as other factors have an impact on preprofessionals' development. It is essential that student teaching programs enlist the best professional role models as cooperating teachers. Practitioners who have positive attitudes, model effective teaching practices and have the ability to provide objective feedback to preprofessional teachers will be the most positive influence in facilitating a student teacher's growth.

Teacher education programs are currently faced with a dilemma. There is a growing teacher shortage and strong public pressure to improve teacher preparation programs. To compound the dilemma, many promising teachers leave education early in their careers. In an effort to improve teacher preparation, many states are mandating lengthier and more frequent field experiences. This study, like related studies of beginning and student teachers, highlights the need to examine the sorts of experiences students have in field settings. Without attention to areas highlighted in this paper, the field experiences being added to improve teacher preparation could reduce prospective teachers' interest in remaining in teaching.

TABLE 1

TOTAL TEACHERS FOR MAIN CATEGORIES: PERCENTAGES AND RANKS BY
POSITIVE AND NEGATIVE EXPERIENCES (N=197)

	POSITIVE (N=197)		NEGATIVE (N=197)	
	%(no.)	Rank*	%(no.)	Rank*
1.0 PARENTS/COMMUNITY	12.69(25)	5	12.69(25)	5
1.1 Feedback to Teacher				
1.2 Expectations/Attitudes				
2.0 ORGANIZATION	17.77(35)	4	34.52(68)	3
2.1 Working Conditions (Physical)				
2.2 Job Description/Satisfaction				
2.3 School Climate				
2.4 Administrative Leadership				
2.5 Work Outside School Hours				
2.6 Curriculum				
3.0 STAFF	52.79(104)	2	36.55(72)	2
3.1 Professional Behavior/ Attitudes (Classroom)				
3.2 Professional Behavior/ Attitudes (Outside Classroom)				
3.3 Individual Interactions Between Teachers and Student Teachers				
4.0 STUDENTS	69.04(136)	1	38.07(76)	1
4.1 Interest				
4.2 Behavior				
4.3 Achievement				
4.4 Feedback to Teacher				
4.5 Teacher interaction with Students				
5.0 STAFF	37.06(73)	3	26.40(52)	4
5.1 Pedagogy				
5.2 Behavior Management				

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Sq Approximation) For Rankings.

DF	CHI-SQ	PROB
1	0.40	0.53

TABLE 2

TOTAL TEACHERS FOR SUBCATEGORIES: PERCENTAGES AND RANKS BY
POSITIVE AND NEGATIVE EXPERIENCES (N=197)

	POSITIVE (N=197)		NEGATIVE (N=197)	
	%(no.)	Rank*	%(no.)	Rank*
1.0 PARENTS/COMMUNITY				
1.1 Feedback to Teacher	5.08(10)	12	0.51(1)	17
1.2 Expectations/Attitudes	7.61(15)	10	12.18(24)	5
2.0 ORGANIZATION				
2.1 Working Conditions (Physical)	0.51(1)	18	7.61(15)	11
2.2 Job Description/Satisfaction	2.03(4)	17	11.68(23)	6
2.3 School Climate	4.57(9)	13.5	8.63(17)	9.5
2.4 Administrative Leadership	8.12(16)	9	5.58(11)	13
2.5 Work Outside School Hours	2.54(5)	16	4.06(8)	16
2.6 Curriculum	4.05(8)	15	4.57(9)	15
3.0 STAFF				
3.1 Professional Behavior/ Attitudes (Classroom)	16.75(33)	6	12.69(25)	4
3.2 Professional Behavior/ Attitudes (Outside Classroom)	4.57(9)	13.5	22.34(44)	2
3.3 Individual Interactions Between Teachers and Student Teachers	39.09(77)	1	8.63(17)	9.5
4.0 STUDENTS				
4.1 Interest	14.72(29)	7	10.66(21)	7
4.2 Behavior	6.60(13)	11	25.89(51)	1
4.3 Achievement	30.46(60)	4	5.58(11)	13
4.4 Feedback to Teacher	31.47(62)	2	5.58(11)	13
4.5 Teacher interaction with Students	27.92(55)	5	0.00(0)	18
5.0 STAFF				
5.1 Pedagogy	30.96(11)	3	9.64(19)	8
5.2 Behavior Management	9.14(18)	8	19.80(39)	3

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Sq Approximation) For Rankings.

