DOCUMENT RESUME

ED 358 092 SP C34 578

AUTHOR Taylor, Vivian; And Others
TITLE Educating Prospective Teachers for Accommodating the Diversity in PK-12 Schools.
PUB DATE 92
NOTE 50p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Collegiality; *Cooperating Teachers; Cooperative Learning; *Curriculum Development; Diversity (Institutional); Educational Practices; Elementary Secondary Education; Higher Education; Preschool Education; *Preservice Teacher Education; *Student Teachers; *Student Teacher Supervisors; Teacher Education Curriculum; Teaching Experience
IDENTIFIERS *Diversity Concept

ABSTRACT

This study was conducted to examine the diversity of student teachers', cooperating teachers', and student teacher supervisors' expectations and perceptions of achievement for the student teaching internship; and to describe a collaborative process for accommodating student diversity in the teacher education program. A nationally represented sample of 1821 student teachers, 455 cooperating teachers, and 51 college supervisors was drawn from 44 teacher education programs located in 30 states. A pre-inventory was administered during the first 2 weeks of internship and the post-inventory was completed during the last two weeks. Curriculum and instructional implications derived from the data suggest: (1) teacher education programs must enable prospective teachers to learn the practice by working with other teachers in collegial settings; (2) learning to accommodate diversity among future teachers is a developmental and collaborative process; (3) a process approach to instruction enables preservice teachers critically to examine their expectations and perceptions of achievement as they learn the practice of teaching; and (4) the use of authentic assessment procedures allows students and teacher educators collaboratively to improve the practice of teaching. (Contains 47 references.) (LL)

Educating Prospective Teachers for Accommodating the Diversity in PK-12 Schools

Vivian Taylor, Leroy Kemp, Effie Clay,

and Richard T. Middleton III

Jackson State University

Abstract

Title: Educating Prospective Teachers for Accommodating the Diversity in PK-12 Schools

Authors: Vivian Taylor, Leroy Kemp, Effie Clay, and Richard T. Middleton III

Purpose

The major purpose of this study was to investigate the relationship among cooperating teachers, college supervisors, and student teachers' expectations for student teaching and their perceptions of achievement. Both the theoretical postulations and the research traditions of teacher education have advanced the supposition that student teachers' expectations of student teaching are associated with their perceptions of achievement.

It was argued that student teachers' intellectual, moral, and ethical psychosocial expectations of student teaching should encompass the range of diversity that exists among students, teachers, and other persons associated with education. Thus, the hypothesis that student teachers' achievement may be predicated upon their expectations for student teaching was the premise of this study.

Methodology

A nationally represented sample was drawn from 44 teacher education programs located in 30 states. There were 1821 student teachers, 455 cooperating teachers and 51 college supervisors.

A pre-post test design was used to test the relationship among student teachers, college supervisors, and cooperating teachers' expectations and achievement for the student teaching internship. These participants voluntarily responded to an inventory that measured ten generic outcomes for student teaching and forty performance indicators of these outcomes. The pre inventory was administered during the first two weeks of the internship and the post inventory was completed during the last two weeks.

The ANOVA test was used to analyze the significance of the mean differences across all groups of participants in this study. The relationship between student teachers' expectations and perceptions of achievement was determined with the T-Test.

Findings

The null hypothesis of no significant difference between student teachers' expectations and their perceptions of achievement was rejected. There was a statistically significant difference of .05 across all ten outcome dimensions for student teaching. Also, the null hypothesis of no significant difference among student teachers, cooperating teachers, and college supervisors' expectations and perceptions of achievement for the internship was rejected. On the forty performance outcome variables, fifteen were significant at .000 probability level and ten were significant at .05 probability level.

Educating Prospective Teachers for Accommodating the Diversity Among PK-12 Student Populations

Vivian Taylor, Leroy Kemp, Effie Clay, Richard Middleton
Jackson State University

Purpose of the Study

In recent years, diversity among all education practitioners and student populations has received an increased value in the American educational systems. The reasons for the recognition and acceptance of the positive attributes of diversity in schools and other education institutions are many. Foremost, new perspectives have emerged on the relationship between the school and society. These perspectives are necessary to accommodate the diversity that exists among human conditions. Moreover, the contours of diversity include the social, political, economic, intellectual, and moral dimensions that evolve within the context of education in a democratic society. As a consequence, the preparation of perspective teachers must ultimately reflect a restructured paradigm.

This restructured paradigm in the preparation of prospective teachers, in part, required an examination of the value of knowledge, to include expectations and perceptions of achievement of these individuals.
Much of the recent literature on the socialization of prospective teachers has focused on the methodological processes for assisting prospective teachers in the reconstruction of their schema for effective teaching in

diverse school settings (Liston & Zeichner, 1987; Zeichner & Gore, 1990; Sirotnik, 1990). Within this research tradition, critical concerns have been advanced in support of preparing teachers as decision makers (Shavelson & Stern, 1981); as reflective practitioners (Schon, 1987); as intellectuals (Giroux, 1988); and as social reconstructionists (Zeichner and Gore, 1990).

This shift in the paradigm requires a conceptualization of teacher preparation as a collaborative process. This process includes public school faculty, teacher educators, as well as prospective teachers. Therefore, the acquisition of knowledge, values, and attitudes in the practice of teaching becomes a shared process, a shared responsibility, and a shared accountability. As a consequence of the diversity among these individuals, there exists a diversity among their conceptualizations of the practice of teaching.

It was the purpose of this study to examine the diversity of student teachers, field-based supervisors or cooperating teachers, and college-based supervisors' expectations and perceptions of achievement for the student teaching internship. Given the increasing diversity among student populations in schools, it was anticipated that differences in the nature of knowledge for the practice of teaching would differ among student teachers, field-based supervisors, and college-based supervisors. A second purpose was to describe one process for accommodating students' diversity in a the teacher preparation program.

An Overview of the Problem

Too often first year teachers have reported that their preservice teacher education program did not adequately prepare them to effectively accommodate the emergent diversity among students in PK-12 schools. Although no program could simulate actual future conditions of schooling, the application of theory and knowledge to practice in actual contexts and processes of schooling has always been a major goal of the professional education of teachers. Student teaching has generally been highly valued as one component for enabling prospective teachers to systematically integrate knowledge and theory to the practice of teaching.

One critical challenge to the socialization and professionalization of prospective teachers is the enhancement of a critical and reflective thinking of their psycho-social values and expectancies toward a recognition of the diverse educational realities in classrooms, schools, and communities. The discontinuity between teacher and student diversity, and between the teacher as a technician and as a social reconceptualist suggests that student teachers need to expand their expectations of schooling to include the dynamic culture of schools and their relationships to the surrounding communities. Hence, a major component of the methodological process was to encourage prospective teachers to develop a greater

continuity between their expectations for teaching and their performance in real contexts of teaching.

