A review is presented of research on student teaching. This review focuses on student teaching as the experience of a basic triad (student teacher, cooperating teacher, and university supervisor) embedded in several overlapping contexts. In the first section, literature is reviewed that deals with demographic characteristics, teacher concerns, self-concept and self-esteem, empathy, interest in people, scholastic aptitude, cognitive levels of processing, and flexibility and creativity of student teachers, cooperating teachers, and university supervisors. In the second section, general constraints determining who may fill each of the roles in the triad are examined. This section focuses on preparatory experiences, training, and selection of student teachers, university supervisors, and cooperating teachers. Literature on the roles and functions of cooperating teachers and university supervisors is examined along with research studies about the cooperating teacher's role in socializing the student teacher and influencing the development of teacher behaviors. In the closing section, contextual influences impinging upon and coloring the student teaching experience are reviewed. This section includes some consideration of the university or teacher training institution together with the public schools involved in student teaching. Literature about links of home and parents to the schools, as a general source of influence upon student teaching, are also examined. Throughout the review, specific topics in need of research are highlighted, and broad issues, such as key methodological problems and promising areas of inquiry, are discussed. Lists of 22 reference notes and 120 references are included. (JD)
Student Teaching: A Review
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Student Teaching: A Review

Student teaching has existed throughout the development of teacher preparation in this country (Hughes, Note 1) and is presently incorporated in several forms in nearly all teacher education programs. The importance of student teaching is voiced often by teacher educators, inservice teachers, and many others (Griffin, Note 2). Certain aspects of student teaching have long been a topic of study among educators; professional organizations such as the American Association of Colleges for Teacher Education (AACTE) and particularly the Association of Teacher Educators (ATE) have devoted much of their time to the understanding of student teaching. Despite the importance of the topic to educators there have been few attempts to synthesize and critique research on student teaching, so as to identify major findings and pose further questions. The current state of the literature reflects the tendency in research to focus on isolated aspects of student teaching (e.g., attitude change; supervision; etc.) without considering the other aspects. To overcome this limitation, the present review seeks to develop an overall framework to consider the multiple issues that exist in examining student teaching, as well as to scrutinize the research literature within each problem area. This will provide an heuristic model for further examination of student teaching.

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Purposes

This review serves the primary purpose of critically surveying much of the available literature pertaining to student teaching. In doing so, the implications and utility of the literature for future research and practice are emphasized. While the quantity of literature on student teaching is vast, very little of it is empirical in nature, and few instances of large-scale research exist. Therefore, generalizations are made within the context of this somewhat limited research.

A second purpose of the review is to provide an organizational framework for considering student teaching literature. Figure 1 diagrams this organization, beginning in the center with the principal triad (student teacher, cooperating teacher, and university supervisor) outward to the contexts in which they are embedded. The diagram indicates the people who are participants in student teaching, together with the factors in their work environment which may influence their behavior. At the personal level, individual and professional characteristics may influence the student teaching experience. For example, questions such as these might be asked: what professional experiences of cooperating teachers contribute to a successful student teaching experience? Do highly empathic supervisors facilitate the learning process for the student teacher?

At the next level, the mutual influences of each individual upon the others may be examined. Questions about the interactive processes between student teacher, cooperating teacher, and university supervisor may be considered, as well as those concerning substantive changes in attitudes and/or skills that may occur as a result of the interactions. For example: what methods does the cooperating teacher use to
Figure 1. The Student Teaching Experience

Community

School District

School Building: plant, size, SES, grades, etc.

Pupils in Classroom
number -- SES -- ethnicity
abilities, etc.

Student Teacher
.teaching activities
characteristics
training/exp.

Cooperating
Teacher
activities
characteristics
training/exp.

University
Supervisor
characteristics
training/exp.
activities etc.

Teacher Preparation Program/Sequence

College of Education

University,
Teacher Training Institution

Political and Societal Context

*There may be some cases where the cooperating teacher assumes this position, as well
facilitate the student teacher's acquisition of teaching skills? What type of feedback does the university supervisor provide to the student teacher and/or cooperating teacher? How are the attitudes of a more conservative cooperating teacher affected by a student teacher's use of innovative approaches to teaching?

