INFORMATION TO USERS

While the most advanced technology has been used to photograph and reproduce this manuscript, the quality of the reproduction is heavily dependent upon the quality of the material submitted. For example:

- Manuscript pages may have indistinct print. In such cases, the best available copy has been filmed.
- Manuscripts may not always be complete. In such cases, a note will indicate that it is not possible to obtain missing pages.
- Copyrighted material may have been removed from the manuscript. In such cases, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each oversize page is also filmed as one exposure and is available, for an additional charge, as a standard 35mm slide or as a 17"x 23" black and white photographic print.

Most photographs reproduce acceptably on positive microfilm or microfiche but lack the clarity on xerographic copies made from the microfilm. For an additional charge, 35mm slides of 6"x 9" black and white photographic prints are available for any photographs or illustrations that cannot be reproduced satisfactorily by xerography.

Order Number 8719774

A comparison of student teachers with internal locus of control and student teachers with external locus of control during the student teaching experience

Becker, Nancy Lynn, Ph.D.

The University of Nebraska - Lincoln, 1987

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark __✓__.

1. Glossy photographs or pages _____
2. Colored illustrations, paper or print _____
3. Photographs with dark background _____
4. Illustrations are poor copy _____
5. Pages with black marks, not original copy _____
6. Print shows through as there is text on both sides of page _____
7. Indistinct, broken or small print on several pages __✓__
8. Print exceeds margin requirements _____
9. Tightly bound copy with print lost in spine _____
10. Computer printout pages with indistinct print _____
11. Page(s) _____ lacking when material received, and not available from school or author.
12. Page(s) _____ seem to be missing in numbering only as text follows.
13. Two pages numbered _____. Text follows.
14. Curling and wrinkled pages _____
15. Dissertation contains pages with print at a slant, filmed as received __✓__
16. Other _____

_____

_____

A COMPARISON OF STUDENT TEACHERS WITH INTERNAL LOCUS OF CONTROL AND STUDENT TEACHERS WITH EXTERNAL LOCUS OF CONTROL DURING THE STUDENT TEACHING EXPERIENCE

by

Nancy L. Becker

A DISSERTATION

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Interdepartmental Area of Administration, Curriculum, and Instruction

Under the Supervision of Professor Robert Egbert

Lincoln, Nebraska

May, 1987

TITLE

A Comparison of Student Teachers With Internal Locus of Control And Student Teachers With External Locus of Control During The Student Teaching Experience

BY

Nancy L. Becker

APPROVED	DATE
Dr. Goldenstein	May 4, 1987
Dr. Hudson	May 4, 1987
Dr. Seagren	May 4, 1987
Dr. Sybouts	May 4, 1987
Dr. Egbert	May 4, 1987

SUPERVISORY COMMITTEE

GRADUATE COLLEGE **UNIVERSITY OF NEBRASKA**

A COMPARISON OF STUDENT TEACHERS WITH INTERNAL LOCUS OF CONTROL AND STUDENT TEACHERS WITH EXTERNAL LOCUS OF CONTROL DURING THE STUDENT TEACHING EXPERIENCE

Nancy L. Becker

University of Nebraska, 1987

Adviser: Robert Egbert

Problem

The purpose in this study was to determine if student teachers who have high internal locus of control and those who have high external locus of control approach student teaching differently and whether they interpret their experiences in a different manner.

Procedure

The study included administering the Rotter I-E Scale to twenty-eight University of Nebraska-Lincoln teacher education majors who were beginning their student teaching experience in two Lincoln Public Schools junior high schools and two Lincoln Public Schools senior high schools. The Rotter I-E Scale was used to identify four student teachers with high internal locus of control and four student teachers with high external locus of control.

An ethnographic approach for completing the study was utilized, and the collection of data consisted of three separate sources--observations, interviews, and videotapes. Each student teacher was observed three times during the student teaching

experience, notes were taken during the observation, and each student teacher was interviewed following the observation. Transcriptions of the taped interview were made. Four videotapes were made of consenting student teachers (two student teachers with internal locus of control and two student teachers with external locus of control) as they conducted a lesson in their classroom.

Information from the observations, interviews and videotapes were gathered and analyzed. Comparisons were noted among the student teachers with internal control, among the student teachers with external control, and between the internal and external locus of control student teachers.

Findings

Some conclusions from this study were:

1. Student teachers with internal locus of control expressed more confidence in themselves than student teachers with external locus of control.

2. Student teachers with internal control attempted to check for their students' understanding of concepts more frequently than student teachers with external control.

3. Internal locus of control student teachers did not express as much concern regarding discipline as external locus of control student teachers.

4. Internal locus of control student teachers, as compared to external locus of control student teachers, noted their cooperating teachers as playing an important role in their student teaching experience.

TABLE OF CONTENTS

CHAPTER 1

Introduction

During the past few years a great deal of discussion has taken place regarding the role that the student teaching experience plays in the development of teachers. Some of this discussion suggested that the individual's past history, as contrasted to the importance of the formal training or student teaching internship, plays a key role in the teacher's performance (Tabachnick & Zeichner, 1980). This perspective was partially reinforced by Lortie (1975) who argued that socialization of teachers occurs during their entire educational experience, including K-12 schooling. According to this perspective, the "latent culture" from the school experience was found to be the predominant force in shaping teaching roles and performance concepts. Lortie stated that formal teacher training has little if any effect on teacher development.

Student teaching having a significant impact on the development of teachers is another view for discussion. While there were numerous studies that support the importance of student teaching in teacher education, there was disagreement over which socializing factors within the student teaching experience actually activate teacher development. These socializing factors were listed as behaviors or characteristics of cooperating teachers (Yee, 1969), classroom characteristics (Copeland, 1980), or critical incidents that occurred during student

teaching (Dale, 1977).

McNergney and Carrier (1981) also believed that no single factor determined the performance of the teacher. A teacher, according to McNergney and Carrier, was a composite of many elements including past educational history, formal training, and the student teaching experience. Each element, including student teaching, was viewed as important. According to this view, the student teaching experience was vital to the success of teacher development but its impact was dependent on the student teacher in combination with the environment and others around them. Many experiences that student teachers had affect their personal and professional development. McNergney and Carrier stated that in order to provide the best possible education for future teachers, these experiences should be identified as potential aids in their education.

Given that there are differences in how Lortie (1975), Yee (1969), Copeland (1980), Dale (1977), and McNergney and Carrier (1981) interpreted the way in which student teachers develop, there seemed to be one commonality among all of their perspectives. This common factor was that different personal characterisitics determine (1) how student teachers viewed their practicum experience, and (2) how they reacted to important events within the student teaching experience.

One personal characteristic that has been known to affect a persons' behavior and their outlook on life and one that could affect the student teaching experience is the student teacher's locus of control (Rotter, 1954). The premise of the locus of control concept was that individuals differ in their perceptions of the sources of control of life experiences and that social learning histories were the

primary determinants of expectancies that people have concerning these sources of control. According to the locus of control concept, persons differ in the degree to which they control their own life experiences. Thus, some individuals who hold generalized beliefs in an internal locus of control of life events; that is, they expected that their behavior when dealing with life events actually did make a difference in what happened to them. On the other hand, an individual who holds generalized beliefs in an external locus of control of life events expected that individual behaviors made little difference. This individual expected that there was little control over important life events. Individuals whose locus of control was internal considered themselves in command of situations; individuals whose locus of control was external considered outside elements as having a relatively more powerful influence. Because the student teaching experience is one in which student teachers clearly have some control of the environment but equally clearly do not completely control the classroom, it is evident that their locus of control may be a key element in how student teachers perceive what happened and, hence, may exert a powerful influence on their behavior. In order to explore this possibility, this study has been conducted to examine the relationship between student teachers' locus of control and the manner in which they perform their student teaching responsibilities and how they perceive their experiences in student teaching.

Problem Statement

Given the overall interest in identifying various methods of

student teacher development and of looking at locus of control during that development, the purpose of the study was to determine if student teachers who have high internal locus of control and those who have high external locus of control approach student teaching differently and whether they interpret their experiences in a different manner.

Overview of Study Approach

The present study was an investigation designed to identify differences between the teaching methods of student teachers with internal locus of control and the teaching methods of student teachers with external locus of control. The study included administering the Rotter I-E Scale to twenty-eight University of Nebraska-Lincoln teacher education majors who were beginning their student teaching experience in two Lincoln Public Schools junior high schools and two Lincoln Public Schools senior high schools. The Rotter I-E Scale was used to identify four student teachers with high internal locus of control and four student teachers with high external locus of control as possible participants in the study.

An ethnographic approach for completing the study was utilized, and the collection of data consisted of three separate sources--observations, interviews, and videotapes. Each student teacher was observed three times during the student teaching experience. Notes were taken during the observation in an effort to document the student teacher's behaviors in the classroom. Each student teacher was interviewed following the observations. Each interview was tape recorded and transcriptions of the taped interview

were made for future analysis. Four videotapes were made of consenting student teachers (two student teachers with internal locus of control and two student teachers with external locus of control) as they conducted a lesson in their classroom.

Information from the observations, interviews and videotapes were gathered and analyzed. Comparisons were noted among the student teachers with internal control, among the student teachers with external control, and between the internal and external locus of control student teachers. These differences and similarities are reported in this study.

This study was intended to produce information regarding student teachers' perceptions of important events, and ways in which student teachers with internal and external locus of control approach and resolve important events. Such information could be valuable to school administrators as they learn to understand their teacher's perceptions of important events and how they resolve important events. Locus of control knowledge could provide new insights to teacher educators, and administrator/teacher communication and evaluation.

Organization of the Study

The remainder of this study is divided into four parts. Chapter 2 contains a review of the literature relative to the major areas of concern pertaining to this study. In Chapter 3, the procedures undertaken to obtain pertinent data are described. An analysis of the data is presented in Chapter 4. The concluding chapter of the study contains a summary of the study, a discussion based on the analysis of

the findings, and recommendations to educational practitioners and researchers.

Definition of Terms

Locus of Control - Life events viewed by the individual as being largely controlled either by the individual (internal) or by other individuals and/or events (external). In this study, locus of control is measured by Rotter's I-E Scale.

Ethnography - This is a method of study that analyzes a complete socio-cultural system or a significant subsystem and begins with assumptions about an issue in that system or subsystem. These assumptions serve as a guide in discovering relationships that might exist between the issue, individuals and the environment, and in the development of a hypothesis.

Assumptions

For the purposes in this study, the following assumption was made:

1. The student teaching experience plays a key role in future teacher performance.

Delimitations

Several delimitations of this study need to be considered:

1. The eight student teachers involved in the study will be enrolled in the University of Nebraska-Lincoln student teaching class.

2. The assignment of students into internal and external categories constitute an operational distinction between groups of student teachers, but not all behaviors will be considered.