Theoretical Framework for the Study

Cognition in Diverse School Settings

The earlier research on cognition advanced by Bartlett's (1932) proposed two major conceptualizations for understanding knowledge acquisition in social contexts. These constructs included simplification by isolation and simplification by integration. Bartlett, (1932) argued in favor of simplification by integration. This construct, suggested that in complex real-world learning, such as the practice of teaching in diverse school settings, individuals simultaneously integrate multiple events. Thus, level of cognition was dependent upon the learners' characteristics.

Later, in support of the simplification by integration, Lewin (1951) proposed a field theory. The field theory construct helped to explain the multi-dimensionality of the relationship between an individual's expectations and achievement in social contexts. According to Lewin (1951), cognition of real-world events included both the person and the psycho-social situation. Moreover, an individuals' performance was a function of the situation at a given time. Consequently, cognition by isolation of specific attributes of events appeared to have little relevance to changing situations in the social context of schooling.

In teacher education, Day (1959) presented initial research in support of the simplification by integration construct and field theory. In a follow-up study of beginning teachers, Day (1959) concluded that the teacher education program exerted little influence on teachers' attitudes and performance in actual teaching. This tradition of research has continued in teacher education with a distinct focus on the context and cultures of teaching (Smith & Geoffrey, 1968; Feiman-Nemser & Floden, 1986); teacher socialization (Lortie, 1975; Zeichner & Gore, 1990; Goodlad, 1990b) teachers' knowledge (Carter, 1990); and cognition and interactive processes (Schon, 1987; Shavelson & Stern, 1981). The emphasis on process, content, and context provided an expanded conceptual framework for understanding the acquisition of the practice of teaching.

Expectancy and Achievement

Educators have recognized the crucial role of expectancy in teacher education (Day, 1959; Jacobs, 1968; Wright & Tuska, 1968; Fuller & Brown, 1975; Liston & Zeichner, 1987; Wildman & Niles, 1987; Marso & Pigge, 1987; Brousseau, Book, & Byers, 1988). This research tradition in expectancy and teaching examined both process and context assumptions about teacher socialization.

The positive relationship between expectancy and achievement has been supported (Tolman & Brunswik, 1935; Ajzen & Fishbein, 1954; Peak, 1955; Atkinson & Reitman, 1956; Rotter, 1955; Atkinson, 1957; Vroom, 1964; Fishbein,

interaction of three components with which the preservice teacher must cope. The first component consisted of the internal self-evaluations in setting personal expectations for learning how to teach competently. The second component consisted of self-observations of the quality of experiences for achieving these expectations. The external self-evaluation, of the actual degree to which these expectations were achieved, was the third component.

Curriculum and Pedagogy

Curriculum theorists (Berliner, 1985; Giroux, 1988; Goodlad, 1990a; Schon, 1987; Evertson, 1990; Kemp, 1992) emphasized the importance of engaging students in authentic, real-world tasks. Real-world tasks seem more motivating and have greater transferability than more traditional, decontextualized academic tasks. Good (1990) stated that preservice teachers need to know how to translate knowledge in ways that students can understand and internalize. Therefore, engaging prospective teachers in the process of the pedagogy as they acquire or demonstrate knowledge in the academic subject matter is a powerful pedagogical strategy. This view of curriculum and pedagogy recognizes the value of the individual in the social context.

Soder (1990) argued that the basis for curriculum and pedagogy must include the nature of the relationship between those who teach and those who are taught. This relationship more often is characterized by the lack of parity in power, knowledge, and volition that intensifies

the nature of moral responsibility. In preparing teachers for diversity, the ethical as well as the moral conditions of curriculum and pedagogy are important components.

Sirotnik (1990) articulated several dimensions of the ethical responsibility for preparing teachers. The curriculum, according to Sirotnik (1990), must nurture and encourage prospective teachers to a) exercise the capability of human inquiry; b) develop a commitment for knowledge; c) acquire a high level of professional competence; d) possess a capacity for caring; and e) to recognize the attributes of freedom, well-being, and social justice for all individuals.

Thinking must be linked to the practice of teaching (Dewey, 1967; Schon, 1987). Knowledge must be acquired through explanation, interpretation, and understanding in the context of human beings. Curriculum and pedagogy must require the best practice and the highest professional competence (Evertson, 1990; Good, 1990; Reynolds, 1989). Prospective teachers will teach in diverse school settings that require a caring relationship among people that is basic to the human condition (Noddings, 1984). In diverse school systems, the curriculum for prospective teachers must enable them to make rational decisions which are responsive to the freedom, well-being, and fairness of all people (Ryan, 1987; Tom, 1984).

Curriculum and pedagogy for preparing teachers to accommodate diversity in schools must recognize the diversity among prospective teacher as a legitimate process

variable. Grant and Secada (1990) stated that efforts to prepare all teachers to teach all students have been inadequate, and argued in favor of programs that recognize accommodating diversity among prospective teachers of all ethic groups. This argument seems reasonable in view of the fact that diversity among school populations will continue to increase.

Assumptions of the Study

1. It was assumed that student teachers' intellectual, moral, and ethical psycho-social expectations of student teaching were associated with the range of diversity that exists among students, teachers, and other persons associated with education.
2. Student teachers' perceptions of achievement were associated with their expectations for the student teaching internship.
3. Efforts to accommodate diversity among PK-12 students must ultimately recognize and accommodate the variability of diversity among preservice teachers' knowledge, beliefs, and values.

Hypotheses

1. There is no statistically significant difference among student teachers', field-based supervisors', and college-based supervisors' expectations and perceptions of achievement during teaching.
2. There exists minimal differences among student teachers', field-based supervisors', and college-based

supervisors' expectations and perceptions of achievement during teaching teaching.

Methodology

Sample

A nationally represented sample was drawn from 44 teacher education programs located in 30 states. There were 1,821 student teachers, 692 cooperating teachers and 84 college supervisors who participated in this study. From this group, a random sample (Sample = 60) was drawn to test the two hypotheses of the study. The random sample consisted of 1,072 student teachers, 415 field-based supervisors, and 50 college-based supervisors.

Design

A pre-post test design was used to test the relationship among student teachers', college-based supervisors', and field-based teachers' expectations and achievement for the student teaching internship. These participants voluntarily responded to an inventory that measured ten generic outcomes for student teaching and forty performance indicators of these outcomes. The pre inventory was administered during the first two weeks of the internship. The post inventory was completed during the last two weeks.