DF	CHI-SQ	PROB
1	0.09	0.76

TABLE 3

TOTAL TEACHERS FOR MAIN CATEGORIES: PERCENTAGES AND RANKS OF POSITIVE RESPONSES
BY CERTIFICATION (N=197)

	ELEMENTARY (N=77)		SECONDARY (N=92)		SPECIAL EDUCATION (N=28)	
	%(no.)	Rank*	%(no.)	Rank*	%(no.)	Rank*
1.0 PARENTS/COMMUNITY	20.78(16)	4	7.61(7)	5	7.14(2)	5
1.1 Feedback to Teacher						
1.2 Expectations/Attitudes						
2.0 ORGANIZATION	19.48(15)	5	15.22(14)	4	21.43(6)	4
2.1 Working Conditions (Physical)						
2.2 Job Description/Satisfaction						
2.3 School Climate						
2.4 Administrative Leadership						
2.5 Work Outside School Hours						
2.5 Curriculum						
3.0 STAFF	49.35(38)	2	54.35(50)	2	57.14(16)	1
3.1 Professional Behavior/Attitudes (Classroom)						
3.2 Professional Behavior/Attitudes (Outside Classroom)						
3.3 Individual Interactions Between Teachers and Student Teachers						
4.0 STUDENTS	66.23(51)	1	76.09(70)	1	53.57(15)	2
4.1 Interest						
4.2 Behavior						
4.3 Achievement						
4.4 Feedback to Teacher						
4.5 Teacher Interaction with Students						
5.0 TEACHER (SELF)	37.66(29)	3	39.13(36)	3	28.57(8)	3
5.1 Pedagogy						
5.2 Behavior Management						

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	0.06	0.97

TABLE 4

TOTAL TEACHERS FOR MAIN CATEGORIES: PERCENTAGES AND RANKS OF NEGATIVE RESPONSES
BY CERTIFICATION (N=197)

	ELEMENTARY (N=77)		SECONDARY (N=92)		SPECIAL EDUCATION (N=28)	
	% (no.)	Rank*	% (no.)	Rank*	% (no.)	Rank*
1.0 PARENTS/COMMUNITY						
1.1 Feedback to Teacher	11.69(9)	5	10.87(10)	5	21.43(6)	4.5
1.2 Expectations/Attitudes						
2.0 ORGANIZATION						
2.1 Working Conditions (Physical)	27.27(21)	4	42.39(39)	3	28.57(8)	1.5
2.2 Job Description/Satisfaction						
2.3 School Climate						
2.4 Administrative Leadership						
2.5 Work Outside School Hours						
2.5 Curriculum						
3.0 STAFF						
3.1 Professional Behavior/Attitudes (Classroom)	31.17(24)	2	43.48(40)	1.5	28.57(8)	1.5
3.2 Professional Behavior/Attitudes (Outside Classroom)						
3.3 Individual Interactions Between Teachers and Student Teachers						
4.0 STUDENTS						
4.1 Interest	36.36(28)	1	43.48(40)	1.5	25.00(7)	3
4.2 Behavior						
4.3 Achievement						
4.4 Feedback to Teacher						
4.5 Teacher Interaction with Students						
5.0 TEACHER (SELF)						
5.1 Pedagogy	29.87(23)	3	25.00(23)	4	21.43(6)	4.5
5.2 Behavior Management						

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	1.88	0.39

TABLE 5

TOTAL TEACHERS FOR SUBCATEGORIES: PERCENTAGES AND RANKS OF POSITIVE RESPONSES
BY CERTIFICATION (N=197)