3. Caution should be exercised when generalizing the results of the study to areas that this study does not address.

Possible Outcomes

From reviewing the literature and completing a pilot study, it was assumed that differences would be found between student teachers having internal and external locus of control. Three of the areas in which it was anticipated that useful knowledge would be gained were:

1. Ways in which student teachers with internal locus of control approach important events as contrasted with the ways in which student teachers with external locus of control approach similar important events,

2. Ways in which student teachers with internal locus of control express self confidence about their teaching ability as contrasted with ways in which student teachers with external locus of control express self confidence about their teaching ability.

3. Ways in which student teachers with internal locus of control become involved in the classroom learning experience as contrasted with ways in which student teachers with external locus of control become involved in the classroom learning experience.

CHAPTER 2

REVIEW OF LITERATURE

This literature review is divided into two sections. The first section contains information about locus of control and how it affects individuals' perceptions of important events. The second section presents a description of ethnographic research, the approach used in this study.

Locus of Control

The role of reinforcement, reward, or gratification is commonly recognized as crucial in the acquisition and performance of skills and knowledge. However, an event regarded by some persons as a reward or reinforcement may be differently perceived and reacted to by others. One of the determinants of this reaction is the degree to which the individual perceives that the reward follows from, or is contingent upon, a person's own behavior or attributes versus the degree to which that person feels the reward is controlled by forces outside of the individual and may occur independently of the individual's actions (Rotter, 1966). The effect of a reinforcement following some behavior depends upon whether or not the person perceives a causal relationship between behavior and the reward. A perception of causal relationship need not be all or none, but may vary in degree. When a reward is received by an individual that is perceived to be contingent not

primarily upon an individual's actions, then it is usually referred to as luck, chance, fate, or as unpredictable because of the great number of forces in the situation. Rotter (1966) has labeled individuals who generally perceive events in such a manner as having external control. When a reward received by an individual is perceived by that individual to be contingent upon her own behavior or characteristics, Rotter has termed that person as having internal control.

The locus of control construct has its origin in Rotter's social learning theory (Rotter, 1954). The theory, when applied to the classroom setting, states that individuals may be distributed along an internal-external locus of control dimension depending upon the degree of responsibility they assume for their successes and failures. For the student with internal control, events are a consequence of the individual's own actions and are therefore under personal control; for the student with external control, events are unrelated to behaviors and are therefore beyond personal control (Chandler, 1975).

The Rotter I-E Scale was designed to measure generalized expectancies regarding the locus of control of life events. It was intended to measure the degree to which an individual believes that important life events are self-controlled (internal locus of control), or controlled by external forces (fate, chance, authority figures). Rotter's (1966) basic theory regarding the scale was that individual social learning histories are the primary determinants of expectancies regarding locus of control. An individual whose learning history is one of "behavior influencing outcomes" learns to expect that his or her behavior actually makes a difference and is said to have internal locus of control. This type of individual can be contrasted with one who

expects that his or her behavior makes little difference to any outcome. Such an individual would be said to have external locus of control. (Maes & Anderson, 1985)

The I-E scale is presented in Table 1. Twenty-three of the items are intended to measure locus of control by having the participant choose one of the two alternatives. The remaining six items are fillers, and are not used in the tabulation of scores. Biserial item correlations with total score with that item removed are given for 200 males, 200 females and for the combined group. The letter preceding the external choice is underlined. The score is the total number of external choices.

TABLE 1

The I-E Scale With Correlations of Each Item With Total Score, Excluding That Item

Note. External item is underlined

Item	Biserial Item Correlations		
	200M	200F	400+F
1.a. Children get into trouble because their parents punish them too much.	Filler		
b. The trouble with most children nowadays is that their parents are too easy with them.			
2.a. Many of the unhappy things in people's lives are partly due to bad luck.	.265	.250	.260
b. People's misfortunes result from the mistakes they make.			
3.a. One of the major reasons why we have wars is because people don't take enough interest in politics.			
b. There will always be wars, no matter how hard people try to prevent them.	.214	.147	.182

(table continues)

Item	Biserial Item Correlations		
4.a. In the long run people get the respect they deserve in this world.			
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.	.238	.344	.289
5.a. The idea that teachers are unfair to students is nonsense.			
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.	.230	.131	.179
6.a. Without the right breaks one can not be an effective leader.	.345	.299	.319
b. Capable people who fail to become leaders have not taken advantage of their opportunities.			
7.a. No matter how hard you try some people just don't like you.	.200	.262	.229
b. People who can't get others to like them don't understand how to get along with others.			
8.a. Heredity plays the major role in determining one's personality.		Filler	
b. It is one's experiences in life which determine what they're like.			
9.a. I have often found that what is going to happen will happen.	.152	.172	.164
b. Trusting to fate has never turned turned out as well for me as making a decision to take a definite course of action.			
10a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.			
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.	.227	.252	.238
11a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.			
b. Getting a good job depends mainly on being in the right place at the right time.	.391	.215	.201
12a. The average citizen can have an influence in governmental decisions.			
b. This world is run by the few people in power, and there is not much the little guy can do about it.	.313	.222	.265

(table continues)

Item	Biserial Item Correlations		
13a. When I make plans, I am almost certain that I can make them work.			
b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.	.252	.285	.271
14a. There are certain people who are just no good.		Filler	
b. There is some good in everybody.			
15a. In my case getting what I want has little or nothing to do with luck.			
b. Many times we might just as well decide what to do by flipping a coin.	.369	.209	.288
16a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.	.295	.318	.307
b. Getting people to do the right thing depends upon ability, luck little or nothing to do with it.			
17a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.	.313	.407	.257
b. By taking an active part in political and social affairs the people can control world events.			
18a. Most people don't realize the extent to which their lives are controlled by accidental happenings.	.258	.362	.310
b. There really is no such thing as "luck."			
19a. One should always be willing to admit mistakes.		Filler	
b. It is usually best to cover up one's mistakes.			
20a. It is hard to know whether or a person really likes you.	.255	.307	.271
b. How many friends you have depends upon how nice a person you are.			
21a. In the long run the bad things that happen to us are balanced by the good ones.	.108	.197	.152
b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.			
22a. With enough effort we can wipe out political corruption.			

(table continues)

Item	Biserial Item Corrleations		
b. It is difficult for people to have much control over the things politicians do in office.	.226	.224	.225
23a. Sometimes I can't understand how teachers arrive at the grades they give.	.275	.248	.255
b. There is a direct connection between how hard I study and the grades I get.			
24a. A good leader expects people to decide for themselves what they should do.		Filler	
b. A good leader makes it clear to everybody what their jobs are.			
25a. Many times I feel that I have little influence over the things that happen to me.	.521	.440	.480
b. It is impossible for me to believe that chance or luck plays an important role in my life.			
26a. People are lonely because they don't try to be friendly.			
b. There's not much use in trying too hard to please people, if they like you, they like you.	.179	.227	.195
27a. There is too much emphasis on athletics in high school.		Filler	
b. Team sports are an excellent way to build character.			
28a. What happens to me is my own doing.			
b. Sometimes I feel that I don't have enough control over the direction my life is taking.	.331	.149	.238
29a. Most of the time I can't understand why politicians behave the way they do.	.004	.211	.109
b. In the long run the people are responsible for bad government on a national as well as on a local level.			

Note. From "Generalized Expectancies for Internal Versus External Control of Reinforcement" by J. B. Rotter, 1966, Psychological Monographs, No. 30, p. 11.

The 23 items in the I-E scale, other than the filler items, deal with the subjects' perception about how rewards and reinforcement are

controlled. This perception determines how the individual is controlled, by self or by factors beyond the individual control. The test, therefore, measures the generalized expectancy individuals have for the location of control of life events. The I-E scale does not measure preference for internal or external control.

Additional test data on the I-E scale were gathered in a series of sample testings. Reliability and internal consistency for these samples are summarized in Table 2. Means and standard deviations of various samples are presented in Table 3.

Table 2 indicates that internal consistencies are relatively stable. Because the items in the I-E scale are not arranged in a difficulty hierarchy, but rather sample attitudes in many different situations, the internal consistency estimates may appear only moderately high for a scale of this length. Furthermore, because items on the I-E scale are not comparable, split-half or matched-half reliability may underestimate the internal consistency. The forced choice nature of the I-E scale offers balanced alternatives so that probabilities of decisions of either alternative do not include extreme splits.

Means and standard deviations of the I-E scores for a variety of populations are presented in Table 3. The Testing Conditions Column of Table 3 indicates that a majority of the testing was administered in group settings and were experimental in nature as they were given over a period of two years. The instrument administered once to Peace Corps Trainees was done in a group setting.

The samples of college students and twelfth graders seem quite similar except those scores taken from Peace Corps volunteers. Rotter

explains the low scores for Peace Corps volunteers by noting that the I-E scale was administered in three different training groups as part of an assessment battery, and the subjects were aware that their scores on the battery could affect their appointment, thus possibly affecting the nature of their responses.

In summary, it can be determined that individuals have developed generalized expectancies in learning situations in regard to whether or not success in these situations is dependent upon their own behavior or is controlled by external forces; individuals differ in how they regard the same situation; and the I-E scale can predict differences in generalized expectance.

TABLE 2

Internal-External Control Test Data:
Internal Consistency

Sample	Type	N	Sex	r	Source
Ohio State Uni Psych Students (sample 1)	split half Spearman Brown	50	M	.65	Rotter (1963)
		50	F	.79	
		100	combined	.73	
	Kuder-Richardson	50	M	.70	Rotter (1963)
		50	F	.76	
		100	combined	.73	
Ohio State Uni Psych Students (sample 2)	Kuder Richardson	200	M	.70	Rotter (1963)
		200	F	.70	
		400	combined	.70	
National Stratified Sample Purdue Opinion Poll	Kuder-Richardson	1000	combined	.69	Franklin (1963)

Note. From "Generalized Expectancies for Internal Versus External Control of Reinforcement" by J. B. Rotter, 1966, Psychological Monographs, No. 30, p. 13.

TABLE 3

Means and Standard Deviations of I-E Scores
For Samples of Several Populations

Sample	Testing Condition	N	Sex	M	SD	Source
Ohio State	Group	575	M	8.15	3.88	Rotter
Uni Psych	Experimental	605	F	8.42	4.06	(1963)
Students		1180	comb.	8.29	3.97	
Kansas Uni	Group	45	M	7.71	3.84	Ware
Psych	Experimental	68	F	7.75	3.79	(1964)
Students		113	comb.	7.73	3.82	
Uni of	Group	134	M	8.72	3.59	Rotter
Conn. Psych	Experimental	169	F	9.62	4.07	(1963)
Students		303	comb.	9.22	3.88	
Peace Corps	Group	122	M	6.06	3.51	Rotter
Trainees	Assessment	33	F	5.48	2.78	(1963)
Columbus,Ohio	Small	41	M	8.46	3.89	Stack
12th Grade	Groups	32	F	7.31	3.64	(1963)
College	(3-12)	73	comb.	7.96	3.80	
Applicants						

Note. From "Generalized Expectancies for Internal Versus External Control of Reinforcement", by J. B. Rotter, 1966, Psychological Monographs, No. 30, p. 15.