Instrumentation

Data was gathered using Kemp's Inventory for Student Teachers to Indicate Their Expectations of Achievement and Opportunities to Perform Indicators of these Expectations-

Form A; and Kemp's Inventory for Student Teachers to Indicate Degrees of Their Achievement and Opportunities to Perform Indicators of the Expectations-Form B (See Appendix A) Alternate Form A and Form B of the inventories were designed and administered to field-based and college-based supervisors. Both inventories used a Likert-type response scale. On areas one through eight of the inventories, the scale categories for expectations and perceptions of achievement were 1) very low, 2) low, 3) moderate, 4) high, and 5) very high. For areas nine and ten, the scale categories were 1) strongly disagree, 2) disagree, 3) undecided, 4) agree, and 5) strongly agree.

The inventories were mailed to the directors of clinical and field experiences for collecting the data. In most situations, the college-based supervisors administered the inventories to the student teachers. In some cases, they were administered by the directors of clinical and field experiences. Except in one situation, both field-based and college-based supervisors returned their inventories directly to the researchers of this study.

All inventories, for each subgroup of the sample, consisted of ten generic knowledge domains relative to the practice of teaching. These domains were 1) instructional, 2) pupil assessment, 3) teacher-self, 4) motivational, 5) social, 6) school management, 7) teaching assessment, 8) teaching media, 9) attitudinal, and 10) career. There was

a total of forty performance indicators of these ten dimensions, four for each dimension.

The ten knowledge based dimensions were derived from the literature on teaching and student teaching. They constituted the parameters of the practice of teaching in this study.

Statistical Analysis

To test the null hypothesis of this study, the ANOVA test was employed to determine levels of statistically significant difference among the sub-sample's mean scores. The ANOVA test produces the F-ratio by dividing the between group variance by the within-group variance. The greater the variation between groups as compared with the variation within groups, the greater will be the size of the F-ratio.

The mean statistics were used to test hypothesis two. The possible range in mean scores was a low of M=1.0 to a high of M=5.0. The higher mean scores were associated with higher level of expectations and higher levels of perceived levels of achievement.

Results

The findings reported in Tables 1 through 9 indicated that there were statistically significant differences on all mean expectations and perceptions of achievement scores among the subgroups. Therefore, the null hypothesis, was rejected. In addition, the data (See Tables 1 through 9.)

revealed that, among the subgroups of the study, there were minimal differences among their expectations and perceptions of achievement during student teaching.

Instructional Dimension

In Table 1, the F-ratios of the mean expectation and

Table 1

Mean and F-ratio scores for the Instructional Expectations and Perceptions of Achievement

Variables	Subgroups EC n= 108 M	EL n= 478 M	SP n= 71 M	SC n= 405 M	FBS n= 415 M	CBS n= 50 M	F
Expectations							
1. Analyze instructional needs	4.0	3.8	3.8	3.3	3.7	3.5	20.3*
2. State objectives	4.2	3.9	3.9	3.5	3.8	3.8	19.7*
3. Alternative methods	4.0	3.9	3.8	3.3	3.7	3.5	23.6*
4. Classroom management	4.0	3.9	3.7	3.4	3.8	3.6	17.3*
Achievement							
1. Analyze instructional needs	3.9	3.8	3.7	3.5	3.4	2.8	15.9*
2. State objectives	3.9	4.0	3.9	3.7	3.6	3.0	14.3*
3. Alternative methods	3.8	3.8	3.8	3.5	3.4	2.7	17.0*
4. Classroom management	4.0	4.0	3.8	3.6	3.5	2.9	21.7*

* = $p < .05$. EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

achievement scores were statistically significant at ($p<.05$). These results suggest that the student teachers',

field-based supervisors', and college-based supervisors' knowledge about the nature of instruction differ.

The mean expectation scores on the four instruction variables ranged from (M=3.3, moderate expectation, to (M=4.0, high expectation). Thus the four sub-groups of student teachers, cooperating teachers, and the college-based supervisors held only moderate to high expectations for instruction. In contrast, the perceptions of achievement mean score ranged from (M=2.7, low achievement) to (M=4.0, high achievement). There existed a greater diversity among the subgroup's perceptions of achievement. However, differences were only minimal between mean expectations and mean perceptions of achievement scores among all subgroups.

Pupil Assessment

Expectation and achievement data for pupil assessment dimension are presented in Table 2. The F-ratio values were statistically significant among the sub-groups for 1 - diagnosis student needs, 2 - teacher made tests, 3 - consult students' parents, and 4 - teacher-student conferences. Student teachers, cooperating teachers, and college-based supervisors held different conceptualizations of pupil assessment. The mean level of difference for expectations ranged from M=2.4 (low) to M=3.6 (moderate). In contrast, the mean level of achievement ranged from M=1.9 (very low) to M=3.4 (moderate). These findings suggest that the sub-

groups' knowledge, values, and attitudes about the pupil

Table 2

Mean and F-ratio Scores for Pupil Assessment Expectations and Perceptions of Achievement

Variables	Subgroups						
	EC n= 108	EL n= 478	SP n= 71	SC n= 405	FBS n= 415	CBS n= 50	
	M	M	M	M	M	M	F
Expectations							
1. Diagnose student needs	3.6	3.4	3.3	3.1	3.2	3.0	12.7*
2. Teacher-made tests	3.5	3.3	3.3	3.2	3.0	2.8	10.5*
3. Consult students' parents	3.0	3.1	2.9	2.6	2.5	2.4	24.5*
4. Teacher-student conferences	3.4	3.3	3.2	2.9	2.9	2.8	14.5*
Achievement							
1. Diagnosed student needs	3.5	3.4	3.3	3.2	3.2	2.4	9.2*
2. Teacher-made tests	3.0	3.0	3.3	3.3	2.9	2.5	7.3*
3. Consulted students'parents	2.4	2.9	2.6	2.5	2.4	1.9	10.0*
4. Teacher-student conferences	2.9	3.1	2.9	2.9	2.8	2.3	4.9*

* = $p < .05$. EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

assessment practices became increasingly diverse during the student teacher internship.

As anticipated, levels of perception of achievement among the four sub-groups were lower than levels of expectation for student teaching. Of the four pupil assessment variables, consult student parents and teacher-student conferences received lower perceptions of achievement during the student teaching internship. The achievement mean score (Table 2) ranged from M=1.9 (very low) to M=2.9 (low). In contrast, mean expectation scores were slightly higher with a mean range of M= 2.4 (low) to M=3.4 (moderate).

Teacher-Self Dimension

Expectation and achievement of the teacher self-dimension are illustrated in Table 3. The F-ratios, for both expectation and achievement variables, were statistically significant for critiquing from students, accepted mistakes, empathize with student and respond to students genuinely.

Mean expectation scores ranged from M=2.7 (low) to M=4.3 (high). In comparison, mean perceptions of achievement scores ranged from M=2.4 (low) to M=4.4 (high) Differences between expectation and achievement scores were minimal. However, mean achievement scores were generally higher than mean expectation scores (see Table 3).