	ELEMENTARY (N=77)		SECONDARY (N=92)		SPECIAL EDUCATION (N=28)	
	%(no.)	Rank*	%(no.)	Rank*	%(no.)	Rank*
1.0 PARENTS/COMMUNITY						
1.1 Feedback to Teacher	6.49(5)	12	5.43(5)	11	0.00(0)	17.5
1.2 Expectations/Attitudes	14.29(11)	6	2.17(2)	16	7.14(2)	10.5
2.0 ORGANIZATION						
2.1 Working Conditions (Physical)	0.00(0)	17.5	0.00(0)	18	3.57(1)	15
2.2 Job Description/Satisfaction	1.30(1)	15.5	3.26(3)	15	0.00(0)	17.5
2.3 School Climate	7.79(6)	11	1.09(1)	17	7.14(2)	10.5
2.4 Administrative Leadership	11.69(9)	9	5.43(5)	11	7.14(2)	10.5
2.5 Work Outside School Hours	0.00(0)	17.5	4.35(4)	13.5	3.57(1)	15
2.5 Curriculum	3.90(3)	13.5	4.35(4)	13.5	3.57(1)	15
3.0 STAFF						
3.1 Professional Behavior/Attitudes (Classroom)	12.99(10)	7.5	21.74(20)	6	10.71(3)	6.5
3.2 Professional Behavior/Attitudes (Outside Classroom)	1.30(1)	15.5	5.43(5)	11	10.71(3)	6.5
3.3 Individual Interactions Between Teachers and Student Teachers	37.66(29)	1	39.13(36)	2	42.88(12)	1
4.0 STUDENTS						
4.1 Interest	12.99(10)	7.5	18.48(17)	7	7.14(2)	10.5
4.2 Behavior	3.90(3)	13.5	8.70(8)	9	7.14(2)	10.5
4.3 Achievement	35.06(27)	2	26.09(24)	5	32.14(9)	2
4.4 Feedback to Teacher	25.97(20)	5	41.03(38)	1	14.29(4)	5
4.5 Teacher Interaction with Students	29.87(23)	4	28.26(26)	4	21.43(6)	3.5
5.0 TEACHER (SELF)						
5.1 Pedagogy	33.77(26)	3	31.52(29)	3	21.43(6)	3.5
5.2 Behavior Management	9.09(7)	9	9.78(9)	8	7.14(2)	10.5

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	0.15	0.93

TABLE 6

TOTAL TEACHERS FOR SUBCATEGORIES: PERCENTAGES AND RANKS OF NEGATIVE RESPONSES
BY CERTIFICATION (N=197)

	ELEMENTARY (N=77)		SECONDARY (N=92)		SPECIAL EDUCATION (N=28)	
	%(no.)	Rank*	%(no.)	Rank*	%(no.)	Rank*
1.0 PARENTS/COMMUNITY						
1.1 Feedback to Teacher	0.00(0)	17.5	1.09(1)	17	0.00(0)	16
1.2 Expectations/Attitudes	11.69(9)	5	9.78(10)	9.5	21.43(6)	1.5
2.0 ORGANIZATION						
2.1 Working Conditions (Physical)	6.49(5)	10.5	7.61(7)	11	10.71(3)	6
2.2 Job Description/Satisfaction	11.69(9)	5	14.13(13)	6	3.57(1)	10.5
2.3 School Climate	2.60(2)	15.5	14.13(13)	6	7.14(2)	7
2.4 Administrative Leadership	6.49(5)	10.5	5.43(5)	14.5	3.57(1)	10.5
2.5 Work Outside School Hours	2.60(2)	15.5	5.43(5)	14.5	3.57(1)	10.5
2.5 Curriculum	5.19(4)	13.5	5.43(5)	14.5	0.00(0)	16
3.0 STAFF						
3.1 Professional Behavior/Attitudes (Classroom)	10.39(8)	7	14.13(13)	6	14.29(4)	4.5
3.2 Professional Behavior/Attitudes (Outside Classroom)	20.78(16)	3	26.09(24)	2	14.29(4)	4.5
3.3 Individual Interactions Between Teachers and Student Teachers	5.19(4)	13.5	13.04(12)	8	3.57(1)	10.5
4.0 STUDENTS						
4.1 Interest	9.09(7)	8	15.22(14)	3.5	0.00(0)	16
4.2 Behavior	23.38(18)	2	29.35(27)	1	21.43(6)	1.5
4.3 Achievement	6.49(5)	10.5	5.43(5)	14.5	3.57(1)	10.5
4.4 Feedback to Teacher	6.49(5)	10.5	6.52(6)	12	0.00(0)	16
4.5 Teacher Interaction with Students	0.00(0)	17.5	0.00(0)	18	0.00(0)	16
5.0 TEACHER (SELF)						
5.1 Pedagogy	11.69(9)	5	9.78(10)	9.5	3.57(1)	10.5
5.2 Behavior Management	25.97(20)	1	15.22(14)	3.5	17.86(5)	3