Research has been collected conveying that internal control predicts educational aspirations and confidence in school situations (McGhee, 1968; Gurin, 1968; Lao, 1970). In experimental studies on locus of control, individuals with internal locus of control were reported to function better than individuals with external locus of control in ambiguous task situations (Ducette and Wold, 1973), and preferred situations where results of those situations could be attributed to their own efforts (Winer, 1972). In other words, individuals with internal locus of control, believing that situational outcomes were dependent upon their own actions, would prefer situations in which the locus of control resided within themselves; individuals with external locus of control, believing that situational outcomes were beyond their personal control, would prefer situations in which their outcomes were controlled by others.

Watson and Baumal (1967) determined that individuals with internal locus of control experienced greater dissatisfaction and made more errors in educational tasks when they believed they had no control over the outcome. Individuals with external locus of control made more errors in educational tasks when they believed that results were dependent upon their individual performance. Rotter and Mulry (1965) determined that internally controlled subjects preferred situations in which rewards were obtained by their own efforts, while externally controlled subjects preferred rewards emanating from external sources.

Students' locus of control orientations have been associated with a variety of achievement related behaviors. A positive relationship has been reported between internal locus of control and the time spent

doing homework among high school students (Franklin, 1963). In one study using college students, and another using elementary school children, participants who were highly active in the classroom were found to be significantly more internally controlled than those who were relatively less active (Katz, 1971; Wolfgang and Potvin, 1973).

Other studies have reported that internal students tend to be more effective in interpersonal relations, (Rotter, 1966), experience less painful relationships with teachers, (Bryant, 1972), and are rated as more positive and less deviant in classroom behavior, (Buck and Austrin, 1971). Internality was found to be positively related to task persistence, (James, 1965), and higher reading, arithmetic, and spelling test scores, (Crandall, 1962; Cellura, 1963, Chance, 1965).

Although the above studies provide evidence that locus of control does affect student decisions in the classroom, there appears to be no literature on student teacher locus of control and how locus of control impacts the student teaching experience.

The locus of control concept, when applied to the educational setting, might be viewed as stating that teachers and students may be distributed along an internal-external locus of control continuum depending upon the degree of responsibility they assume for their educational successes and failures (Chandler, 1975). According to this view, student teachers as a student subgroup also would be distributed on this continuum. Student teachers that are controlled internally would be at one end of the continuum and would believe that their personal success or failure is largely dependent upon either the degree of effort they exert or the level of competence they posses, or some combination of the two. External student teachers would be at the

other end of the continuum, as they do not expect success or failure to be as closely related to their personal effort or skill.

Ethnographic Research

Teacher education, as it is frequently practiced, can be described as a socialization process in which individuals learn and practice the norms of the occupation of teaching. Literature reviewed on teacher education provides ample descriptions of the structure and function of teacher education activities and curriculum. However, literature seems to be lacking in precise descriptions of the socialization process of teacher education.

In his review of past educational research, Mehan (1982), noted that a vast majority of studies demonstrate that the organization of the classroom is not one-dimensional, with learnings only originating from the teacher to the student. He contends that the classroom situation is multi-dimensional with teacher and students jointly responsible for the continuous movement of activity. Future educational research should no longer look at just one aspect of the environment, but at the total educational process. Doyle (1979) supports this concept and he suggests that educators need a better understanding of the classroom environment, not simply the teacher behaviors, if progress in educational research is to be made. According to Doyle, techniques of ethnography aid in the conduct of studies that permit viewing the context of teaching. Early studies of American ethnography can be traced to Lewis Henry Morgan. Morgan

(1870) developed questionnaires for recording kinship terminologies in the middle of the nineteenth century. From his study came three aspects of inquiry that are frequently considered the essential ingredients of anthropological research. First, Morgan had a contrasting or comparative insight, a method of constantly seeking the main types of kinship systems. Second, Morgan discovered he needed systematic information, information he found that was not available except when he discovered it. Third, after relating the results of his study, Morgan used his findings to formulate a general interpretation of human development as a whole. Hymes (1982) contends that when Morgan's aspects of anthropological study, (insight into contrasting types, a need for specific information, and a general theoretical frame) are united, ethnography becomes the name of the essential method.

The field study approach using ethnographic research has seldom been utilized in education because, according to some authors, e.g. Lutz & Ramsey (1974), educational researchers seek identification with the more prestigious physical scientists and their methods. It is convenient to locate operationalized variables with the availability of printed tests that have statistical reliability and validity already established. Collected data can then be submitted for computer analysis. In such situations, measures may or may not have a relationship to operational reality which affirms the idea of testing hypotheses rather than developing them.

Mehan (1982) has addressed the quantitative measurement frequently done in educational research. He found that most of the measurements were taken indirectly; e.g., number of books in the libraries, amount of equipment in the computer class, opinions of administrators and

teachers toward parental involvement. Mehan notes that what actually happens inside schools, classrooms, and lunchrooms on a daily routine has not been examined by researchers who use such survey methods. The school becomes a "black box" between incoming and outgoing factors.

Hymes (1982) suggests that ethnography can help connect the incoming and outgoing variables described by Mehan in another way. We are all aware, for example, that the city of New York has newspapers, television and radio stations, libraries, books, magazines, and story tellers. Without ethnography one can only collect statistics as to production and distribution, but with ethnography one can discover the connections among these things in the lives of all different types of people. Hymes also notes that even self-reporting cannot always be reliable. People are human and are often unable or unwilling to give accurate accounts of the topic in question. Thus, an observer is needed who can identify important events or aspects of the environment. Oftentimes, further exploration of these observations is necessary for the observer to understand them.

Language which may distinguish ethnography from the "ideal" of experimental science is also considered by Hymes (1982). Our acquired concepts about cultural patterns and worlds can be interpreted in terms of structure, such as lines, graphs, numbers, letters or abstract terms. Some of what we believe about these acquired linguistic concepts resists interpretation in terms of structure. Instead, Hymes states, ethnography requires presentation. This presentation of ethnography can be visual and/or verbal. The verbal presentation, or narrative aspect, is seeking to acquire the knowledge that others already have. The ethnographer's ability to provide a verbal and

visual presentation can be accomplished after learning the meanings, norms, and patterns of the way of life that is under consideration.

Relying on unstructured conversation proved to be a superior method of obtaining data according to Wax, Wax, and Dumont (1964). As they initiated their study of the formal education in an American Indian community, they soon discovered that questionnaire schedules and other research instruments were helpful but used alone did not allow them to understand the social dynamics of a complex interethnic situation. Only after some forty-seven lengthy unstructured interviews were they able to formulate a questionnaire schedule for use with members of the Pine Ridge Reservation.

The field study approach using ethnographic research frequently receives criticism from researchers using a quantitative approach. Jacob (1982) believes, however, more is to be gained by using ethnography or combining quantitative and qualitative approaches, than through quantitative approaches alone. Jacob illustrates the differences of quantitative and qualitative research methods in Table 4. This table compares the methodological characteristics of ethnographic and quantitative approaches to research according to eleven different dimensions of contrast.

TABLE 4

Methodological Characteristics of Ethnographic And Quantitative Approaches

Dimensions of Contrast	Ethnographic	Quantitative
Hypothesis Formultaion	Formulated through-Out Study	Formulated at Beginning of Study
Hypothesis Reformulation	Open to Reformulation	Not open to Reformulation
Questions Asked	Descriptive, Process	Descriptive, Causal
Data Used	Qualitative	Quantitative
Methods of Data Collection	Naturalistic Participant-Observation, Open-ended Interviews	Nonparticipant Observation Questionnaires, Experiments
Concern for Context	Central Concern (ethnohistorical and immediate)	Minor Concern
Approach to Generalization	Nonstatistical	Statistical
Concern for Validity	Central Concern	Not of Central Concern
Concern for Reliability	Not of Central Concern	Central Concern
Approach to Meaning	Emic and Locally Relevant	Etic
Types of Categories Used	Emic and Locally Relevant	Etic

Note. From "Combining Ethnography and Quantitative Approaches: Suggestions and Examples from a Study on Puerto Rico" by Evelyn Jacob, From Children In and Out of School, Gilmore and Glatthorn, editors, Center for Applied Linguistics, Washington, D.C., 1982, p. 129.

Although many differences in Table 4 can be noted, the major dimensions of contrast between ethnographic and quantitative approaches to research seem to center around hypothesis formulation and reformulation, methods of collecting data, approach to generalization, and the analysis of data which utilizes either emic or etic meanings. The term emic refers to meanings and categories that are recognized by members of the culture being studied. The term etic refers to meanings and categories that are imposed on the data from outside, usually from a theory or model.

The hypothesis formulation and reformulation in an ethnographic study, according to Jacob, differs from a quantitative study in that a hypothesis in ethnography is gradually developed as the literature is reviewed and data are collected. If the review of literature and analysis of data suggest a reformulation of the hypothesis, the ethnographic approach allows for this change. In quantitative approaches hypotheses are formulated during the literature review and, perhaps, during pilot studies; it does not, however, allow for a change in hypotheses later in the process.

Table 4 points out another major difference between ethnographic and quantitative research methods. The collection of data in an ethnographic project utilizes methods such as participant-observation and open-ended interviews while the methods of collecting data in a quantitative projects utilize such data gathering methods as questionnaires, surveys and experiments.

The approach to meaning, according to Jacob (1982), offers yet another difference between ethnography and quantitative approaches. The relevance to participants is a major factor in that ethnographers

use terms, categories, etc. that are recognized by members of the group being studied as compared to quantitative researchers who frequently impose categories and meanings on the data.

As Mehan (1982) compares qualitative and quantitative research, he questions the value of abstract correlational studies. Statistical summaries are far removed from the daily routine of educators and students. Even though the numbers in a statistical study have some meaning, what actually happens when activity takes place in the classroom cannot be retrieved from those statistical summaries. However, a cooperative approach between researchers and practicing educators could provide for a dialog that would allow for methods of looking critically at social circumstances that may or may not need changing (Mehan, 1982).

The manner of developing the hypothesis is a unique feature of anthropological and ethnographic research. This method of study begins with tentative assumptions about the issue in question. These assumptions then serve as a guide to the researcher who looks for relationships that might exist between the issue, individuals and the environment (Lutz & Ramsey, 1974). The method of developing hypotheses provides a needed freedom that allows for definition of future research problems (McDermott & Hood, 1982).