Table 3.

Mean and F-ratio scores for Teacher-Self Expectations and Perceptions of Achievement

Variables	Subgroups EC n= 108 M	EL n= 478 M	SP n= 71 M	SC n= 405 M	FBS n= 415 M	CBS n= 50 M	F
Expectation							
1. Critiquing from students	3.8	3.6	3.4	3.4	2.8	2.7	47.7*
2. Accept mistakes	4.3	4.1	3.8	3.8	3.8	3.7	16.0*
3. Empathize with students	4.3	4.1	3.9	3.8	3.7	3.5	20.8*
4. Respond to students	4.4	4.2	4.0	3.9	3.9	3.7	19.5*
Achievement							
1. Critiquing from students	3.8	3.9	3.3	3.6	3.3	2.4	21.2*
2. Accept mistakes	4.0	4.2	3.8	3.9	3.8	3.3	14.9*
3. Empathize with students	4.1	4.3	4.0	4.0	3.8	3.2	19.9*
4. Respond to students	4.1	4.4	4.0	4.0	3.9	3.2	20.8*

* = $p < .05$.
EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-based Supervisors

Social Dimension

Social dimension variables are indicated in Table 4.

Table 4 .

Mean and F-ratio Scores for the Social Expectations and Perceptions of Achievement

	Subgroups						
	EC n= 108	EL n= 478	SP n= 71	SC n= 405	FBS n= 415	CBS n= 50	
Variables	M	M	M	M	M	M	F
Expectation							
1. Problems in perspective	4.2	3.9	3.6	3.5	3.6	3.4	20.8*
2. Communication techniques	4.3	4.0	3.7	3.6	3.7	3.7	21.7*
3. Faculty's point of view	4.2	4.0	3.6	3.6	3.5	3.4	24.6*
4. Share responsibilities	4.4	4.2	3.9	3.9	3.8	3.8	23.2*
Achievement							
1. Problems in perspective	3.9	3.9	3.9	3.5	3.5	3.2	12.6*
2. Communication techniques	4.0	4.0	4.0	3.6	3.4	3.2	16.7*
3. Faculty's point of view	4.0	4.0	4.0	3.6	3.6	3.4	14.2*
4. Share responsibilities	4.1	4.2	4.1	3.8	3.8	3.6	15.8*

* = $p < .05$. EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

The F-ratios of the mean score were (Table 4) statistically significant for each of the four variables.

Expectation mean scores ranged from M=3.4 (moderate) to M=4.4 (high). In contrast, perceptions of achievement mean scores ranged from 3.2 (moderate) to M=4.1 (high). There appeared to exist greater diversity of expectations versus those reported for perceptions of achievement (See Table 4).

There were only minimal differences among expectation and achievement mean scores in favor of the expectations.

Motivational Dimension

Variables relative to the motivational dimension of the practice of teaching are illustrated in Table 5.

These variable are 1) information to students, 2) relate content to students' experiences, 3) use students' ideas in teaching, and 4) call students' names. The expectation and perception of achievement F-ratios of the mean scores were statistically different ($p < .05$) on the four variables among the six sub-groups (See Table 5).

The expectation mean scores ranged from M=3.3 (moderate) to M=4.3 (high). In contrast, perceptions of achievement mean scores ranged from M=2.6 (low) to M=4.3 (high) (Table 5). This finding suggests that diversity of the professional practices for motivation increased among the sub-groups. There were minimal expectation and

Table 5.

Mean and F-ratio Scores for the Motivational Expectations and Perceptions of Achievement

	Subgroups						
	EC n= 108	EL n= 478	SP n= 71	SC n= 405	FBS n= 415	CBS n= 50	
Variables	M	M	M	M	M	M	F
Expectation							
1. Information to students about performance	3.7	3.5	3.5	3.0	4.0	3.9	57.3*
2. Relate content to students' experiences	3.9	3.8	3.5	3.3	3.9	3.7	30.0*
3. Use student ideas	3.9	3.8	3.5	3.3	3.8	3.5	26.1*
4. Call student' names	4.3	4.2	4.0	3.8	4.3	4.2	26.5*
Achievement							
1. Information to students about performance	3.7	3.8	3.9	3.3	3.8	3.2	13.7*
2. Relate content to students' experiences	3.8	3.8	3.9	3.3	3.7	2.9	18.7*
3. Use student ideas	3.7	3.7	3.7	3.1	3.5	2.6	19.6*
4. Call student' names	4.2	4.3	4.3	3.8	4.1	3.7	15.3*

* = $p < .05$. EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

perceptions of achievement differences in favor of expectations.

School Management Dimension

Data for school management are reported in Table 6.

Table 6

Mean and F-ratio Scores for the School Management Expectations and Perceptions of Achievement

	Subgroups						
	EC n= 108	EL n= 478	SP n= 71	SC n= 405	FBS n= 415	CBS n= 50	
Variables	M	M	M	M	M	M	F
Expectation							
1. School regulations	3.7	3.6	3.3	3.1	3.5	3.1	15.3*
2. Supervise school facilities	3.7	3.6	3.2	3.0	3.4	2.9	20.4*
3. School's legal regulations	4.0	3.8	3.5	3.3	3.6	3.4	15.1*
4. Schools rules	3.6	3.4	3.1	3.0	3.2	2.9	13.8*
Achievement							
1. School regulations	3.3	3.7	3.2	2.9	3.4	2.4	18.7*
2. Supervised school facilities	3.4	3.8	3.2	2.9	3.4	2.6	22.8*
3. School's legal regulations	3.3	3.7	3.3	3.1	3.5	2.7	11.9*
4. Schools rules	3.0	3.4	3.0	3.0	3.1	2.3	7.1*

* = $p < .05$. EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

The F-ratios of the mean scores for each expectation and perception of achievement variable were statistically significant ($p < .05$). The null hypotheses was rejected.

This finding suggest that student teachers, field-based supervisors and college-based supervisors held unique

perceptions of the practice of teaching related to school and classroom management.

Expectation mean scores ranged from M=2.9 (moderate) to M=4.0 (high). In contrast, perception of achievement mean scores ranged from M=2.3 (low) to M=3.8 (moderate). In general, mean perception of achievement scores were lower than expectation mean scores (Table 6).

Teaching Assessment Dimension

Findings relative to the practice of teaching involving the assessment of teaching effectiveness are reported in Table 7. The four variables 1) assess instructional resources, 2) assess ability to sequence instruction, 3) assess ability to diagnose instructional needs, and 4) assess ability to use tests results were associated with the teaching assessment.

As indicated in Table 7, the F-ratios of the expectation and perception of achievement mean scores were statistically significant on the four variables among the sub-groups. Therefore, the null hypothesis of no significant difference among student teachers, cooperating teachers, and college-based supervisors' pedagogical perceptions of the practice of teaching was rejected.