Finally, all of these individuals conduct their work within several environments, including the school, the university, the school district, the community, and so on. Thus, individual behavior can be affected by the nature of these work places. Research at this level of analysis may include questions such as the following: what effect does socioeconomic status or ethnicity of pupils have on cooperating teacher-student teacher interactions? What impact does the university training program have upon the university supervisor's ability to assist the cooperating teachers? In order to fully comprehend the student teaching experience, each of these levels of analysis must be considered.

The review of literature is organized around this framework. The subtopics include (1) the characteristics of each of the individuals in the clinical experience; (2) the selection processes applied to each; (3) the social/psychological interactions and mutual influences among the student teaching participants; (4) the planned and unplanned activities, as they relate to on-going functioning and goal-attainment of the student teaching experience; and, (5) the contextual influences which shape, frame, and to varying degrees determine the nature of the student teaching experience.

The Role of Individual Characteristics in Student Teaching

Two basic questions emerge when one first considers student teaching: who are the participants? What are their characteristics? These may be answered from either of two distinct perspectives,
demographics or individual differences. Information pertaining to student teaching from each of these perspectives will be reviewed.

**Demographics**

Yarger, Howey, and Joyce (1977) have provided demographic profiles of the typical student and teacher educator based upon a sample of 2,200 students and 420 faculty members from 175 teacher training institutions. The "typical" preservice teacher is a single, Anglo woman in her early 20's. In contrast, the "typical" university education faculty member is a 43-year-old Anglo male with experience working in the public schools. Approximately half of the teacher educators are full professors and roughly the same number have supervisory duties.

Little demographic information characterizing either cooperating teachers or university supervisors, as distinct groups, is available. Other demographic variables such as age, sex, or ethnicity have not been well-researched in relation to preservice training outcomes in teacher education. Generally more women than men (especially at elementary levels) enter the teaching profession and are thus involved in greater numbers in preservice experiences. However, no conclusions have been reached regarding differential efficacy between men and women in education or in preservice activities.

One background characteristic that has been the focus of attention regarding student teachers is past experience with children. Some investigations have claimed that previous experience with children is of major importance in successful student teaching (Ryan, 1960; Ducharme, 1970). Schalock (1979), writing on teacher selection, noted that three Oregon College of Education studies failed to find any relationship between previous experience with children and student teaching competencies. Examining this issue from a different perspective, Wood
found that previous experience with children was the highest ranked reason for entering teaching. It would appear that previous experience with children deserves further study in relation to preservice training and teacher education.

Individual Differences

Individual differences in student teaching occur at levels other than simple demographics. Among the psychological characteristics or traits which have been investigated in relation to student teaching and its outcomes are the following: teacher concerns; self-concept and self-esteem; empathy; interest in people; scholastic aptitude; cognitive levels of processing; and, flexibility and creativity. Research on the role of each of these traits in the student teaching experience will be examined.

Teacher concerns. Fuller (1969) studied the concerns of preservice and inservice teachers. Three areas of concerns were identified: self, teaching tasks, and impact of teaching on student learning. A developmental transition through these three concern areas was theorized as a function of greater teaching experience. According to the theory, teachers are able to be concerned primarily with the impact of their teaching on students only after resolving concerns about their own socialization into the teaching field and ameliorating concerns about how to teach. The Teacher Concerns Questionnaire (TCQ) has been used to measure concerns in these three areas. To date, however, research has not supported the validity of hierarchical movement through levels of concerns as a function of teaching experience (George, Note 3). Nevertheless, the TCQ does identify concerns among cooperating teachers, university supervisors, and student teachers which may be sources of conflict.
Self-Concept and Self-Esteem. While some investigators have used self-concept and self-esteem interchangeably, Coopersmith and Feldman (1974) defined self-esteem as evaluative in overall degree (high or low), and self-concept as referring to various attributes of self. Positive teacher self-concepts have been related to overall teacher mental health (Milgram and Milgram, 1976) and to their students' achievement (Rayder, Abrams, & Larson, 1978). Soares and Soares (1968) found that student teachers' self-concepts were related more to their university supervisors' ratings rather than to their cooperating teachers' ratings of them. They also found elementary level student teachers to have more positive self-concepts than secondary level student teachers. Walberg (1968) found that males majoring in elementary education had poorer self-concepts than males majoring in secondary education or women in education. Garvey (1970) found positive self-concept as measured by the Tennessee Self-Concept Scale to be related to higher student teaching ratings. She concluded that student teaching success is affected but not necessarily determined by a positive view of oneself.