According to Hymes (1982), training for ethnographers revolves around two basic premises. The more the ethnographer knows about the area in question, the better. Understanding of the field will allow the ethnographer to determine what kinds of elements will likely go together, and possibly help avoid potential roadblocks. The second premise stated by Hymes is that training for ethnography is partially a

matter of knowing how to get along with other people and gather information.

Ethnographic research is not merely the study of one event, it is based on a careful study of a complete socio-cultural system such as an educational system. Examples of educational systems and subsystems could be classrooms, schools, or districts. Use of ethnographic procedures in education allows educators to look at themselves and their environment by turning their attention to what actually goes on rather than what ought to go on (Wolcott, 1982).

Ideally, these educational systems and subsystems--lessons, classrooms, schools or districts--provide a composite view of the whole educational system (Heath 1982). These pieces are frequently considered a complete system in that they have a structure and rules of their own, and justification for revealing details of their composition, participants, settings, and rules. Lessons are complete when standing alone, but are also viewed as a piece of the educational day. Studying a lesson may not provide a total view of the concept but it will allow one to understand a portion of the process.

As in other forms of research, validity and reliability are important concepts in ethnography. By utilizing different sources of information, validity and reliability can be improved. One may define validity in observations as: an observation is valid when it measures what it purports to measure (Borg and Gall, 1981). In order to test the validity of an observation, one may ask if the observation procedures chosen will measure the intended behaviors as nearly as possible. If the answer is yes, then the measurement of behaviors using the specific observation system can be considered valid. Valid

observation requires selecting or creating unambiguous observational items and applying them at the appropriate time to accurately mirror the reality of classroom behavior (McNergney & Carrier, 1981). Additional questions that should be asked are: what kinds of conclusions should be made after observing, and will the type of data collected allow one to make such conclusions.

Reliability in observations will assure the researcher whether the observations measure actions and interactions with consistency and accuracy. The demands of reliability in observations are three fold:

1. the observation instrument must produce internally consistent data
2. the observer must be consistent in perceptions of behavior
3. in certain conditions, consistency must be maintained between or among two or more observers. (McNergney & Carrier, 1981).

Observer partiality is an especially difficult and sensitive matter in ethnographic research. Because of the number of observations and interviews involved, some partiality on the part of the researcher is essentially unavoidable. The trust and confidence required in the relationship between researcher and those whose behavior or culture is being studied actually makes it impossible to be a completely impartial observer. When this occurs, Hymes (1982) suggests to face up to the fact that the ethnographer may be partial and to allow for it in the interpretation of data.

Heath (1982) contends that frequently ethnographers operate with the following principles:

1. fieldworkers must keep an open acceptance of the behaviors

of all group members under observation

2. when participation in and complete description of the observed group is not possible, fieldworkers must make a decision to learn and describe events, settings, and group activities

3. data collected from pieces of the culture should be related to existing knowledge of the culture as it is understood as a whole.

The ethnographer serves as the research instrument with heavy dependence on three fieldwork techniques: participation, observation and interviewing (Hymes, 1982). According to Wilcox (1984) the observation process in ethnography may be described as extensive descriptive detail. Observers attempt to capture the conduct of everyday life in the natural environment. Ethnographers must learn the conceptual framework of members of the society and organize data of the boundaries observed instead of utilizing predetermined categories established prior to the participant-observation (Heath, 1982). Both longhand descriptions of interaction and technological techniques are utilized in obtaining the necessary data. Mechanical devices, however, should not be used in isolation. It is always important to have the ethnographer present during data collection.

The fieldworker should try to disassociate himself from the kinds of people whom his respondents hate, fear and distrust (Wax, 1971). However, the experienced participant observer knows that such a disassociation is only partial. If the disassociation occurs at all, it usually takes a long time to become established.

There are several different levels of intrusion in participant-observer methods. Spradley (1980) identifies these levels

as nonparticipation, passive participation, moderate participation, active participation, and complete participation. Each method of participant-observer has its own unique qualities, however, all of the observation methods have several common characteristics:

1. a purpose or reason for observation
2. a recording procedure
3. what or who is to be observed
4. methods of analyzing data (McNergney & Carrier, 1981).

Before initiating the observations in an ethnographic study, the researcher must identify which observation approach will be used.

Ethnography frequently involves the utilization of interview techniques when gathering data. While it is essential for the ethnographer to enter the interview with some predetermined questions, Goodenough (1956) found that feedback, or interactive-adaptive methods allow for initial questions to change during the course of inquiry. These changes usually result from noting the differences of the individuals being interviewed. Goodenough contends that an essential characteristic of an enthnographic interview is that it is open-ended and can be self-corrected at the time of inquiry.

Interviews vary from completely informal encounters to highly structured sessions, with open-ended questions. Although not utilized in this study, questionnaires may be helpful in obtaining sociometric information, but are never employed as the primary data-gathering technique. In addition to the generation of their own data, ethnographers may collect data from existing sources such as school records, and by asking participants to keep journals of their experiences during the fieldwork.

After an individual has chosen to research a topic using ethnographic principles, it is necessary to follow five fundamental principles of ethnography:

1. Identify formal definitions and descriptions as starting points in the natural environment.
2. Focus the investigation on regularly occurring interactional events of the program.
3. Identify ethnographic observation techniques to be used.
4. Use interview, program documents, surveys and other pertinent information to guide, and validate the observable data.
5. Use ethnographic rules of evidence to seek out patterns, themes, and categories in collected data (Wolcott, 1982).

According to Heath (1982), what some people view as the weaknesses of ethnographic research are actually its strengths. Heath states that the validity of human behavior must rest on reality based on disciplined observation and analysis. Ethnography provides a data base obtained through the researcher working closely with the group. This immersion recognizes the interdependence of parts as the ability to describe, incorporate data into form and function of a specific group, and retain data for future interpretations. These parts are the major strengths of ethnography.

Summary

Experiences that student teachers encounter contribute to their overall development. How the student teacher views the practicum

experience and how they react to important events within that experience are important considerations of student teacher development. One method of analyzing student teacher development is applying locus of control concepts within an ethnographic study of student teachers.

Two bodies of literature were reviewed in this chapter, locus of control and ethnography. Locus of control refers to the effect of a reinforcement following some behavior and whether or not the individual involved perceives that the reinforcement resulted from her own performance or from some characteristic or action over which she had no control. When a reward is perceived by an individual to be contingent upon her own behavior or characteristics, that person is referred to as having internal control. When a reward is perceived by an individual to result from luck, fate or to be unpredictable because of the numerous variables in the situation, that person is referred to as having external control (Maes & Anderson, 1985). Rotter's I-E Scale was developed and validated to measure perceptions of internal and external locus of control in individuals (Rotter, 1966).

The Review of Literature chapter also contains a section devoted to ethnography. The ethnographic approach to research utilizes participant observations, and interviews in its collection of data (Hymes, 1982). The reviewed literature suggests that the educational environment is not one-dimensional; therefore, educational research should be allowed to look at the total learning process in a multi-dimensional fashion (Mehan, 1982).

CHAPTER 3

METHODS

As a preliminary step in preparing for this dissertation study, the researcher first conducted a pilot study that paralleled the design developed for the dissertation research. The pilot study consisted of administering Rotter's I-E Scale to student teachers to identify three student teachers with internal locus of control and three student teachers with external locus of control. An initial meeting was held with each of the identified student teachers to secure permission for participation in the study, to develop rapport with the possible participants, and explain the procedures of the study. All student teachers who were asked to participate agreed to do so. Observations with each student teacher were completed followed by individual interviews. Information was then analyzed and compared for the two groups.

Two kinds of information were gained from the pilot study, (a) knowledge of process and (b) preliminary suggestions about outcomes. Although the knowledge gained about ethnographic processes was especially useful in planning the dissertation research, both process and outcome information from this pilot study contributed to further understanding of student teachers and the decisions they make in the classroom.

Information Gained from the Pilot Study

Process knowledge gained began with the pre-observation interview. However, other important information was acquired including:

1. It became clear that as Heath (1982) suggested, the interview should not be formally structured. Structure in the interview causes the student teacher to feel inhibited and could possibly jeopardize future observations. From the pilot study it appeared that the pre-observation interview must first enable the researcher to get acquainted with the student teacher and then to explain the process of the study.
2. Observations in the classroom need to be based on a consistent format, however, allowance for flexibility must be maintained. Careful notes of what decisions the teacher makes must be taken for future reference. It is also necessary to make judgments about student participation, and student reactions to the teacher. Examples of these judgments might be: Are the students taking notes? Are the students on or off task? Are students responding to the questions asked?
3. During the observation, it is also vital for the researcher to be aware of other related factors in the environment that may have an impact on teacher decisions or student participation. Examples of these factors might be: Is there a pep rally scheduled for the day? Did a fire drill just occur? Is there a substitute teacher replacing the cooperating teacher?
4. The post-observation interview should not take place until the researcher has sufficient time to organize thoughts and

questions for the follow-up interview. Although the interview may or may not take place immediately, it should not occur more than a few hours after the observation. Both the student teacher and the researcher may have difficulty recalling critical events in the classroom if the time is too long between observation and follow-up interview.

5. The post-observation interview should begin with casual questions to make the student teacher feel at ease, and include a reassurance of a nonjudgmental feeling tone. Further questions should be drawn from the observation reflecting the student teacher's decisions and student response. Confirmation of locus of control should be included in follow-up questions. During this interview process, it is essential for the researcher to be sensitive to individual needs by analyzing the student teacher's verbal and non-verbal signals. This will enable the interviewer to determine the student teacher's comfort level and a need for additional probing questions.

Preliminary outcome information from the pilot study was also promising. This information seemed to suggest that there was a definite difference between the decisions made by student teachers possessing internal locus of control and decisions made by student teachers possessing external locus of control. These decisions covered a wide spectrum ranging from how the instructional material was presented to how students were identified for answering questions.

One preliminary difference observed was that students instructed by an internal locus of control teacher were more actively involved in the learning process. These students were randomly asked questions and

they appeared comfortable seeking out answers from the teacher. Students who had an external locus of control instructor were not frequently asked questions. When questions were asked, they were usually asked of students who had their hands raised and were prepared to respond.

Another difference observed was that internal locus of control teachers provided participatory activities in which their students participated. Those teachers appeared to feel that active participation was an essential component to acquiring knowledge. Students instructed by an external locus of control teacher seemed less actively involved in the learning process. Student participation consisted of taking notes of the instructional material presented in the classroom. This method was frequently referred to as the lecture method.

A third difference from preliminary observations was that teachers with internal locus of control appeared to be confident in themselves while presenting material to the class. They walked around the classroom seeking student attention without feeling tied to lesson plans, or a lectern. Effective transitions were also utilized throughout the lessons by the teacher with internal locus of control. Instructors with external locus of control, on the other hand, appeared less at ease while instructing their class. They frequently read directly from their lesson plans or notes presented on the overhead projector.