Table 7

Mean and F-ratio Scores for the Teaching Assessment Expectations and Perceptions of Achievement

	Subgroups						
	EC n= 108	EL n= 478	SP n= 71	SC n= 405	FBS n= 415	CBS n= 50	
Variables	M	M	M	M	M	M	F
Expectations							
1. Assess instructional resources	4.3	4.1	3.9	3.8	3.9	3.8	12.6*
2. Assess ability to sequence instruction	4.3	4.1	3.9	3.8	3.9	3.8	12.0*
3. Assess ability to diagnose instructional needs	4.1	4.1	3.9	3.8	3.8	3.7	12.1*
4. Assess ability to use test results	4.1	4.0	3.9	3.8	3.7	3.6	13.8*
Achievement							
1. Assess instructional resources	4.0	4.2	3.9	3.8	3.7	3.7	13.4*
2. Assess ability to sequence instruction	4.0	4.2	3.9	3.9	3.7	3.4	13.2*
3 Assess ability to diagnose instructional needs	3.9	4.0	3.9	3.7	3.7	3.2	10.6*
4 Assess ability to use test results	3.7	3.9	3.7	3.7	3.5	3.1	9.6*

* = $p < .05$. EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

The expectation mean scores ranged from M=3.6 (moderate) to M=4.3 (high). In contrast, perceptions of

achievement mean scores ranged from M=3.1 (moderate) to M=4.2 (high). There were minimal differences among expectation and achievement mean scores in favor of expectation mean scores.

Teaching Media Dimension

The variables associated with teaching media were 1)

Table 8

Mean and F-ratio Scores for the Teaching Media Expectations and Perceptions of Achievement

	Subgroups						
	EC n= 108	EL n= 478	SP n= 71	SC n= 405	FBS n= 415	CBS n= 50	
Variables	M	M	M	M	M	M	F
Expectations							
1. Use diagrams	3.8	3.7	3.4	3.3	3.2	3.1	17.5*
2. Use charts	3.8	3.8	3.4	3.2	3.3	3.1	22.4*
3. Make use of pictures	3.8	3.7	3.5	2.9	3.1	3.0	36.8*
4. Use audio recorder	3.8	3.7	3.5	2.9	3.1	3.0	46.6*
Achievement							
1. Used diagrams	3.5	3.6	3.2	3.1	3.2	2.5	11.5*
2. Used charts	3.8	3.7	3.2	3.0	3.3	2.7	15.7*
3. Made use of pictures	3.9	4.0	3.7	3.2	3.4	2.7	26.8*
4. Used audio recorder	3.4	3.5	3.3	2.8	2.9	2.5	14.9*

* = $p < .05$. EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

use diagrams, 2) use charts, 3) make use of pictures, and 4) use audio recorder (Table 8). The F-ratios for the mean scores on each of these four variables were statistically significant. Thus, the null hypothesis was rejected.

Mean expectation scores ranged from M=2.9 (low) to M=3.8 (moderate). In contrast, achievement mean scores ranged from M=2.5 (low) to 4.0 (high). There existed minimal differences among expectation and perception of achievement scores in favor of expectations.

Attitudinal Dimension

Scores on the attitudinal dimension variable represent the degree to which the sub-groups agreed with the statements. The F-ratios (See Table 9) of the mean scores were statistically significant at ($p < .05$). The null hypothesis was rejected.

This finding suggest that student teachers, field-based supervisors, and college-based supervisors held similar but unique expectations and perceptions of achievement for student teachers.

The expectation mean scores ranged from M=3.1 (moderate) to M=4.2 (high). In contrast, the perception of achievement mean score ranged from M=2.9 (low) to M=4.3 (high). Differences between mean scores for attitudinal expectation and perceptions achievement were minimal.

Table 9 .

Mean and F-ratio Scores for the Attitudinal Expectations and Perceptions of Achievement

	Subgroups						
	EC n= 108	ELM n= 478	SP n= 71	SC n= 405	FBS n= 415	CSB n= 50	
Variables	M	M	M	M	M	M	F
Expectation							
1. Teaching is complex	3.1	3.1	3.0	3.1	3.6	3.7	14.5*
2. Teaching involves dissatisfaction	4.2	4.2	3.9	3.9	4.1	4.1	24.1*
3. Teacher and student beliefs are important in teaching	4.2	4.2	3.9	3.9	4.1	4.1	7.0*
4. Teaching demands assessment of teaching performance	4.2	4.2	3.9	4.0	4.3	4.2	11.7*
Achievement							
1. Teaching was complex	3.9	4.2	4.2	4.0	4.3	3.7	8.1*
2. Teaching involved dissatisfaction	2.7	2.9	3.4	3.2	3.9	3.3	36.2*
3. Both teachers and student beliefs were important	4.0	4.4	4.6	4.0	4.2	3.3	13.6*
4. Teaching demanded assessment of teaching performance	4.0	4.4	4.3	4.1	4.2	3.4	11.6*

* = $p < .05$.
EC = Early Childhood, EL = Elementary, SP = Special Education, SC = Secondary, FBS = Field-Based Supervisors, CBS = College-Based Supervisors

Early childhood (M=4.2, agree) and elementary (M=4.2, agree) student teachers held high attitudinal expectations for variable 2-teaching involves dissatisfaction. Both sub-

groups agreed highly that teaching would involve high degrees of dissatisfaction. However, these sub-groups, EC (M=2.7, disagreed) and EL (M=2.9, disagreed) reported lower perceptions at the end of student teaching. These differences were larger than had been anticipated and were not in support of hypothesis two.

In comparison, on the variable teaching is complex, special education (SP) and secondary (SC) pre and post mean scores did not support hypothesis two. On the pretest, both special education (M=3.0, undecided) and secondary education majors (M=3.1, undecided) were not sure whether teaching was complex. However, on the posttest of attitudinal achievement, both sub-groups agreed that teaching was complex (SP, M=4.2-agreed) and (SC, M=4.0-agreed).

Summary of the Findings

Sub-group expectation and perception of achievement mean scores were statistically significant on each of the thirty-six variables. These findings rejected the null hypothesis of no significant difference among student teachers', field-based supervisors', and college-based supervisors' expectations and perceptions of achievement during the student teaching. The findings were, however, in support of the theoretical literature on cognition by integration.

In general, expectations and perceptions of achievement differences were minimal on all thirty-six variables among the six sub-groups. These findings were in support of

hypothesis two. Thus student teachers', field-based supervisors', and college-based supervisors' pre and posttest perceptions of the practice of teaching were minimal.