Doherty (1980) echoed these findings by discovering a link between low self-esteem among student teachers and lower competency ratings as student teachers. In 1965, Wright and Tuska found that significant changes in self-image occurred in student teachers after preservice and first-year teaching experiences. With greater experience in the classroom, preservice and new teachers saw themselves as increasingly more demanding, meaner, and less inspiring to students. Smith and Smith (1979) considered the effect of teaching in lower socioeconomic level schools on the self-concepts of student teachers. Those student teachers placed in poverty areas were likely to have unfulfilled
expectations about the achievement levels of their pupils that contributed to a lack of perceived success for the student teachers. Similar findings have been reported by Wagenschein (1950) and Smith and Adams (1973).

Walberg (1968) concluded that observed declines in self-concept self-ratings from student teachers during preservice was a result of the conflict between personal needs (to establish rapport with individual children) and role demands (to establish authority and discipline in the classroom). The research appears to support the view that higher levels of self-esteem and positive self-concepts are related to many experiences in teaching. Thus, they are likely to be of significance in the preservice period of teacher education.

**Empathy.** Research in a variety of people-oriented professions has found that empathy is related to growth, development, or health. Carkhuff (1971) reports that counselors who exhibit high empathic listening skills have more successful therapy outcomes. Similarly, LaMonica (Note 4) in a study of empathy in nurses reports that more empathic nurses are viewed as more caring and helpful by patients. In education a craft or conventional wisdom has held that teachers who are more caring and concerned about their students will be more effective. This idea has rarely been examined by educational researchers.

Another important place where empathy may be an especially important concept is in supervision. Goldhammer's (1977) and Cogan's (1973) descriptions of clinical supervision clearly acknowledge the need for supervisors to consider the thoughts and feelings of the supervisee (e.g., the student teacher). As yet there has been little research examining the role of empathy in supervision in general or as a component of effective student teaching in particular.
Interest in People. Interest in people is considered characteristic of members of the teaching profession. It is often assumed that teachers should be warm and empathetic in interacting with children. A study by Yarger, Howey, and Joyce (1977) found student teachers and teacher educators expressing interest in working with students. Other researchers have found that persons entering the teaching profession cite their desire to work with people as most important in their occupational decision. Maurich (1960) found this true of students, and Isham, Carter, and Stribling (Note 5) have confirmed this finding among teacher educators.

Scholastic Aptitude. Verbal ability in teachers has been found important to the instructional skill of communicating (Taylor, Ghiselin, & Yagi, 1967). Intellectual ability would seem essential in teaching, although intelligence and academic grade point average have been found to correlate only modestly with teacher performance ratings (Ducharme, 1970; Ferguson, Note 6). It has been argued by Vernon (1965) that high correlations between intellectual ability and teaching performance are unlikely, as teachers are relatively homogeneous as to intellectual ability (scoring between 110 and 120 on most traditional intelligence tests). With this restricted range of ability, higher correlations with other variables are not likely to be found.

Cognitive Levels of Processing. The interest in cognitive developmental stages, sparked by the work of Piaget (1970) and Kohlberg (1969), has been noted in teacher education. Murphy and Brown (1970) found that the encouragement of student self-expression by teachers was related to the teachers' higher conceptual level. Lower conceptual levels on the part of teachers were related to more rote questioning of their students. Hunt and Joyce (1967) and Glassberg and Sprinthall
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(1980) have examined levels of information processing among preservice teachers as they affect student teaching processes. Hunt and Joyce (1967) found that higher conceptual levels in preservice teachers were associated with a teaching style in which children are assisted in evaluating information, raising hypotheses, and making inferences. Glassberg and Sprinthall (1980) found that experiences in role-taking and various reflections exercises could result in increased ego and ethical development.