Preliminary knowledge gained from the pilot study was of great value in planning and conducting the dissertation study. Information obtained regarding the process suggested that interviews and observations should follow a similar format, yet allow for differences

among subjects. Information obtained regarding the outcomes of the pilot study implied that there were differences between the methods in which internal and external student teachers instruct their classes and how they made decisions.

Description of the Study

Four student teachers with internal locus of control (two females and two males), and four student teachers with external locus of control (two females and two males), were identified at the beginning of their student teaching experience. The Rotter I-E Scale was administered at the beginning of the semester to determine the student teacher's locus of control. The results of the I-E Scale administered to twenty-eight student teachers are presented in Table 5. The sex, and internal and external score of each individual is included. Eight individuals were identified as possible participants for the study. Participants with internal locus of control chosen for the study received I-E Scale internal scores of 23, 20, 20 and 19. These scores were out of a possible 23 points and are indicated in Table 5 with a double asterisk. Participants with external locus of control chosen to participate in the study received I-E Scale external scores of 14, 15, 18 and 13 out of a possible 23 points. These individuals are indicated in Table 5 with a single asterisk. It is clearly visible that the scores of the student teachers with external locus of control are not as high as the student teachers with internal locus of control. However, during the pilot study participants with similar external and internal scores were used and the results were sufficient to support

continued study.

TABLE 5

RESULTS OF I-E SCALE
ADMINISTERED AUGUST, 1986

Subject #	Sex	Internal Score	External Score
1	m	14	9
2	f	15	8
3	m	16	7
4	f	14	9
5	m	17	6
6	f	13	10
**7	m	23	0
8	m	20	3
9	m	16	7
**10	f	20	3
**11	f	19	4
*12	m	9	14
13	f	14	9
*14	m	8	15
15	f	16	7
**16	m	20	3
17	f	14	5
18	m	16	7
19	f	17	6
20	m	11	8
21	f	17	6
22	m	10	13
23	f	14	9
24	f	15	8
*25	f	5	18
26	f	19	4
*27	f	10	13
28	m	16	7
TOTAL	f=15 m=13		

Note. **=Internal subjects to be used in study

*=External subjects to be used in study

Following the identification of eight subjects (four internal and four external), an individual interview was held to develop a rapport

with each student teacher. A brief explanation was given about the I-E Scale instrument that was administered to them previously and a discussion was held regarding the study that they were chosen to participate in. During this initial session, each student teacher was given the option of participating in the study, and was told that a decision whether to participate or not would not affect her or his relationship with either the cooperating teacher or University supervisor. Permission for participation was obtained from all eight identified student teachers.

The collection of data during the study consisted of three separate sources--observations, interviews, and videotapes.

Each student teacher was observed three times during the student teaching experience. An attempt was made to have the observations occur throughout the semester. The first observation was held in early October, the second observation was held in early November, and the third and final observation was held in early December. While student teachers were being observed, an attempt was made not to bias the study by the researcher not being aware of the identity of the internal and external locus of control participants. In other words, student teachers were not labeled as having internal or external locus of control prior to any of the observations.

Two sets of notes were taken during each of the three observations. One set consisted of the student teacher's behaviors observed during the class period. This set refers to the amount of student contact, the student teacher's location in the room, student participation, etc. The second set consisted of questions that would be asked of the student teacher during the interview scheduled after

the observation. These questions referred to the decisions the student teacher did or did not make during the class period.

Each student teacher was interviewed following the observation. It was frequently not convenient to interview the student teacher during the next class period, because of other student teaching responsibilities. However, the interview was completed the same day as the observation. Follow up questions noted during the observation were asked at this time. Additional questions and/or comments to make the student teacher feel at ease were also incorporated in the interview. Each interview was tape recorded and transcriptions of the taped interview were made for future analysis.

In an effort to permit validation of the observations, four videotapes, (one female with internal locus of control, one male with internal control, one female with external locus of control and one male with external locus of control), were made of consenting student teachers. The videotapes were scheduled with the student teachers' prior knowledge, thus allowing them the option to adjust their lesson plans if they so desired.

Information was gathered from the observations, the interviews and the videotapes. These data were then analyzed. Comparisons were noted among the internal participants, among the external participants, and between the internal and external locus of control participants. The differences and similarities between the internal and external locus of control subjects are reported in this study.

While analyzing ethnographic research, it is important to do a reliability check on the collected data. One method in which this reliability can be checked is by using an independent source to review

the collected data and determine if the findings are accurate. Upon completion of the data collection, two such independent sources were utilized to assist in the reliability check. One independent source was used in analyzing the transcriptions and the other source was used in analyzing the videotapes. In determining the identity of the sources, an effort was made to locate individuals who were informed about education and sensitive to issues of the classroom and teacher education, but unbiased by their knowledge about individual student teachers.

The independent source identified for reviewing the transcriptions was given a copy of each transcription that contained all data collected from the observations and interviews. The instructions for the independent source for reviewing the transcriptions were:

1. Read the Analysis of Data summary to become acquainted with terminology, process of the study and categories that were established for purposes of analyzing the data.
2. Read the transcriptions that were compiled for each student teacher. (The transcriptions for each student teacher included notes taken during the observations, and interviews. The transcriptions were not coded for the independent source to identify them as having internal or external locus of control.)
3. Attempt to identify the transcriptions that belonged to student teachers with internal or external locus of control.
4. Determine additional similarities and/or differences between the transcriptions that were not already identified.

Videotapes were used in the study as an additional method of checking for reliability of the data. Two student teachers with

internal control (one male and one female), and two student teachers with external control (one male and one female), agreed to be videotaped during one of their class periods. This reliability check was also based on an independent source viewing the tapes after the study was completed. Similar qualities were sought in the individual who reviewed the videotapes as the individual who reviewed the transcriptions. Instructions for checking the reliability of the videotapes were:

1. Read the Analysis of Data summary to become acquainted with terminology, process and categories that were established in analyzing the data.
2. View the four videotapes (the videotapes were not coded for the independent source)
3. Attempt to identify the videotapes that belong to the student teachers with internal locus of control and the student teachers with external locus of control.

The collected data were analyzed from two different methods. One method was that of content analysis. The content analysis looked at the constructs that emerged from the observations, interviews, and videotapes. The other method utilized the University of Nebraska Student Teacher Recommendation Form. Completion of the Student Teacher Recommendation Form also required using collected data from the observations, interviews and videotapes. Forms were completed for each student teacher with internal locus of control and each student teacher with external locus of control. These eight completed forms were compared to determine similarities and differences between the student teachers included in the study. The limitations of this study did not

allow for comparisons of student teacher and cooperating teacher perceptions regarding the content of the Student Teacher Recommendation Form.

Summary

In order to determine comparisons between student teachers with internal locus of control and student teachers with external locus of control, the following steps were taken:

1. Eight student teachers were identified as participants, four with high internal locus of control and four with high external locus of control.

2. An initial meeting was held with each of the eight identified student teachers to explain the study, develop rapport, and gain permission for participation in the study.

3. Three observations were made of each student teacher at different times during the semester.

4. Interviews were held of each student teacher following each observation.

5. Four videotapes (two student teachers with internal locus of control and two student teachers with external locus of control) were made to determine reliability of the observations.

6. Transcriptions of the observations, interviews and videotapes were analyzed.

CHAPTER 4

RESULTS

This chapter presents the results of an analysis of data gathered from observing, interviewing and videotaping eight student teachers in the Lincoln Public School District. These data were analyzed to learn if any differences in the classroom could be noted between student teachers who were identified as having internal locus of control and student teachers who were identified as having external locus of control.

In the analysis phase of the study, the data were analyzed from two distinctly different methods. One method was that of content analysis. The content analysis looked at the data according to the constructs that emerged from the observations, interviews and videotapes. The other method utilized the University of Nebraska Student Teacher Recommendation Form. The two methods of analyzing the data are discussed separately.

Content Analysis

Completion of the pilot study assumed three basic differences would be found between the teaching styles of student teachers having internal locus of control and those student teachers having external locus of control. These differences noted previously were:

1. Students instructed by a student teacher with internal locus

of control would be actively involved in the learning process,

2. Internal locus of control student teachers would provide activities for their students' participation, and

3. Student teachers with internal locus of control would appear to be confident of themselves while presenting material to the class.

Student teacher involvement, student activities and student teacher self confidence provided a method with which to analyze the pilot study. Through this analysis, the outcomes of the pilot study were: student teachers with internal locus of control were more actively involved in the learning process, student teachers with internal locus of control provided activities for their students to participate in, and student teachers with internal control appeared more self confident. Because of additional results gained from the dissertation study, the three outcomes from the pilot study have been reorganized. The only exception to this reorganization being the category of self confidence. This category clearly remained as strong in the dissertation study as it was in the results of the pilot study and was, therefore, retained for the dissertation study.

The second difference noted in the pilot study was that internal locus of control student teachers provided activities for their students' participation. This difference was also observed during the dissertation study, however, in Chapter 4, these differences have been placed in two separate categories: checking for student understanding and classroom management. Checking for student understanding included such activities as determining if the students understood concepts that were presented, randomly questioning students, and movement throughout the classroom. Classroom management included how well control was

maintained in the room.

The third difference noted in the pilot study--that students instructed by a student teacher with internal locus of control were more actively involved in the learning process--was eliminated. The dissertation study determined to have categories that centered only directly on the student teacher, thus eliminating those that centered on the student.

Results gathered in the dissertation study were more extensive than those collected for the pilot study. These more complete results suggested four categories in which differences between student teachers with internal and external locus of control could be analyzed. These categories, based on the constructs that emerged from the data, were confidence in self or self esteem, methods of checking for student understanding, classroom management, and work with the cooperating teacher.

Self confidence refers to feelings individuals have about themselves and the work they do. If individuals possess self confidence, they will feel that they are doing a good job, the best that they can. High self esteem usually gives individuals a perception that they are better than most others in their given area of expertise. In the context of this study, self confidence also refers to individuals' ability to handle situations that require spontaneity. Events that occur unannounced frequently take a person off guard. Individuals response to those unannounced happenings can often be attributed to their self confidence or lack of that quality.

Checking for students' understanding is another category that demonstrated variations in the observations of internal and external

student teachers. Checking for students' understanding implies that student teachers will make frequent analysis of students to determine if they are comprehending what is being taught. The checking for understanding should take place frequently, not only during quiz or testing periods. This category includes teaching techniques such as questioning skills, and a teacher's movement around the room in an attempt to check on individuals' progress.

A third category for purposes of analysis is classroom management. Classroom management refers to the student teacher's ability to maintain control of the students during the class period. It is a common belief among educators that too much student talking provides a barrier for student learning. Too little talking or discussion provides little opportunity for student and/or teacher feedback.