Curriculum and Instructional Implications

The findings of this study support the theoretical and experimental research that learning through integration is a powerful premise for accommodating diversity among preservice teachers. If teachers are to be prepared for diversity in PK-12 schools, then the teacher education programs must ultimately recognize and build upon the variations in preservice teachers' diversity. Kemp (1992) argued that the teacher education curriculum must evolve through a responsive-collaborative paradigm that includes the perceptions of all those responsible for educating all students. The teacher education curriculum should infuse the school and community system's cultural, social, political, and educational ethos into the knowledge base of teaching if teachers are to be prepared for diversity (Kemp, 1992).

There are several curriculum and instructional implications for enabling majors to accommodate, to some degree, the variations of diversity among student populations. First, it is important to recognize the collaborative nature of pedagogy. Prospective teachers' values, expectations, and acquired knowledge must help to

establish the conditions of learning that they will establish in their own schools and classrooms. In this way, future teachers will realize the critical importance of including the value, expectations, and other variations of diversity among children and youth into the educational process. Second, the curriculum must involve prospective teachers in the problems and dilemmas arising out of the conflicts between schooling and education, reality and idealism, as well as rights and interests of individual students and special-interest groups. Finally, future teachers need many opportunities to examine their moral obligations for ensuring equitable access to the best education for all children and youth (Fenstermacker, 1990).

In the following sections, elements of a teacher education program are discussed relative to preparing preservice teachers to accommodate diversity in schools.

Collaboration in Learning

The teacher education program where this research was conducted uses a collaborative approach. This approach is a process of mutual adaptation of goals, interests, values and experiences relative to the organization and content of learning designed to accommodate educational reform (Posner, 1992; Nagel, 1988; Gorter, 1987).

Collaboration affords active participation by students, teachers, administrators, parents, and members of the community in decisions that affect teaching and learning. This helps to minimize conflict and controversy that can

arise as the result of vast diversity in the belief and value systems of key players in the learning process.

Using this approach, students are active participants in their own learning, and are empowered to think for themselves in dealing with situations in varied experiential classroom settings. It facilitates cooperation and communication, encourages teacher confidence, reduces teacher anxiety and facilitates change in teacher behavior (Goldhammer, Anderson & Krawjewski, 1993). College-based supervisors, field-based supervisors, course professors, prospective teachers, and others must work as partners to design the curriculum, nature of instruction, and educational experiences to accommodate the diversity in PK-12 schools.

Nature of the Curriculum

The body of literature on curriculum development for teacher education suggests that curriculum means different things to different people (Posner, 1992). The curriculum is influenced by tensions arising out of political, social, economic, and philosophic differences. Differences in values, beliefs, and theoretical orientations also influence the nature of the teacher education curriculum. The teacher education curriculum, discussed in this study, was designed to address this diversity in the actual plan of educational experiences for prospective teachers.

Prospective teachers learn the practice of teaching by working with other teachers in collegial settings at teacher

centers, rather than by being taught by outside consultants. They are afforded many opportunities to critically examine their expectations for teaching. Much of this form of learning is inferential and is acquired through participation in real-word teaching situations.

Learning to accommodate diversity among student populations is a developmental and collaborative process. The design of the curriculum is focused at the local level on helping preservice teachers to grow professionally by reading, observing other teachers, and discussing ideas. Theirs is a distinct recognition and acceptance of the prospective values, attitudes, and knowledge about teaching. Based on these efforts, students attempt to interpret a comprehensive and integrated approach to teaching in a manner that capitalizes on their own strengths and preferred styles of teaching. Externally produced materials about the context and process of teaching play a role in curriculum, but are subordinated to the primary focus on teacher development.

The teacher educators believe that curriculum must continually change based upon new knowledge of teachers and teaching, learners and learning, and the subject matter. In addition, the teacher education curriculum is altered in relation to conditions of schooling in the broader social and political forces. Specific goals and objectives are necessary only to guide the teacher preparation process.

Students complete a core curriculum which covers a broad body of knowledge, essential to all students followed by pre-professional courses prior to admission to a teacher education program. Admission is based upon predetermined criteria including successfully passing a standardized test, the National Teacher Examination (NTE). This test is used to evaluate the students' command of basic educational skills and general educational and professional education knowledge. The application process typically would be initiated during the sophomore year and would qualify students for the beginning of a full sequence of professional education courses in their junior year.

The curriculum provides both general education foundations and specialized courses for teacher education majors using the tenets of the Responsive Educator Model. This model embraces the philosophy of the teacher education unit and requires that preservice teachers become responsive to the diversity in schools and communities. The teacher education curriculum encourages prospective teachers to become responsive to social change; to diverse student populations; to the need for sharing responsibility for education; to the demands of diversity for creativity and critical thinking; to the relationship between communication and learning; and to the need for accountability.

At the point of admission to teacher education, the curriculum becomes more reflective of the diverse factors that effect education in our society, and moves to basic

professional courses that help students to understand more deeply the nature of the education process. Also, students begin to integrate educational practices and principles with emphasis on understanding differences among people from various backgrounds.

The content enables students to bridge the school, home, and the larger community which shape the diversity among student populations. Prospective teachers are encouraged to develop responsive knowledge base specific to parent involvement, changing lifestyles of children and youth, parent community interactions, effective home-school-community relationships; and communicating with diverse families. Students also acquire technical knowledge and skills for developing leadership training in parent education; school-based and home-based programs; and working with parents of the children with disabilities. Finally, preservice teachers gain perspectives relative to the rights of students as well as their moral and ethical responsibilities as professional educators.

The Nature of Instruction

A process approach to instruction is implemented as a form that encourages prospective teachers to critically examine their expectations and perceptions of achievement relative to the practice of teaching. It is delivered in a variety of modes with consideration to learning styles, individual differences in terms of ability and rate of learning and learning situation. A concerted effort is made

to personalize learning as much as possible based on students' interests.

Instruction is not only classroom based but to a great extent field-based instruction is provided at each level of the degree program, freshman through senior year experiences. Additionally, laboratory instruction is provided for practice of skills, reinforcement, remediation and/or enrichment, and micro-teaching episodes followed by individual conferences for feedback are facilitated. Also, a review of course outlines reflect extensive use of each of the following instructional methods: lectures, discussions, small group sessions, large group sessions, panels, team teaching, role playing, recitation, guided independent study, laboratory learning and projects.

Curriculum implementation is conceptualized as a process of multiple interpretations by those involved in the preparation of prospective teachers. Rather than one proper way to implement the curriculum, a collaborative approach looks for a variety of profiles of practice. In this way, the teacher education program may best accommodate the range of diversity among teachers and student populations.

The Nature of Authentic Assessment

Authentic assessment, in teacher preparation, emphasizes real-world teaching events in actual school settings. Assessment is a process that leads to the improvement of the practice of teaching. As such, it is a collaborative reconstruction of the meaningfulness of the

interaction for the improvement of the professional practice in teaching. There is recognition that learning must involve the active participation of prospective teachers in both the school and the students' social context.