Despite these results, other research has found that such higher order teaching skills as probing, redirection, and higher cognitive questioning had little effect on increasing the conceptual skills of students. These somewhat conflicting results leave open the precise relationship between conceptual levels and teaching behavior, especially as it affects pupils; nevertheless, it remains an important factor to explore in student teachers and their cooperating teachers. Some developmental research (Kohlberg, 1969) has speculated that persons must be challenged by others at more complex levels of development to produce growth, suggesting that differences in the cooperating teachers' and student teachers' levels of development may result in some change. A more careful examination of conceptual development in student teachers is clearly necessary.

Flexibility/Creativity. The constructs of flexibility and creativity have been rather consistently identified as important in teacher education (Ekstrom, 1976). Hunt and Joyce (1967) found that student teachers displaying a wider range of teaching styles were considered more effective as teachers than student teachers engaging in fewer teaching styles. Earlier, Bond (1959) found that 90 percent of student teachers rated as creative before beginning preservice teaching
were judged outstanding by their teaching supervisors. Crocker (1974) found significant relationships between creativity test scores and student teaching performance; flexibility, as measured by the creativity tests, was found to be the strongest single predictor of performance.

Ishler. (Note 7) examined differences in verbal behavior among student teachers classified as either high or low in creativity on the Torrance Tests of Creative Aptitude (1962). Those student teachers with higher creative aptitude scores used more open-ended and varied activities in the classroom, as recorded on the Flanders Interaction Analysis (1970). Generally, the literature suggests that flexibility and creativity are important criteria in teaching competency.

Yet, it remains unclear what particular student outcomes might be most affected by measures of flexibility and creativity. Flexibility as a construct is not unidimensional, for academic problem-solving flexibility is not necessarily manifested in the same way as interpersonal, social flexibility. Nor is creativity a unidimensional construct; different measures of creative aptitude do not correlate positively with one another (Durio, 1979).

However, flexibility and creativity variables are continually found to be related to teaching effectiveness in studies. It would seem that investigation of the contribution of flexibility, especially to the interpersonal dynamics occurring in the student teacher/cooperating teacher/university supervisor triad, is warranted. Social flexibility is related to constructs such as empathy and communication skills and is important to the human interactions of those engaged in teaching and teacher education.

Summary. Promising avenues for investigating the effects of individual differences on student teaching have been noted in this
portion of the review, including demographic characteristics, teacher concerns, self-concept and self-esteem, empathy, interest in people, scholastic aptitude, cognitive levels of processing, flexibility, and creativity. While research is still very inconclusive in many areas of individual differences, results in some of them are sufficiently consistent to suggest that certain components should be included in a comprehensive description and analysis of student teaching. Without further information on the characteristics and traits of each member of the student teaching triad, there will continue to be little useful understanding about how they impact teacher preparation.

The Student Teaching Experience

In addition to the personal characteristics that the student teacher, cooperating teacher, and university supervisor bring to student teaching, many aspects of the experience itself need to be examined more closely. The interaction of these three key individuals is the core of the entire experience and the area that has received the most attention. Here one must consider the selection and training of each member of the triad, as well as changes in attitudes and philosophies, role conflicts, socialization, acquisition of teaching behavior, and supervision. The reciprocal influences of the student teacher, cooperating teacher, and university supervisor upon one another need to be better understood. The following section reviews recent research into the student teaching experience.

Career Selection and Placement of Student Teachers

A prevailing theme in the literature regarding the selection of student teachers was stated succinctly by Muente (1974): "Let's be more selective with student teachers" (p. 236). Writing from the perspective of cooperating teacher and field supervisor, she urges that
"poor risks" and students who are "unsuited for teaching" be "weed out" prior to student teaching. Given such a critical perspective of the status quo, it is important to know what factors determine the population from which student teachers will be selected.

By contrasting responses of prospective teachers in 1960 with those in 1975, Fox (1976) investigated the question of why students major in education. He noted that students in 1975 were significantly more likely to indicate humanistic reasons (e.g., desire to work with young children, dissatisfaction with poor teachers, etc.) than the 1960 subjects. They were significantly less influenced by factors such as higher salaries, job security, or social prestige.

These findings may reflect systematic differences in the two populations; however, the changes may be due to the context in which the decision to teach is made rather than the individuals making the decision. Teaching in the 1970's and 1980's may no longer be characterized as a relatively high-paying, secure, or prestigious profession. One need only glance at recent issues of Newsweek ("Why Public Schools are Flunking," April 20, 1981; April 27, 1981; May 4, 1981) to make this determination. Therefore, it is unlikely that contemporary preservice teachers would cite these reasons for their career choice, whereas they might have been quite plausible ones twenty years ago.