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	3.50	0.17

TABLE 7

TOTAL RESPONSES FOR MAIN CATEGORIES: PERCENTAGES AND RANKS BY
POSITIVE AND NEGATIVE EXPERIENCES (N=956)

	POSITIVE (N=557)		NEGATIVE (N=339)	
	% (no.)	Rank*	% (no.)	Rank*
1.0 PARENTS/COMMUNITY	4.67(26)	5	7.02(28)	5
1.1 Feedback to Teacher				
1.2 Expectations/Attitudes				
2.0 ORGANIZATION	8.08(45)	4	24.31(97)	3
2.1 Working Conditions (Physical)				
2.2 Job Description/Satisfaction				
2.3 School Climate				
2.4 Administrative Leadership				
2.5 Work Outside School Hours				
2.6 Curriculum				
3.0 STAFF	25.49(142)	2	27.32(109)	1
3.1 Professional Behavior/ Attitudes (Classroom)				
3.2 Professional Behavior/ Attitudes (Outside Classroom)				
3.3 Individual Interactions Between Teachers and Student Teachers				
4.0 STUDENTS	43.81(244)	1	25.81(103)	2
4.1 Interest				
4.2 Behavior				
4.3 Achievement				
4.4 Feedback to Teacher				
4.5 Teacher interaction with Students				
5.0 STAFF	17.95(100)	3	15.54(62)	4
5.1 Pedagogy				
5.2 Behavior Management				

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Sq Approximation) For Rankings.

DF	CHI-SQ	PROB
1	0.10	0.75

TABLE 8

TOTAL RESPONSES FOR SUBCATEGORIES: PERCENTAGES AND RANKS BY
POSITIVE AND NEGATIVE EXPERIENCES (N=956)

	POSITIVE (N=557)		NEGATIVE (N=339)	
	% (no.)	Rank*	% (no.)	Rank*
1.0 PARENTS/COMMUNITY				
1.1 Feedback to Teacher	1.97(11)	12	0.25(1)	17
1.2 Expectations/Attitudes	2.69(15)	10	6.77(27)	5.5
2.0 ORGANIZATION				
2.1 Working Conditions (Physical)	0.18(1)	18	4.26(17)	11
2.2 Job Description/Satisfaction	0.72(4)	17	6.77(27)	5.5
2.3 School Climate	1.62(9)	13.5	4.76(19)	9
2.4 Administrative Leadership	3.05(17)	9	3.51(14)	12
2.5 Work Outside School Hours	1.08(6)	16	2.26(9)	16
2.6 Curriculum	1.44(8)	15	2.76(11)	14.5
3.0 STAFF				
3.1 Professional Behavior/ Attitudes (Classroom)	6.64(36)	6	8.77(35)	4
3.2 Professional Behavior/ Attitudes (Outside Classroom)	1.62(9)	13.5	14.04(56)	2
3.3 Individual Interactions Between Teachers and Student Teachers	17.24(96)	1	4.51(18)	10
4.0 STUDENTS				
4.1 Interest	5.39(30)	7	5.51(22)	7
4.2 Behavior	2.33(13)	11	14.54(58)	1
4.3 Achievement	11.67(65)	4	2.76(11)	14.5
4.4 Feedback to Teacher	13.29(74)	3	3.01(12)	13
4.5 Teacher Interaction with Students	11.13(62)	5	0.00(0)	18
5.0 STAFF				
5.1 Pedagogy	14.18(79)	2	5.01(20)	8
5.2 Behavior Management	3.77(21)	8	10.53(42)	3

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Sq Approximation) For Rankings.