In the preparation of teachers, authentic assessment should emphasize a) the connection between content and process objectives in real-world tasks, b) holistic performance in increasingly challenging diverse school settings, c) connection of content and process to prospective teachers background, d) and linking assessment and instruction.

Richardson (1991) stated that the value an institution attaches to diversity should be acknowledged in the curriculum. He further suggested that as students become more diverse, assessment procedures and measurable standards for progress are required to preserve the quality of education. Accordingly, this teacher education program employs a variety of assessment measures to include questionnaires, essays, reports and projects, classroom observations, interviews and conferences, demonstration lessons by way of microteaching, and periodic traditional tests. These multiple assessment measures help to determine the curriculum's success, as well as the behavioral outcomes of instruction.

Although formal testing methods are employed, emphasis is placed on authentic assessment measures. For example, in an upper level professional course, students are evaluated

on classroom observations during field-based clinics as represented in reflection logs they use to write/summarize insights relative to classroom management, strategies, socialization processes, instructional techniques, materials and other information they gather which demonstrates reflective thinking about teaching and learning. Questionnaires are completed to assess students' level of reflective thinking, values, and perceptions about different aspects of the teaching process. Micro-teaching episodes are evaluated to determine whether or not a student can actually demonstrate a particular teaching behavior or characteristic in a simulated setting.

Research reports and projects are assigned to allow students to examine the knowledge base and to synthesize information as it was applied to what was observed in actual classrooms. Finally, student and teacher interviews and conferences are used, facilitated by open-ended questions, that allow the teacher educators to determine students' reactions to learning styles, media integration, classroom environment, communication and other critical aspects of classroom integration. The interviews and conferences involve the students, college-based supervisors, field-based supervisors and/or the school principal.

Authentic assessments, varied in nature, permeate the curriculum beginning with the students first year experience, in Education 100, a lower level introductory education course. These assessments not only help to

determine the attainment of curriculum goals and objectives, but also serve to clarify how they were accomplished. They are not limited to the basic assessment of knowledge acquisition, but also evaluate students' attitudes, beliefs, values, perceptions, and skill development.

Consistent with the collaborative learning model perspective, authentic assessment helps to evaluate the diverse experiences of a diverse population of prospective teachers preparing to accommodate the demand for diversity in the PK-12 schools.

Critical Perspectives

Coordinating a successful student teaching program involves, among other things, a knowledge of the needs of several publics who interact in the dynamics of a constantly changing social, political, economic, cultural, and educational context. Often dilemmas arise out of the conflicts that center on issues pertaining to rights, interests, ethics, morality, responsibility, and accountability in the education of diverse student populations. The student teaching internship provides an important opportunity for prospective teachers to understand the dimension of tacit knowledge related to these perspectives. Acquisition of pedagogical and subject matter knowledge is important, but inadequate for accommodating the comprehensiveness of diversity in schools.

The student teaching internship allows preservice teachers to begin to explore their professional expectations

for teaching diverse student populations. The findings of this study support the fact that student teachers' perceptions of the professional practice are valid and must be considered as on source of diversity in teacher preparation. Perhaps an important dimension of the field placement officer is to insure collaborative discourse among student teachers, field-based and college-based supervisors. While the university courses in pedagogy are most valuable and necessary, as far as equipping students with effective knowledge based theory and best practice, they cannot serve as an authentic simulation for real-world teaching experiences.

The student teaching experience requires of student teachers hundreds of spontaneous unplanned interactions for effectively accommodating the diversity among student populations. It is highly unlikely that any number of course preparations can prepare students for the hundreds and thousands of responses called for in student teaching. Consequently, it is vital that a developmental sequence of initial, intermediate, and advanced field experiences be incorporated into the curriculum for the education of teachers. This form of pedagogical experiences enables prospective teachers to interact with several publics in the ever changing educational and societal setting.

Summary and Conclusions

This study was one attempt to understand the theoretical basis for designing teacher education programs

that would enable future teachers to effectively accommodate the diversity among PK-12 student populations. The findings advanced by expectancy and performance theorists and researchers purported that individual achievement was associated with level of expectancy. On this basis, this study examined the diversity among student teachers', field-based and college-based supervisors' expectations for the student teaching internship. It was assumed that variations in these individuals expectations for the practice of teaching constituted an important dimension of diversity that needed to be accommodated. If teachers were required to respond effectively to the demands of diversity, then it seemed reasonable that teacher education programs needed to first recognize diversity among its majors.

The assumptions advanced by the multisource theorists challenged the traditional practice in teacher education of learning by isolation. The claim was made that, in complex social settings such as schools, individuals have the capacity for integrating the practice of teaching through participatory learning. As a consequence, it was anticipated that student teachers' expectations and perceptions of achievement of the practice of teaching would be significantly different from those of field-based supervisors, and those of college-based supervisors. The findings of this study supported this conjecture.

A second issued examined in this study was the nature of the teacher education program for enabling prospective

teachers to accommodate diversity in PK - 12 schools. This discussion was focused on collaboration in learning, the nature of the curriculum, the nature of instruction, the nature of authentic assessment, and on critical perspectives.

Several themes emerged from this analysis of an existing teacher education program. First, the teacher education program must enable prospective teachers to learn the practice by working with other teachers in collegial settings. Second, learning to accommodate diversity among future teachers is a developmental and a collaborative process. Third, a process approach to instruction enables preservice teachers to critically examine their expectations and perceptions of achievement
as they learn the practice of teaching. Fourth, the use of authentic assessment procedures allows students and teacher educators to collaboratively improve the practice of teaching with a unique emphasis on the changing dynamics of diversity. Finally, several publics who interact in the social, political, economic, cultural, and educational contexts of schools and communities must be recognized as significant factors in the process of preparing teachers for diversity among student populations.

References

Ajzen, I. & Fishbein, M. (1954). The prediction of behavior from attitudinal and normative variables. Journal of Experimental Social Psychology, 6, 466-487.

Atkinson, J. (1957). Motivational determinants of risk-taking behavior. Psychological Review, 64, 359-371.

Atkinson, J., & Reitman, W. (1956). Performance as a function of motive strength and expectancy of goal attain ment. The Journal of Abnormal and Social Psychology, 53, 361-366.

Bartlett, F. C. (1932). Remembering: A study in experimental and social psychology. Cambridge, England: Cambridge University Press.

Berliner, D. C. (1985). Laboratcry settings and the study of teacher educatien. Journal of Teacher Education, 36(6), 2-8).

Brousseau, B. A., Book, C., & Byers, J. L. (1988). Teacher beliefs and the cultures of teaching. Journal of Teacher Education, 39(6), 33-39.