Work with the cooperating teacher is the final category used in this analysis. The cooperating teacher, other than the students in the classroom, is the one individual that the student teacher has daily contact with. The student teacher's working relationship with a cooperating teacher is an important factor in the student teaching experience. The rapport that can be developed between student teacher and cooperating teacher presents the opportunity for student teacher growth and development throughout the semester. It should be noted, however, that a positive relationship with the cooperating teacher does not ensure a positive student teaching experience.

In analyzing the data of this study, the categories of confidence in self, methods of checking for student understanding, classroom management and work with the cooperating teacher were found to provide

a useful structure for organizing the data. It should be noted, however, that the above categories are not clearly discrete. It should also be understood that the generalizations given below are what a majority of the internal and external locus of control subjects provided. Rarely did the generalizations occur with 100% of the internal or external locus of control participants.

Self Confidence

The student teachers' self esteem (self confidence) was not measured directly; however, several behaviors were noted that suggested student teachers did or did not have a high degree of self esteem. Indications of self esteem that were noted were the ability to take control of a situation, flexibility or spontaneity when confronted with unexpected situations, and an ability to recognize one's errors and rectify them.

During the observation period of comparing student teachers with internal locus of control to student teachers with external locus of control, several specific behaviors that could be categorized as self confidence surfaced. These factors were considering self as a role model for students, perception of personal improvement as a teacher, flexibility or spontaneity while responding to unexpected situations, questioning techniques, keeping scheduled appointments, and concern for students' enjoyment.

Student teachers with internal locus of control frequently expressed, during the interview, they saw themselves as a role model

for their students and having a genuine interest in the teaching profession. Externally controlled student teachers also expressed an interest in the teaching profession, but mentioned other jobs they wished to pursue and the desire to teach in a different situation.

High internal locus of control student teachers demonstrated another factor of self esteem when they noted a perception of improvement in their teaching ability. During interviews they shared statements indicating excitement and enthusiasm with how much better they were doing such as "I was excited about how well class went today." and "It feels good to know you're getting better." These perceptions may have originally been generated from their cooperating teacher or University supervisor; however, they were expressed as true feelings of the student teacher. High external locus of control student teachers, for the most part, did not convey that same self confidence in their teaching improvement. During the interviews, external students frequently questioned their ability in instructing students. This questioning of ability referred to insecurity about being able to provide information at the appropriate level and a need to have the students enjoy what was being presented. Student teachers with external control often made comments such as, "I don't know if we just got that lucky or what.", "It doesn't always work, but it's better than nothing.", "I'm excited about the project but the students probably won't like it.", "If some of the students don't get it, it's their fault." Several additional comments from the external student teachers revolved around the concept that the student teaching experience was, however, getting easier.

Another area in which self confidence was observed in the student

teacher's ability to respond spontaneously to unexpected events in the classroom. Neither internal or external student teachers seemed to experience frustration with such unexpected events such as fire drills, pep rallies, announcements over the intercom system. However, student teachers with external locus of control frequently changed the dates assignments were due when students in the classroom protested. Comments such as, "It's taking them longer than the other class.", and "Perhaps I didn't do a very good job explaining it.", were shared during interviews.

Throughout the observations, students with internal locus of control felt confident in canceling the appointed meetings, both pre-secheduled observations and interviews, if there was something more important that they felt they should be doing at the time. Other things perceived as being more important were meetings at the University and finishing a paper that was due the next day. Student teachers who possessed external locus of control admitted there were things that they should be doing but they took the time to meet with the interviewer anyway. These external subjects admitted they needed to be assisting their cooperating teacher in another class or planning with their cooperating teacher.

Checking for Student Understanding

A second difference observed between internal and external locus of control student teachers was the method in which they checked for their student's understanding of the information presented. A wide variety of methods was utilized, however, a few distinct variations

were noted. These variations include the student teacher's movement around the room, amount of student practice time, methods of questioning skills.

Student teachers with internal control walked around the room frequently in an attempt to discover those students who were experiencing problems with the material that had been presented. This movement usually took place after the initial information was presented to the students. This movement throughout the room allowed the student teacher to visually check on each student's progress plus providing feedback to each student as an individual. Student teachers with external locus of control for the most part remained in front of the room. Only during labs and/or group work did they move among the students and then the student teachers frequently ended up working with only one or two groups rather than the whole class. Comments regarding the lack of movement, or working with only one group were, "They needed a lot more help getting started.", "That group had a member missing, so I took his place."

Student teachers with internal control frequently utilized probing techniques in which to follow up their questions for students such as, "Why do you feel 'x' would be appropriate there?", "What characteristics about the grain of wood indicate the use of that tool?" These probing questions were continued until the student teachers received the answer they felt was appropriate for the question. External student teachers occasionally answered questions themselves not always allowing students to explore alternatives.

Internally controlled student teachers devoted a large amount of the class period to student practice. For example, business and math

classes frequently were allowed fifteen to thirty minutes of practice time if the student teacher felt it was necessary for the student's comprehension of the material. It was their feeling that during the practice time students would experience difficulty if they did not comprehend the material. If the students experienced any difficulty, the student teacher felt that they would be able to help alleviate any misunderstanding while the student was still under their guidance in the classroom. Externally controlled student teachers did not allow for as much student practice time during the class period. During this study time, external student teachers frequently worked with only one or two students and expected the students to recognize when they needed assistance and raise their hand for individual help.

Both internally and externally controlled student teachers expressed the need for quiz and test grades for determining student's comprehension of presented material. Quiz and testing frequency varied from announced quizzes to unannounced quizzes over homework. However, testing usually followed completion of chapters and units of the text, and quarter in the district calendar.

Classroom Management

Classroom management was another difference observed between internal and external locus of control student teachers. Classroom management, or discipline, is an essential ingredient to teaching. Only with an adequate amount of classroom control will students have the proper environment in which to learn. During the observations, several factors surfaced regarding classroom management between

internal and external locus of control student teachers. These factors are the amount of concern expressed over student talking during the class period, and the reaction to problems in classroom management.

Student teachers with internal control did not express a great deal of concern in the area of discipline. Their discipline techniques varied but all of the subjects stated that they were not upset if several students talked while a lesson was being presented. They did, however, call individual students down during class when they felt the talking distracted other students. Student teachers with internal locus of control would also meet individually before or after class with students who were disruptive in an effort to remedy the problem. Externally controlled student teachers expressed more frustration with student talking. Their techniques for dealing with this disruption varied from humiliating or putting the student down, "Do you know what this is for? Do you know it?" to no action at all for fear of damaging their reputation with the students in the classroom, "I don't want to be a total jerk and tell them that I'll kick them out of class if they keep it up.".

All classrooms, however, are not perfect with absolutely no need for classroom control. Internally and externally controlled student teachers did vary in how they responded to a need for more classroom management. Internal student teachers when experiencing this need for more management frequently changed some aspect of their teaching, such as methods of delivering material to the students, and some aspect of the classroom, such as placement of desks. External student teachers, on the other hand, expressed a desire to change their techniques for working with the students, "I've read some articles from the PDK

magazine regarding discipline and I'm going to try them next week." During the next observation, however, these changes were not observed.

Work With Cooperating Teacher

A notable difference was also observed in the student teachers' perception of how well they worked with their cooperating teacher. Since the cooperating teacher works with the student teacher on a daily basis, there is a potential for the development of a unique relationship. The student teacher usually looks to the cooperating teacher for guidance and support as they develop throughout the semester. Variations between internally and externally controlled student teachers, however, can be noted in the role the cooperating teacher plays in the student teaching experience and the student teacher's acceptance and utilization of suggestions given by the cooperating teacher. Notes taken during observations and interviews were inconclusive in determining the amount of cooperation between the student teacher and cooperating teacher.

Internally controlled student teachers made frequent references to their cooperating teachers and the assistance they received from them, "She's really helped me this semester." The cooperating teacher appeared to play an important role in the student teacher's experience. Fewer references to the importance of the cooperating teacher's role in the student teaching experience was expressed by the external student teachers.

Student teachers with internal control frequently gave the cooperating teacher credit for assisting them through an unpleasant

situation. Suggestions from the cooperating and supervising teacher appeared to be appreciated by the student teacher. Externally controlled student teachers expressed a good working relationship with their cooperating teacher, but noted more frustration and often disagreements in how the cooperating teacher suggested handling the classroom content and students, "We don't always agree on my plans, and I don't know, he may be right.", "She keeps saying I should really look at the level of my comments to the kids. She thinks it's too high. It may be, but the kids will never change unless they're exposed to it."

Analysis Using University of Nebraska Teacher Evaluation Form

The University of Nebraska-Lincoln teacher education program uses a student teacher recommendation form. This form includes rating divisions for academic achievement, professional skills, potential for growth, and personal qualities. In the following discussion, each rating division is discussed as it pertains to observations made of internal and external locus of control student teachers included in this study.

Academic Achievement

All four participants with internal locus of control had student teaching assignments in two related, but separate content areas. Two related but separate content areas refers to assignments such as business law and accounting, algebra and geometry, mechanical drafting

and wood working. Each student teacher with internal locus of control stated that they preferred one of the two assignments over the other. During the interviews, they based their reasoning on familiarity of the subject and student motivation. Although their comfort level was high for their preferred content area, each student teacher expressed a desire to become more proficient in the other content area.

The internal locus of control student teachers appeared to be very knowledgeable in their field. Very few notes were needed to assist them through a lesson even though students in the classroom frequently asked questions that probably were not anticipated. Student teachers with internal locus of control did not take advantage of the cooperating teacher's presence in the classroom to assist them in the delivery of material or the answering of questions. They managed the classroom as if it was their own.

Student teachers with external locus of control taught only one subject. One external student teacher did, however, end the semester teaching in two content areas but this additional assignment did not take place until late in the student teaching experience. The opportunity to discuss proficiency in other content areas did not arise.

All four external student teachers appeared to be quite knowledgeable in their teaching assignments. All of the external subjects utilized notes during their classroom presentations. One subject, however, used them extensively.

In three of the four classrooms with internal locus of control student teachers, the cooperating teacher was always present. This presence allowed for constant feedback and assistance to the student teacher. In two out of the four classrooms with student teachers with

external locus of control, the cooperating teacher and student teacher developed a situation similar to co-teaching. In these two environments, the cooperating teacher assisted in the taking of roll, explanation of concepts to the students and discipline of the students. This assistance from the cooperating teacher may, however, be a factor reflecting the cooperating teacher and not the student teacher.

Professional Skills

The term professional skills refers to items such as diagnoses students' needs, prescribes and implements learning activities, evaluates student learning, motivates students, use of oral communication and decision making.

Student teachers with internal locus of control utilized assistance from their cooperating teachers in how they organized material that was to be presented to the students in the classroom They all expressed an appreciation of the expertise their cooperating teachers had. Two out of the four student teachers, after receiving the guidance from their cooperating teachers, chose to alter the organization of the unit being presented. These two student teachers felt that there was a more logical progression of information than the one suggested.