DF	CHI-SQ	PROB
1	0.58	0.45

TABLE 9

TOTAL RESPONSES FOR MAIN CATEGORIES: PERCENTAGES AND RANKS OF POSITIVE RESPONSES
BY CERTIFICATION (N=557)

	ELEMENTARY (N=224)		SECONDARY (N=268)		SPECIAL EDUCATION (N=68)	
	% (no.)	Rank*	% (no.)	Rank*	% (no.)	Rank*
1.0 PARENTS/COMMUNITY						
1.1 Feedback to Teacher	7.59(17)	5	2.61(7)	5	3.08(2)	5
1.2 Expectations/Attitudes						
2.0 ORGANIZATION						
2.1 Working Conditions (Physical)	8.93(20)	4	6.72(18)	4	10.77(7)	4
2.2 Job Description/Satisfaction						
2.3 School Climate						
2.4 Administrative Leadership						
2.5 Work Outside School Hours						
2.5 Curriculum						
3.0 STAFF						
3.1 Professional Behavior/Attitudes (Classroom)	21.88(49)	2	27.24(73)	2	30.77(21)	2
3.2 Professional Behavior/Attitudes (Outside Classroom)						
3.3 Individual Interactions Between Teachers and Student Teachers						
4.0 STUDENTS						
4.1 Interest	41.96(94)	1	47.01(126)	1	36.92(25)	1
4.2 Behavior						
4.3 Achievement						
4.4 Feedback to Teacher						
4.5 Teacher Interaction with Students						
5.0 TEACHER (SELF)						
5.1 Pedagogy	19.64(44)	3	16.42(44)	3	18.46(13)	3
5.2 Behavior Management						

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	0.14	0.93

TABLE 10

TOTAL RESPONSES FOR MAIN CATEGORIES: PERCENTAGES AND RANKS OF NEGATIVE RESPONSES
BY CERTIFICATION (N=399)

	ELEMENTARY (N=138)		SECONDARY (N=218)		SPECIAL EDUCATION (N=43)	
	%(no.)	Rank*	%(no.)	Rank*	%(no.)	Rank*
1.0 PARENTS/COMMUNITY	7.25(10)	5	5.50(12)	5	13.95(6)	4.5
1.1 Feedback to Teacher						
1.2 Expectations/Attitudes						
2.0 ORGANIZATION	21.01(29)	3.5	25.69(56)	3	27.91(12)	1.5
2.1 Working Conditions (Physical)						
2.2 Job Description/Satisfaction						
2.3 School Climate						
2.4 Administrative Leadership						
2.5 Work Outside School Hours						
2.5 Curriculum						
3.0 STAFF	21.01(29)	3.5	31.19(68)	1	27.91(12)	1.5
3.1 Professional Behavior/Attitudes (Classroom)						
3.2 Professional Behavior/Attitudes (Outside Classroom)						
3.3 Individual Interactions Between Teachers and Student Teachers						
4.0 STUDENTS	27.54(38)	1	26.61(58)	2	16.28(7)	3
4.1 Interest						
4.2 Behavior						
4.3 Achievement						
4.4 Feedback to Teacher						
4.5 Teacher Interaction with Students						
5.0 TEACHER (SELF)	23.19(32)	2	11.01(24)	4	13.95(6)	4.5
5.1 Pedagogy						
5.2 Behavior Management						

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	0.08	0.96

TABLE 11

TOTAL RESPONSES FOR SUBCATEGORIES: PERCENTAGES AND RANKS OF POSITIVE RESPONSES
BY CERTIFICATION (N=557)

	ELEMENTARY (N=224)		SECONDARY (N=268)		SPECIAL EDUCATION (N=68)	
	%(no.)	Rank*	%(no.)	Rank*	%(no.)	Rank*
1.0 PARENTS/COMMUNITY						
1.1 Feedback to Teacher	2.68(6)	11.5	1.87(5)	11.5	0.00(0)	17.5
1.2 Expectations/Attitudes	4.91(11)	7	0.75(2)	16	3.08(2)	10.5
2.0 ORGANIZATION						
2.1 Working Conditions (Physical)	0.00(0)	17.5	0.00(0)	18	1.54(1)	15
2.2 Job Description/Satisfaction	0.45(1)	15.5	1.12(3)	15	0.00(0)	17.5
2.3 School Climate	2.68(6)	11.5	0.37(1)	17	3.08(2)	10.5
2.4 Administrative Leadership	4.46(10)	9.5	1.87(5)	11.5	3.08(2)	10.5
2.5 Work Outside School Hours	0.00(0)	17.5	1.87(5)	11.5	1.54(1)	15
2.5 Curriculum	1.34(3)	13.5	1.49(4)	14	1.54(1)	15
3.0 STAFF						
3.1 Professional Behavior/Attitudes (Classroom)	4.91(11)	7	8.50(23)	6	4.62(3)	6.5
3.2 Professional Behavior/Attitudes (Outside Classroom)	0.45(1)	15.5	1.87(5)	11.5	4.62(3)	6.5
3.3 Individual Interactions Between Teachers and Student Teachers	16.52(37)	1	16.79(45)	1	21.54(15)	1
4.0 STUDENTS						
4.1 Interest	4.91(11)	7	6.34(17)	7	3.08(2)	10.5
4.2 Behavior	1.34(3)	13.5	2.99(8)	9	3.08(2)	10.5
4.3 Achievement	13.39(30)	3	9.70(26)	5	13.85(9)	3
4.4 Feedback to Teacher	11.61(26)	4	16.42(44)	2	6.15(4)	5
4.5 Teacher Interaction with Students	10.71(24)	5	11.57(31)	4	10.77(7)	4
5.0 TEACHER (SELF)						
5.1 Pedagogy	15.18(34)	2	13.06(35)	3	15.38(10)	2
5.2 Behavior Management	4.46(10)	9.5	3.36(9)	8	3.08(2)	10.5