There is some indication that the decision to enter teaching is not made or acted upon hastily. Van Patten (1977) and Seiforth and Samuel (1979) stress that the first education course in the professional sequence may be critical in the selection process. Zeichner (Note 8) has proposed that many preprofessional experiences may contribute to selection into (or out of) the profession.
Clearly, no profession relies exclusively on self-selection for determining its membership, particularly when there are clear and pressing supply-demand forces operating in the societal context. Ellsworth, Krepelka, and Kear (1979) and Haberman (1974) address the selection process from this perspective.

Ellsworth, et al. (1979) emphasize that the core issue should be the fairness and appropriateness of candidate screening procedures, vis-a-vis the role of the teacher. They concede that substantial variation in screening criteria exists across teacher education institutions but the differences may be a reasonable reflection of the differing goals in those institutions. This should not excuse, however, a lack of systematic investigation of institutional processes, especially those relating entry skills of teaching to the institutional goals. Among screening procedures, Ellsworth et al. found that grade-point averages (GPA's) and personal interviews are used most frequently. Other criteria used somewhat less often included evidence of good health, language proficiency, and profiles derived from personality inventories. Also, the authors point out that there is a trend towards increasing demand for, and reliance upon, various competency tests. The tests being developed and/or used pertain to subject matter competency and general reading, language, and mathematics proficiency.

Haberman (1974) would support the use of such testing, to the extent that the tests could predict teaching success rather than success as a student. Lack of predictive validity is the essential criticism of GPA's and interviews for selection purposes. In line with the perceived need for criteria with predictive validity, Haberman formulated eleven guidelines which he felt were integral to the appropriate operation of a selection process.
Given the apparent need for more careful selection of student teachers and the demand for systematic and appropriate selection criteria, it is surprising to find so little current research relating the use of selection criteria to different student teacher outcomes. Leslie (1970) and Wilk (1964) studied possible relationships between placement selection variables, student teacher performance, and student teacher attitudes. While Wilk's student teachers performed better when their grade level preferences and area of experience were considered in the placement process, Leslie's student teachers did not perform better (the matching efforts here were far more extensive). However, Leslie concluded that certain within-group comparisons supported the general theoretical advantages of matching for placement practices.

Selection of Cooperating Teachers and University Supervisors

Just as it is easy to document the need for careful selection of student teachers, it is easy to understand that cooperating teachers should be chosen carefully for their role. Yet, as Brodbelt (1980) notes, the selection of supervising teachers is ironically among the more neglected aspects of student teaching programs. Participants at a 1981 working conference on student teaching agreed with Brodbelt's opinion that it is too easy to become a cooperating teacher (Griffin, Note 2).

The criteria which seem to be used most often (Brodbelt, 1980) for selection include the act of volunteering to supervise a student teacher, satisfactory ratings from one's building principal, and a certain number of years of teaching experience. He also makes the point that neither partner in the university-public school collaboration wishes to antagonize the other by requiring high teaching performance standards -- the implicit assumption is that a professional operating in
the field should be capable of providing the novice with an adequate induction experience.

As far as the selection of university supervisors is concerned, it is difficult to locate published literature explaining or guiding this process. This may very well be a function of the vast differences across institutions in the assignment of the supervisory role/functions to individuals. Clearly some basic descriptive information is needed. In spite of the lack of available information describing the selection process of cooperating teachers and supervisors, it is of interest to consider the training or experiences that are provided to those who are chosen. The next section will focus on this issue.

Cooperating Teacher Training and Experiences

Most of the literature regarding the training of cooperating teachers is craft-oriented. While many authors (Blair, 1960; Painter & Weiner, 1979; Quick, 1967) agree that special training and skills are needed, there is less agreement as to the precise content of that training. Blair (1960) emphasizes a need for self-reflection. Quick (1967) specifies different categories of assets for cooperating teachers, including professional attitudes, professional abilities, human relations skills, and personal habits. Even more useful is Quick's listing of nine supervisory activities with which cooperating teachers need to be familiar. Among these are evaluating student teachers through observation, providing specific feedback and constructive criticism, pointing out strengths and weaknesses, and relinquishing classroom control to the student teacher. Because these skills are stated clearly, it becomes relatively simple to operationalize them as criteria for selecting cooperating teachers and as training objectives for individuals serving as cooperating teachers.
The idea that cooperating teachers can or should be given some inservice education for their expanded instructional/supervisory role is widespread in the literature.