Student teachers with internal locus of control provided learning activities for their students to participate in. These learning activities, however, were basically a practice situation for the newly acquired learnings. From the observations and interviews of the study,

activities were not utilized to introduce new curriculum. This, however, may directly relate to the content area the student teachers were teaching.

Student teachers with internal locus of control utilized several different methods for evaluating student learning. These methods were relatively consistent and featured an analysis of student's questions, moving around the room to check individual student work, and analysis of quiz and test grades. Three out of the four student teachers with internal locus of control frequently gave pop quizzes to assist them in evaluating student learning.

Internal locus of control student teachers utilized effective oral communication. During the observations, they appeared very open to student questions and took a great deal of time to attempt to explain the learnings that were being introduced. Three out of the four student teachers conversed leisurely with the students prior to the start of class. One student teacher with internal locus of control had a very weak voice. Although it did not appear to effect her teaching as she adjusted to compensate for her voice, she did share that it was a concern of her University supervisor.

Student teachers with external locus of control also displayed a proficiency in the professional skills area. Student teachers with external locus of control also looked to their cooperating teachers as individuals with a great source of knowledge. Diagnosis of students' needs was a skill developed under the guidance of the cooperating teacher. Three out of the four external student teachers utilized their cooperating teachers a great deal in their professional development. The fourth student teacher received assistance when

needed, but not as consistently as the others.

Two out of the four student teachers with external locus of control incorporated many learning activities into their classroom. This is partially because of the content area in which they taught. Chemistry labs and drama activities were a natural part of their curriculum.

Evaluation of student learning took place frequently in the classrooms that had external locus of control student teachers. This evaluation usually took the form of quiz and test experiences. In three of the four classrooms, homework was also an integral aspect of the external environment. This homework was collected and returned to the student on a regular basis.

External locus of control student teachers also communicated effectively in and out of the classroom. Their students appeared to feel confident when asking questions of the the student teacher. Time was always allowed for questions by the students. One student teacher with external control incorporated a discussion time at the beginning of each period. This Citizenship Issues class took advantage of current events of the day for "kibitzing", as the student teacher called it.

Potential for Growth

The potential for growth section of the student teacher evaluation revolves around the student teacher's adaptability, initiative, leadership and professional commitment. The student teacher's ability in these four areas was discussed in the self confidence section

earlier in this chapter. However, there are additional points to be included here.

Internal locus of control student teachers felt very confident when faced with unexpected situations. They responded well to fire drills, unannounced pep rallies, and announcements over the intercom. Internal student teacher's self confidence provided them with a strong feeling of ability in teaching their classes. This self confidence also provided the internal subject with the desire to improve in all facets of their teaching experience. They recognized they were good and getting better, but that they still had room for improvement.

All four student teachers with internal locus of control expressed a sincere desire to teach and continue their professional commitment to the teaching profession. Students teachers with external locus of control, as with the internal subjects, responded well when faced with unexpected situations that happened in the classroom.

Two of the four external subjects expressed a commitment to the teaching profession, while the other two subjects expressed other jobs that they might be interested in pursuing. These jobs included educational counseling and professional dramatic aspirations.

Student teachers involved in the study were informed that because of their participation in the study, a reference upon request would be completed for their placement file. All of the high internal subjects took advantage of this offer, while only one of the external subjects took advantage of it.

Personal Qualities

The final area for student teacher evaluation is personal qualities. This section includes items such as attitude, rapport with students and other, and appropriate dress.

Student teachers with internal control had a very positive attitude in the classroom. Although this positive attitude was not one of fun and games, it allowed for positive give and take between the students in the classroom and the cooperating teacher. Their attitude toward the study was positive, however, it was clear that it was not a priority during their student teaching experience.

Student teachers with internal control also developed a positive rapport with both their students and cooperating teacher. It appeared that students felt comfortable discussing problems with the student teacher. These discussions revolved around the content and were not usually of a personal nature.

External locus of control student teachers, as with the student teachers with internal locus of control, possessed a positive attitude in the classroom. Their attitude toward the study was also positive, and they cooperated in every way they could to assist in its completion.

Student teachers with external control had a positive rapport with both their students and cooperating teacher. Students in external classrooms did not, however, take advantage of before class time to discuss problems with the student teacher. They usually remained in front of the room behind the podium preparing for the day's lesson.

Summary

Self confidence, methods of checking for student understanding, classroom management, and work with the cooperating teacher categories provide a firm basis for analyzing data collected during the study. It is important to remind the reader, once again, that they can not and should not be used independently of other data collected during the course of the study. Information that was grouped according to the student teacher evaluation form provided both confirmation and additional insights to the study.

It should be noted that the four videotapes of the student teachers completed during the study, while not providing additional data, did provide support for the data previously collected. The two participants with internal control made no changes in their delivery of the lesson when they were being videotaped. Even though the videotaping presented an unfamiliar situation, these student teachers with internal control remained relatively unaffected by the process. The two participants with external locus of control did make changes in their delivery. One student teacher rearranged the room so that there was no longer a table in front of the room. The other student teacher with external control performed a monologue for her students, something that was not a normal event for the drama class. These changes in teaching techniques that appeared to be set up especially for the camera demonstrated externally controlled student teachers uneasiness with the normal routine.

Following the analysis and comparison of the internal and external

locus of control student teacher participants, the major findings are:

1. Student teachers with internal locus of control expressed more confidence in themselves than student teachers with external locus of control. Neither internally or externally controlled student teachers experienced frustration with unexpected events that took place during the class period.
2. Student teachers with internal locus of control attempted to check for their student's understanding of concepts more frequently than student teachers with external locus of control.
3. Internal locus of control student teachers did not express a large amount of concern regarding discipline. External locus of control student teachers experienced more frustration with student talking.
4. Cooperating teachers of the internally controlled student teachers played an important role in their student teaching experience. Externally controlled student teachers expressed more conflicts with their cooperating teachers.
5. Student teachers with internal and external locus of control displayed a proficiency in the subject area and a potential for growth in that area.

CHAPTER 5

SUMMARY, DISCUSSION AND RECOMMENDATIONS

Summary

An ethnographic study involving the decisions student teachers with high internal and student teachers with high external locus of control make in the classroom provided an unique method of gathering data for analysis and interesting results.

A brief summary of the steps followed during the study are:

1. Four student teachers with internal locus of control (two females and two males), and four student teachers with external locus of control, (two females and two males) were identified. This involved administering the Rotter I-E Scale to students beginning their student teaching experience.

2. An interview with the eight identified student teachers was conducted in order to:

   a. develop rapport with the student teachers

   b. obtain permission for participation in the study

   c. explain the activities of the study.

3. Three observations were made of each student teacher. A record of the events in the classroom were kept.

4. Two videotapes of internal student teachers (one female and one male), and two videotapes of external student teachers (one female and one male) were completed.

5. Each student teacher was interviewed as soon as possible after

the observation. Follow-up questions relating to the observation were asked.

6. Information that was gathered in the interviews, observations and videotapes were analyzed and compared.

Following the analysis and comparison of the student teachers with high internal and high external locus of control, the major findings were:

1. Student teachers with internal locus of control expressed more confidence in themselves than student teachers with external locus of control. Neither internally or externally controlled student teachers experienced frustration with unexpected events that took place during the class period.

2. Student teachers with internal control attempted to check for their students' understanding of concepts more frequently than student teachers with external control.

3. Internal locus of control student teachers did not express a large amount of concern regarding discipline. External locus of control student teachers experienced more frustration with student talking.

4. Cooperating teachers of the internally controlled student teachers played an important role in their student teaching experience. Externally controlled student teachers expressed more conflicts with their cooperating teachers.

Discussion

As previously stated, there are many similarities and differences between student teachers with internal and external locus of control. In an attempt to compare the internal and external groups of subjects four categories, self confidence, classroom management, checking for student understanding and work with cooperating teacher were developed. These categories establish distinct differences between the decisions the student teachers with internal control and the decisions student teachers with external control make in the classroom. These four categories, however, do not look at the internal and external student teacher in a holistic educational point of view. There is much more to the student teaching experience beyond whether the student teacher can control the classroom, how they check for student understanding, and the relationship with their cooperating teacher.

Throughout the study, many differences and similarities between the internal and external locus of control student teachers were noted. While it appears on the surface that the internal student teacher possess qualities more appropriate for the teaching profession, one should be cautious in making that assumption. For example, student teachers with strong internal locus of control usually had the perception that what they were doing in the classroom was the correct method for instruction at that time. Occasionally, the chosen method of instruction was not the best method. This study did make references to the positive work student teachers with internal locus of control had with their cooperating teachers. However, the references were

usually made regarding individual situations rather than teaching philosophies.

Additional time spent on analyzing the data obtained from this study revealed that extremely strong internal and external student teachers may be too dominant in the method in which they make decisions. Administrators and fellow teachers would most likely not appreciate working along side individuals that are so confident they are not willing to improve. Student teachers with strong internal locus of control have a great deal of self confidence and occasionally this self confidence prevented an acceptance of new ideas. Administrators and fellow teachers would also not appreciate working along side individuals who are so unsure of themselves that they are constantly changing their minds. Student teachers with strong external locus of control frequently lacked the self confidence that allowed them to hold on to their beliefs without wavering. Often these individuals were unsure of how they felt in certain situations and whether they should or should not have considered alternatives. Perhaps it is the student teachers who possess both internal and external qualities that develop into the most effective teachers.

The ethnographic research utilized in this study provided the opportunity to explore practical research methods in an educational setting. This exploration lead to discovering the benefits of ethnography. The ability to see a holistic view of the student teaching process was one such benefit. Discussing daily plans, teaching philosophies, and future goals with the student teacher while observing actual teaching experiences provided a unique method of data collection.

Many individuals in the educational setting can and should take advantage of evaluating teachers in this holistic method. The teacher appraisal process should be more than just a classroom observation every three years. The appraiser must recognize that to encourage growth in fellow educators, individuals must look at their performance from as many different perspectives as possible. Evaluating performance from these perspectives will offer a more total evaluation, one that both the appraiser and appraisee can benefit from.

Another benefit of ethnography is that enthnographic methods make research feasible for practicing educators to utilize in the work place. Educators presently find that data is available, but that the research methods are not always applicable in the school setting. Ethnographic research provides a non-threatening, yet valid method of study for educators.

Knowledge of ethnographic research methods does not automatically ensure success for practicing researchers utilizing ethnography. It is, however, a first step for a successful study. Upon completion of this study, several additional factors were identified that contributed to its successful outcome. One additional factor was that the researcher had a great deal of working knowledge regarding the environment that was studied. An awareness of individual's roles and expectations, and organizational responsibilities and hierarchy were all aspects of that knowledge. Had there not been some prior awareness of the environment, the researcher might have inadvertently lost valuable data collecting time. Another factor beyond the basic ethnographic methods that affected the study was my role with the Lincoln Public Schools. The title of assistant principal seemed to

carry some authority with the student teachers included in the study. I had no problems acquiring subjects, yet on the other hand, the student teachers did not view me as an evaluator who would directly affect their student teaching experience. All of the student teachers were cooperative and willing to share their classroom experiences, values, work with cooperating teachers and University supervisors, and educational goals.