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	0.09	0.96

TABLE 12

TOTAL RESPONSES FOR SUBCATEGORIES: PERCENTAGES AND RANKS OF NEGATIVE RESPONSES
BY CERTIFICATION (N=399)

	ELEMENTARY (N=224)		SECONDARY (N=268)		SPECIAL EDUCATION (N=68)	
	% (no.)	Rank*	% (no.)	Rank*	% (no.)	Rank*
1.0 PARENTS/COMMUNITY						
1.1 Feedback to Teacher	0.00(0)	17.5	0.46(1)	17	0.00(0)	16
1.2 Expectations/Attitudes	7.25(10)	4	5.05(11)	9	13.95(6)	2
2.0 ORGANIZATION						
2.1 Working Conditions (Physical)	3.62(5)	11	4.13(9)	11	6.98(3)	6.5
2.2 Job Description/Satisfaction	6.52(9)	5.5	7.34(16)	4	4.65(2)	9
2.3 School Climate	2.17(3)	15	6.42(14)	6.5	4.65(2)	9
2.4 Administrative Leadership	3.62(5)	11	2.75(6)	13.5	6.98(3)	6.5
2.5 Work Outside School Hours	1.45(2)	16	2.29(5)	15.5	4.65(2)	9
2.5 Curriculum	3.62(5)	11	2.75(6)	13.5	0.00(0)	16
3.0 STAFF						
3.1 Professional Behavior/Attitudes (Classroom)	5.80(8)	7	16.09(35)	3	11.63(5)	4.5
3.2 Professional Behavior/Attitudes (Outside Classroom)	12.32(17)	3	15.14(33)	1	13.95(6)	2
3.3 Individual Interactions Between Teachers and Student Teachers	2.90(4)	14	5.96(13)	8	2.33(1)	12
4.0 STUDENTS						
4.1 Interest	5.07(7)	8	6.88(15)	5	0.00(0)	16
4.2 Behavior	15.22(21)	2	14.22(31)	2	13.95(6)	2
4.3 Achievement	3.62(5)	11	2.29(5)	15.5	2.33(1)	12
4.4 Feedback to Teacher	3.62(5)	11	3.21(7)	12	0.00(0)	16
4.5 Teacher Interaction with Students	0.00(0)	17.5	0.00(0)	18	0.00(0)	16
5.0 TEACHER (SELF)						
5.1 Pedagogy	6.52(9)	5.5	4.59(10)	10	2.33(1)	12
5.2 Behavior Management	16.67(23)	1	6.42(14)	6.5	11.63(5)	4.5

*Average ranks were used for ties.

Kruskal-Wallis Test (Chi-Square Approximate) For Rankings

DF	CHI-SQ	PROB
2	0.17	0.92

APPENDIX A

CATEGORIES Definitions and Examples (Positive and Negative)

1.0 Parents/Community

1.1 Feedback to Student Teacher

This includes instances in which the student teacher cites specific communications from parents to other community members.

EX: "A parent of a child who gave me some problems came up to me and said, 'Thank you for all you've done for my child.' She stood and talked to me for awhile before she had to leave."