Painter and Wiener (1979) describe an inservice, competency-based program for cooperating teachers (competencies were those set forth by AACTE and the teaching competencies established by the state of North Carolina). At least three sessions between cooperating teachers and university supervisors were included in the inservice model, together with campus visits by the cooperating teachers. Informal evaluations of the inservice program were quite favorable. The student teachers tended to feel that communication with cooperating teachers was improved and the university supervisors gained increased respect for the cooperating teachers' role.

These results may be interpreted as an indirect consequence of the intervention, as well as a direct effect. Garner (1971) found that student teachers reported experiencing improved relations with their cooperating teachers, as the student teachers were allowed to assume greater responsibility for teaching. Under Painter and Weiner's system, student teachers had to assume increased teaching responsibility in order to free cooperating teachers to attend university sessions. The improved communication may have been as much a function of this shift in responsibilities as of the nature of inservice training provided. Similarly, Chun (1979) and Shiraki (1979) emphasize the need for active participation on the part of the student teacher. By allowing student teachers to be actively involved in learning teaching behaviors, communication and human relations may improve.

However, other available research has been equivocal. Amidon (1967, cited in Tittle, 1974) experimentally manipulated the training
given groups of student teachers and cooperating teachers. Experimental groups received training in interaction analysis while control groups were taught learning theory. Although the student teachers demonstrated improved interaction skills (e.g., were more indirect, accepting, and supportive) with the classroom pupils, no systematic effects were observed with the cooperating teachers. Because there were no reported changes in attitudes of either set of teachers, one might infer that student teachers' improved communication skills with pupils were not transferred to interactions with colleagues. As yet, there has been little conclusive information about the effects of training on cooperating teachers or its impact on student teachers.

University Supervisor Training and Experiences

There are few articles available for formulating a picture of how to prepare supervisors. In a craft-oriented article, Hanke (1967) notes "individuals invariably have no specific preparation for this job" (p. 37), although it seems desirable for the person to have a broad range of experience. It is also believed important for the supervisor to have a thorough knowledge of the college's teacher education sequence. In this manner s/he will be prepared to fulfill the public relations demands of the supervisor's role, to provide for in-service needs of cooperating teachers, and to provide feedback and evaluations regarding the student teacher's performance. Some background in interpersonal relations also seems desirable to enable the supervisor to assist student teachers with anxiety-reduction and reality-checking of goals, perspective, and enthusiasm (Hanke, 1967). S/he should be prepared to make appropriate placements by being sensitive to the needs of both the student teacher and the cooperating teacher.
Jones (1980), Copeland and Atkinson (1978), and Junell (1969) have all focused on the elements of human relations and/or communication training and skills of supervisors. Junell argues compellingly that the standard practice of requiring supervisors to grade student teachers has a negative effect on communication. Jones lists a series of potential communication problems between supervisors and cooperating teachers.

Jones’ emphasis is a reflection of how extensively the supervisor will need to make use of specialized training. Hence, through training, the supervisor should become aware of his/her own style, of the reinforcing nature and content of his/her interactions with teachers, and of the nature of his/her nonverbal cues. All of the above authors emphasize the need for supervisor training in self-awareness.

Copeland and Atkinson (1978a) manipulated the style of presentation of a supervisor, together with his use of professional jargon, in relation to student teachers’ perceptions of the supervisor’s perceived credibility and utility. Some support was found for the theoretically-based hypothesis of a relationship between perceived expertness and perceived supervisor utility. Thus, student teachers’ perceptions of the usefulness of a supervisor were seen by the authors as tied to student perceptions of the extensiveness of supervisor background experiences and training. However, research concerning supervisors’ training and background is generally inconclusive regarding their effects on student teachers.