Recommendations

The summary and discussion of this study have implications for educational practitioners and researchers alike. Educational practitioners refer to individuals who are directly involved in the teaching of specific learnings to students in an educational setting. These students may be from a public school, higher education, or continued learning environment. Researchers, on the other hand, refer to individuals who are directly involved in the collection and analysis of qualitative and quantitative data in an effort to improve some aspect of the educational process. It is possible, of course, to have one individual be both a practitioner and a researcher. When this occurs, however, the individual is usually an instructor at the higher education level and participating in research at the same time. The following recommendations, therefore, are separated into two categories, one for practitioners and one for researchers. Both practitioners and researchers should become familiar with each category as both directly or indirectly affect job performance in educational settings.

For Practitioners

1. Information concerning the locus of control concept as it applies to internal and external variables, should be made available to educators both in and out of the classroom. Throughout the study there appeared to be a lack of knowledge in the area of locus of control. Educators who did not recognize the term locus of control, however, could immediately relate experiences with internal and external individuals once given the appropriate definition. Increased knowledge in this area would provide for a more comprehensive understanding of educators with whom the practitioner is involved.

2. The Rotter I-E Scale is a valid instrument and should be used more frequently when working in an educational environment. Through the use of the Scale, teachers, team leaders, and administrators can gain additional information about the individuals they work with on a daily basis. The internal, external knowledge would be helpful in anticipating how individuals would respond to change, and how they would respond to suggestions for possible improvement. Learning methods to improve communication in the educational setting should be a goal for all educators, and determining the level of locus of control would be a major assistance in this area.

3. Educational practitioners should participate in research more frequently. One method that may possible make research a viable option for teachers and administrators is the utilization of ethnographic research techniques. Through ethnographic research, teachers would be able to study specific problems that they see happening in their classroom or school. Public school administrators, likewise, could

recognize that they have the ability to research their school or district and actually develop some hypotheses that could benefit everyone involved. Practitioners who increase the frequency of research might also bridge the gap between public and higher education, an aspect that could possibly provide for more opportunity for free exchange.

For Researchers

1. Additional research is needed to determine whether the findings in this study are generalizable to teachers in educational settings. The study was based on research of individuals completing their teacher education experience. Tenured teachers, who have had the opportunity to work in the educational setting for many years, may or may not respond in the same manner as the student teachers did in the study.

2. The findings of this study should be compared to a similar study comparing internal and external locus of control teachers from the same content area. This comparison would imply comparing internal locus of control math teachers to external locus of control math teachers. Having a constant content area may provide varying results.

3. Additional research comparing internal and external locus of control teachers from the same educational level should be completed. A comparison of internal and external locus of control teachers from the elementary setting may be helpful in further understanding the concept. Likewise, a similar comparison of internal and external locus of control teachers should occur in the middle school, high school and

higher education settings.

4. This study has determined that an ethnographic research method can be extremely helpful when doing research in the educational environment. It is being recommended, therefore, that researchers who study practitioners in their own environment utilize ethnography. An extensive analysis of the subject, their environment and relationship with others all play an important part in the total individual. This method of extensive analysis may produce more comprehensive findings for researchers. Ultimately, these additional findings may in the long run prove to be more valuable to the practitioner.

5. Although the videotapes were not used extensively, they did provide additional means of checking the validity of the study. In this particular ethnographic study, the videotapes gave another opportunity for the student teachers with internal and external locus of control to demonstrate the internal or external locus of control characteristics.

BIBLIOGRAPHY

Borg, W., and M. Gall, Educational Research, David McKay Company, Inc., New York, 1965, pp. 82.

Bryant, K. "Student-Teacher Relationships as Related to Internal-External Locus of Control: Implications for the Role of the School Psychologists" American Psychological Association, 1972, pp. 567-568, (Mimeographed).

Buck, M.R., and H.R. Austrin, "Factors Related to School Achievement in an Economically Disadvantaged Group," Child Development, XLII 1971, pp. 1,183-1,826.

Cellura, A.R. "Internality as a Determinant of Academic Achievement in Low SES Adolescents" Unpublished manuscript, University of Rochester, 1963.

Chance, J.E., Internal Control of Reinforcements and the School Learning Process, Minneapolis: Society for Research in Child Development, 1965.

Chandler, J.A., "Locus of Control: A Proposal for Change," Psychology in the Schools, XII July, 1975, pp. 334-339.

Copeland, W. Student Teachers and Cooperating Teachers: An Ecological Relationship. Theory Into Practice, Vol. 18, 1980, 194-199.

Crandall, F.J., W. Katkowsky, and A. Preston. "Motivational and Ability Determinants of Young Children's Intellectual and Achievement Behaviors," Child Development, XXXIII, 1962, p. 91-109.

Dale R. "Implications of the Rediscovery of the Hidden Curriculum for the Sociology of Teaching." Identity and Structure: Issues in the Sociology of Education, D. Gleason, ed., Nafferton Books Driffield, England, 1977.

Doyle, W. "Classroom Tasks and Students' Abilities," in P.L. Peterson & H.J. Walberg eds., Research on Teaching: Concepts, Findings and Implications, Berkeley, CA: McCutchan, 1979.

Ducette, J. and S. Wold, "Cognitive and Motivational Correlates of Generalized Expectancies for Control," Journal of Personality and Social Psychology, SSVI, 1973, p. 420-60.

Franklin, R.D. "Youth's Expectancies About Internal versus External Control of Reinforcement Related to N Variables," Unpublished doctoral dissertation, Purdue University, 1963.

Goodenough, W.H. "Residence Rules", Southwestern Journal of Anthropology 12:22-37, 1956.

Gurin, P. "Internal-External Control in the Motivational Dynamics of Negro Youth," Journal of Social Issues, XXV, 1968, p. 25-53.

Heath, Shirley Brice, "Ethnography in Education: Defining the Essentials", Children In and Out of School, eds. Gilmore & Glatthorn. The Center for Applied Linguistics, Washington D.C., 1982.

Hymes, Dell, "What is Ethnography?" Children in and Out of School, eds. Gilmore & Glatthorn, The Center for Applied Linguistics, Washington, D.C. 1982.

Jacob, Evelyn, "Combining Ethnography and Quantitative Approaches: Suggestions and Examples from a Study on Puerto Rico", Children In and Out of School, eds. Gilmore and Glatthorn, Center for Applied Linguistics, Washington, D.C., 1982.

James, W.H., The Application of Rotter's Social Learning Theory Minneapolis: Society for Research in Child Development, 1965.

Katz, H.A., P.D. Hersch, and T.L. Wright, "Internal vs. External Control and Two Examples of Classroom Behavior" San Francisco: Western Psychological Association, 1971, Mimeographed.

Lao, R.C., "Internal-External Control and Competence, and Innovative Behavior Among Negro College Students," Journal of Personality and Social Psychology, XIV, 1970, p. 445-460.

Lortie, S. Schoolteacher. Chicago: University of Chicago Press, 1975.

Lutz, Frank and Margaret Ramsey. " The Use of Anthropological Field Methods in Education." Educational Researcher, Vol. 3, No. 10, Nov., 1974, p. 5-7.

Maes, W., and D.E. Anderson. " A Measure of Teacher Locus of Control." Journal of Educational Research, Vol. 79, No. 1, Sept/Oct, 1985, p. 27-32.

McDermott, R. & L. Hood, "Institutionalized Psychology and the Ethnography of Schooling", Children In and Out of School,eds.Gilmore & Glatthorn, Center for Applied Linguistics, Washington, D.C., 1982.

McGhee, P.E. and J.J. Crandall, "Beliefs in Internal-External Control of Reinforcements and Academic Performance," Child Development, XXXIX, 1968, p. 91-102.

McNergney, R., and Carol Carrier. Teacher Development. MacMillan Publishing Co., Inc., New York, 1981.

Mehan, H. "The structure of Classroom Events and Their Consequences for Student Performance", Children In and Out of School, eds. Gilmore and Glatthorn, Center for Applied Linguistics, Washington, D.C., 1982.

Morgan, L.H., "Systems of Consanguinity and Affinity of the Human Family." Washington D.C.: Smithsonian Institution, 1877.

Rotter, J.B. "Generalized Expectancies for Internal Versus External Control of Reinforcement." Psychological Monographs, No. 30, 1966.

Rotter, J.B. Social learning and Clinical Psychology, New York: Prentice-Hall, 1954, p. 102.

Rotter, J.B. and R.C. Mulry, "Internal versus External Control of Reinforcement and Decision Time," Journal of Personality and Social Psychology, II, 1965, p. 593-597.

Spradley, James P. Participant Observation. Holt, Rinehart, and Winston, 1980.

Stack, J.J., "Individual Differences in the Reduction of Cognitive Dissonance: An Exploratory Study," Unpublished doctoral dissertation, Ohio State University, 1963.

Tabachnick, R.R., and K.M. Zeichner. "The Impact of the Student Teaching Experience on the Development of Teacher Perspectives," Teacher Education Vol. 35, No. 6, Nov/Dec, 1984, p. 28-36.

Watson, D., and E. Baumal, "Effects of Locus of Control and Expectation of Failure upon Present Performance," Journal of Personality and Social Psychology, VI, 1967, p. 212-215.

Wax, M., R. Wax & R. Dumont, "Formal Education in an American Indian Community," Journal of the Society for the Study of Social Problems, Spring, 1964, Vol 11, No. 4.

Wax, Rosalie, Doing Fieldwork, The University of Chicago Press, 1971.

Wilcox, Kathleen, "Ethnography as a Methodology and It's Application to the Study of Schooling: A Review", Doing The Ethnography of Schooling, George Spindler, ed., Holt, 1982, p. 457-479.

Winer, B., Theories of Motivation: From Mechanism to Cognition, Chicago: Markham Publishing Co., 1972.

Wolcott, Harry, "Mirrors, Models, and Monitors: Educator Adaptations of theEthnographic Innovation," Doing the Ethnography of Schooling," George Spindler, ed., Holt, Rinehart and Winston, 1982, p. 69-91.

Wolfgang, A., and R. Potvin, Internality as a Determinant of Degree of Classroom Participation and Academic Performance Among ElementaryStudents, Washington, D.C.: Department of Health, Education and Welfare, 1973, ED 085 112.

Yee, A. "Do Cooperating Influence the Attitudes of Student Teachers?" Journal of Teacher Education, 31, 1980, p. 327-332.