"One parent sent a note . . . asking that her child not be required to do anything . . . that was all she wanted us to do."

1.2 Expectations/Attitudes

This refers to those expectations and attitudes the student teacher reports to be held by parents or the community for which no direct communication is cited.

EX: "Working with parents and seeing how willing they are to help the teachers and their children."

"The incredible emphasis placed on grades by parents."

2.0 Organization

2.1 Working Conditions

This includes comments on the school's physical facilities and the materials, equipment, and funds available.

EX: ". . . there was no Xerox machine, I had to pay to Xerox many things for my students. . . ."

[No positive comments were made in this area.]

2.2 Job Description

This includes comments about the expectations the organization places on teachers during school hours, reactions to these expectations, and comments on the salaries received by teachers.

EX: "I enjoyed the challenge of five preparations a day."

"Paperwork, paperwork, paperwork."

". . . hall duty. All teachers have some sort of duty and this angers me. . . . you would never see a lawyer sitting outside a courtroom making sure no trouble erupts!"

2.3 School Climate

This encompasses comments on relationships between teachers and students and teachers and other school staff members as well as comments on the atmosphere created by these relationships.

EX: "I was impressed by the atmosphere that prevails in the school . . . admire the rapport established between students and the faculty."

"The feeling of some teachers that school is a war and the students are the enemy."

2.4 Administrative Leadership

This refers to comments related to the actions or perceived attitudes of school administrators.

EX: "The way the administration was always available to help if you needed it."

"Comments by principal [negative]."

2.5 Work Outside School Hours

This includes all comments related to the amount of time devoted to teaching and preparation outside school hours.

EX: [No positive comments in this area.]

"When you have to invest in a pack mule to carry home all the papers you have to grade."

"Teaching isn't a job I can leave at the office. . . . I have difficulty . . . being able to concentrate on other important aspects and people in my life."

2.6 Curriculum/Philosophy

This includes all comments on the school's curriculum or the philosophy perceived by the student teacher to be held by the school or members of its staff.

EX: "Emphasis on school-wide curriculum development."

"A strong planned curriculum."

". . . more individualization of instruction is needed."

3.0- Staff

3.1 Professional Behavior and Attitudes in the Classroom

This encompasses all comments on the behaviors of any teacher in the classroom.

EX: "Teachers who are concerned about their students, classes, and classrooms, and this comes through in their teaching."

"Seeing a teacher use the paddle as his only method of classroom management."

3.2 Professional Behavior and Attitudes Outside the Classroom

This includes all comments on teacher's behaviors outside the classroom which are related to teaching, relationships with students, and relationships between teachers outside the classroom.

EX: "I overheard one teacher saying to a student that he cared about him and if this student needed someone to talk to that he would be there to listen."

"I heard two teachers 'condemn' a student on the basis of the student's brother. Because the brother was a troublemaker . . . the teachers . . . assumed he was also a 'bad apple.'"

3.3 Individual Interactions Between Teachers and Student Teachers

This category encompasses all comments on relationships and interactions between student teachers and teachers.

EX: "Teachers in my school are extremely willing to help a beginning teacher through sharing ideas and insights."

"A couple times my cooperating teacher made some comments that made me feel like quitting teaching."

4.0 Students

4.1 Interest In and Attitudes Toward Learning

This includes comments on student attitudes toward school, learning, and achievement.

EX: "It's wonderful to see the students get excited about what they're doing. Their faces are priceless when insight first strikes."

"Lazy students--homework is like pulling teeth. Students invariably seek the path of least resistance."

4.2 Behavior

This refers to student behaviors in the classroom which affect teaching and other students' learning.

EX: "Students finally starting to get down to work."

"Discipline problems."

"Students who disrupted the class and had temper tantrums."

4.3 Achievement

This refers to student achievement of instructional objectives.

EX: "Visible gains in student progress."

"Seeing a child working on a very low level."

4.4 Feedback to the Student Teacher

This refers to students' evaluative comments to the student teacher regarding his/her performance.

EX: "A number of students have told me how much they like my classroom and me as a teacher."

"A kid telling me I always picked on him."

4.5 Teacher Interaction with Students

This includes any comments on the student teacher's interactions with students outside the classroom, often in extracurricular activities.