Carter, K. (1990). Teachers' knowledge and learning to teach. In W. R. Houston (Ed.). Handbook of research on teacher education. (pp. 291-310). New York: Macmillan.

Day, H. (1959). Attitude changes of beginning teachers after initial teaching experiences. Education, 10, 326-328.

Dewey, J. (1967). Reconstruction in philosophy, Boston: MA: Beacon Press.

Evertson, C. M. (1990). Bridging knowledge and action through clinical experiences. In D. D. Dill & Associates (Eds.). What teachers need to know: The knowledge, skills, and values essential to good teaching. (pp. 94 - 109). San Francisco, CA: Jossey-Bass Publishers.

Feiman-Nemser, S. & Floden, R. E. (1986). The cultures of teaching. In M.C. Wittrock (Ed.). Handbook of research on teaching. (pp. 505-526). New York: Macmillan.

Fenstermacker, G. D. (1990). Some moral considerations on teaching as a profession. In Goodlad, J. I., Soder, R. & Sirotnik, K. A. (Eds.). The moral dimensions of teaching. (pp. 130-154). San Francisco, CA: Jossey-Bass Publishers.

Fishbein, M. (1966). The relationship between beliefs, attitudes, and behavior. In S. Feldman (Ed.). Cognitive consistency (pp. 199-223). New York: Academic Press.

Fishbein, M. & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley Publishing Company.

Fuller, F. & Brown, O. (1975). Becoming a teacher. In Kevin Ryan (Ed.). Teacher education, the seventy- fourth yearbook of the national study of education: P. II (p. 25 -54). Illinois: The University of Chicago Press.

Giroux, J. R. (1988). Teachers as intellectuals: Toward a critical pedagogy of learning. Grandy, MA: Bergin and Gavey Publishers, Inc.

Goldhammer, R. Anderson, R. & Krawjewski, R. J. (1993). Clinical supervision, 3rd ed. Forth Worth, TX: Harcourt Brace Jovanovich College Publishers.

Goodlad, J. I. (1990b). Teachers for our nations schools. San Francisco, CA: Jossey-Bass Publishers.

Goodlad, J. I. (1990a). The occupation of teaching in schools. In Goodlad, J. I., Soder, R. & Sirotnik, K. A. (Eds.), The moral dimensions of teaching. (pp. 3 - 34). San Francisco, CA: Jossey-Bass Publishers.

Good, T. L. (1990). Building the knowledge base of teaching. In D. D. Dill & Associates (Eds.). What teachers need to know: The knowledge, skills, and values essential to good teaching. (pp. 17 - 75). San Francisco, CA: Jossey-Bass Publishers.

Gorter, R. J. (1987). International collaboration in curriculum development. Educational Leadership 46 (4), 4-7.

Grant, C. A. & Secada, W. G. (1990). Preparing teachers for diversity. In W. R. Houston (Ed.). Handbook of research on teacher education. (pp. 403-421). New York: Macmillan.

Jacobs, E. B. (1968). Attitude change in teacher education: An inquiry into the role of attitude in changing teacher behavior. Journal of Teacher Education, 19, 410-415.

Kemp, L. (1992). Perspectives on restructuring teacher education: A conceptual paradigm for educating 21st century teachers. In D.W. Jones (Ed.). Restructuring the teaching profession: Leadership and collaboration. Muncie, IN: North Central Association.

Lewin, K. (1951). Field theory in social science. New York: Harper and Row.

Liston, D. P. & Zeichner, K. M. (1987). Reflective teacher education and moral deliberation. Journal of Teacher Education, 38(6), 2-8.

Lortie, D. C. (1975). Schoolteacher: A sociological study. Chicago, IL: The University of Chicago Press.

Marso, R. & Pigge, F. L. (1987). Differences between self-perceived job expectations and job realities of beginning teachers. Journal of Teacher Education, 38, 53-56.

Nagel, N. (1988). One university's response to teacher education reform. Educational Leadership, 46 (3), 23-24.

Noddings, N. (1984). Caring: A feminist approach to ethics and moral education. Berkeley, CA: University of California Press.

Peak, H. (1955). Attitudes and motivation. In M. R. Jones (Ed.). Nebraska symposium on motivation (pp. 155-156). Lincoln, Nebraska: University of Nebraska Press.

Posner, G. (1992). Analyzing the curriculum. New York: McGraw-Hill.

Reynolds, M. C. (Ed.). (1989). Knowledge base for the beginning teacher. Oxford: Pergamon Press.

Richardson, R. (1991). Six ways universities can maintain quality and diversity. The Education Digest, 46, 8-11.

Rotter, J. B. (1955). The role of the psychological situation in determining the direction of human behavior. In M. R. Jones (Ed.). Nebraska symposium on motivation (pp. 245-275). Lincoln, Nebraska: University of Nebraska Press.

Ryan, K. (1987). The moral education of teachers. In K. Ryan & G. F. McLean (Eds.). Character and moral development in schools and beyond (pp. 358-380). Westport, CT: Praeger.

Schon, D. A. (1987). Educating the Reflective Practitioner. San Francisco, CA: Jossey-Bass.

Shavalson, R. J. & Stern, P. (1981). Research on teachers' pedagogical thoughts, judgments, decisions, and behavior. Review of Educational Research, 51, 455-498.

Sirotnik, K. A. (1990). Society, schooling, teaching, and preparing to teach. In Goodlad, J. I., Soder, R. & Sirotnik, K. A. (Eds.). The moral dimensions of teaching. (pp. 296-328). San Francisco, CA: Jossey-Bass Publishers.

Smith, L. M. & Geoffrey, W. (1968). The Complexities of an urban classroom: An analysis toward a general theory of teaching. New York: Holt, Rinehart and Winston, Inc.

Tolman, E. & Brunswik, E. (1935). The organism and the causal texture of the environment. Psychological Review, 42, 43-77.

Tom, A. (1984). Teaching as a moral craft. New York: Longman.

Vroom, V. H. (1964). Work and motivation. New York: John Wiley and Sons, Inc.

Wahba, M. A. & House, R. J. (1972). Expectancy theory in industrial and organizational psychology: An integrative model and a review of the literature. Proceedings of the Annual Convention of the American Psychological Association, 7(1), 465-466.

Wildman, T. M. & Niles, J. A. (1987). Reflective teachers: Tensions between abstractions and realities. Journal of Teacher Education, 38(4), 25-31.

Wright, B. D. & Tuska, S. A. (1968). From dreams to life in the psychology of becoming a teacher. School Review, 76, 253-273.

Zeichner, K. M. & Gore, J. M. (1990). Teacher socialization. In W. R. Houston (Ed.). Handbook of research on teacher education. (pp. 329-348). New York: Macmillan.