EX: "Interacting with students on a personal level."

[No negative examples were given.]

5.0 Student Teacher

5.1 Pedagogy

This encompasses any comments by the student teacher on his/her own feelings about and performance in planning, delivering, and evaluating instruction.

EX: "Seeing my unit really work."

"When a lesson you have spent hours on is a total flop. It doesn't go over the way you think it will."

5.2 Behavior Management

This includes any comments by the student teacher on his/her own performance in and feelings about managing student behavior.

EX: "I feel good when I can get the children to sit down and talk out their problems, instead of hitting each other."

"No matter how hard I try, sometimes a class can be totally unmanageable."

References

- Applegate, J. H. et al. The First Year Teaching Study, Educational Resources Information Center. (ED 135 766), 1977.
- Burke, P. J. First Year Teacher Needs: Two Perspectives. Paper Presented at the Annual Conference of the American Educational Research Association, Montreal, April, 1983.
- Frankel, M. Projection of Educational Statistics to 1986-87. National Center for Educational Statistics, Hyattsville, MD, 1978.
- Gallup, A. Gallup Poll of Teachers Attitudes Toward the Public Schools. Phi Delta Kappa, Bloomington, In, 1985.
- Gronlund, N. E. Measurement and Evaluation in Teaching, Third Edition. MacMillian, NY, 1976.
- Villeme, M. G., Hall, B. W., and Topping, M. E. Higher Ability Teachers: What Aspects of Teaching Do They Like and Dislike?. Paper Presented at the 1984 Annual Conference of the American Educational Research Association, New Orleans, LA, 1984.
- Hajek, J. A Course in Nonparametric Statistics. Holden-Day, San Francisco, CA, 1969.
- Herzberg, F., Mausner, B., and Snyderman, B. The Motivation to Work. Wiley, NY, 1959.
- Holsti, O. R. Content Analysis for the Social Sciences and Humanities. Adison-Wesley, Reading, MA, 1969.
- Johnston, J. M. First Year Teachers: Perceptions of Change, Educational Resource Center. (ED 207 972), 1980.
- Johnston, J. M. and Ryan, K. Research on the Beginning Teacher: Implications for Teacher Education, Educational Resources Information Center. (ED 209 188), 1981.
- Kennedy, et al. The Clear Teacher Checksheet, Journal of Educational Research. Sept/Oct, 1978.
- Levin, J. Was the Unit Plan of Any Value to You?. Unpublished, The Pennsylvania State University, University Park, PA, 1981.
- Levin, J., Nolan, J., and Hoffman, N. A Strategy for the Classroom Resolution of Chronic Discipline Problems, National Association of Secondary School Principals' Bulletin. 69 (479), March, 1985: 11-18.
- Mahon, J. M. A Comparison of Concerns of Secondary and Elementary Student Teachers, Educational Resources Information Center. (ED 201 631), 1981.

National Educational Association, Nationwide Teacher Opinion Poll 1983. Washington, D.C., 1983.

The Pennsylvania State University, Student Teaching Handbook. Office of Clinical Experiences, College of Education, 1984.

Rosenshine, B. Teaching Functions in Institutional Programs, The Elementary School Journal. 83 (4), March, 1981: 335-351.

Ryan, K. Survival is Not Good Enough: Overcoming the Problems of Beginning Teachers, Educational Resources Information Center. (ED 090 200), 1974.

Schlehty, P. C. and Vance, V. S. Do Academically Able Teachers Leave Education?, The North Carolina Case, Phi Delta Kappan. 63, 1981: 106-112.

Shrigley, R. L. Curbing Student Disruption in the Classroom - Teachers Need Intervention Skills, National Association of Secondary School Principals' Bulletin. 69 (479), March, 1985: 26-32.

Statistical Analysis System Institute, SAS User's Guide: Statistics, 1982 Edition. 1982.

Sullivan, C. G. Sources of Anxiety Within the School Setting as Reported by Emory University Preservice and Inservice Teachers, Educational Resources Information Center. (ED 179 536), 1979.

Travers, R. M. W. Essentials of Learning, Fourth Edition. MacMillan, NY, 1977.

Veenman, S. Perceived Problems of Beginning Teachers, Review of Educational Research. 54 (2), 1984: 143-178.