Cooperating Teacher and University Supervisor Roles

There are many variations in the roles and activities of the cooperating teacher and the university supervisor. These variations may be due to the university, school district, or schools in which these people work. There has been very little research conducted regarding
the actual models of practice despite the numerous theoretical models that have been proposed (e.g., Andrews, 1964; Conant, 1963; Slay, Note 8). A few studies exploring the role of the university supervisor note some of the key variables regarding roles and activities in student teaching.

Generally, the value of the university supervisor in the usual triadic model has been open to question. Monson and Bebb (1970) view the role as unnecessary and Zimpher, De Voss, and Nott (1980) regard it as extremely complex. At least two studies have investigated the effects of changing or eliminating the role of the university supervisor (Morris, 1974; Smith, 1969).

In these cases, alteration or elimination of contacts with a university supervisor led only to differences in student teachers' self-reports of satisfaction and ease of communication with cooperating teachers. It seems that the university supervisor has minimal effect upon performance, but a more potent effect upon student teacher communication and satisfaction.

Another possible role for university supervisors is that of working directly with the cooperating teacher. Monson and Bebb (1970) described a pilot program in which the only function of the supervisor was a weekly inservice meeting. The results of this program indicated that student teachers, cooperating teachers and university supervisors were all quite satisfied with this arrangement; however, these results indicated little about what was lost or gained by this model of supervision in comparison to other more traditional models.

A contrasting study by Zimpher, De Voss, and Nott (1980) suggests that the university supervisor's influence is very important. From their descriptive study they concluded that without the university
supervisor, student teachers would have little input in setting requirements, evaluating, or assessing the overall experience. Apparently, these supervisors provided most of the impetus to the student teachers to advance beyond concerns for daily chores to concerns for self-analysis and improvement. In view of the equivocal research findings, a more detailed analysis and description of the roles of the cooperating teacher and university supervisor are clearly needed.

Socialization or Enculturation of the Student Teacher

Much of what takes place during student teaching can be generally described as socialization. Most of the studies of socialization have focused on particular aspects of the process such as attitude change or acquisition of teaching behaviors. Lortie (Note 10), Zeichner (Note 8, Note 11), and others have broadened the study of student teacher enculturation to include consideration of other socializing factors such as early childhood experience and peer influences. Zeichner (Note 8, Note 11) and Griffin (Note 2) have also criticized much of the past work on this topic because of the often implicit assumption that the student teacher was a passive recipient in the process. Zeichner has argued that studies of socialization must take into consideration the reciprocal influences of the cooperating teacher, university supervisor, and student teacher. The following section includes a review of selected studies of student teacher socialization.

Studies of socialization include those that provided various conceptualizations of induction (Iannaccone, 1963) and studies that sought to identify the key individuals and their functions in the socialization of newcomers to the profession (Friebus, 1977; Karmos & Jacko, 1977; Manning, 1977; Ryan, Note 12). Closely related to this work are studies which identify conformity effects (Haberman, 1978) and
critical incidents in successful and unsuccessful student teacher enculturation (De Voss, Note 13).

Iannacone (1963) and Lortie (Note 10) have both analyzed the teacher socialization process. Iannacone (1963) confined his focus to the changes in student teachers' perceptions of teaching over the course of a semester-long placement. The preliminary concerns reflect student teacher "horror" and "indignation" over cooperating teacher behaviors, and they correspond to an entry stage in which student teachers act only as observers. A transition stage occurs when student teachers and cooperating teachers begin to establish collaborative relationships dependent upon mutual concern for individual learning. However, the relationships are still clearly superordinate-subordinate in nature.

In the final phase, the relationship between student teachers and cooperating teachers becomes more collaborative in nature. The student teachers' perspective towards disruptive behavior, towards the operationalization of learning goals, and towards learning problems more closely resemble those set forth by the cooperating teacher (except in the rare case of a student teacher whose socialization may have been unsuccessful; Iannacone, 1963). This is consistent with Haberman's (1978) thesis that student teachers are particularly susceptible to control by group norms, especially those espoused by the classroom teachers.

Several researchers have looked more specifically at the socializing agents (Friebus, 1977; Karmos & Jacko, 1977; Manning, 1977). Manning (1977) reports that the student teachers indicated that professional contacts (cooperating teachers, supervisors, and other college professors) exerted the most significant influence upon their beliefs. Other groups of people, such as parents and friends, had a
less significant influence. Setting and training variables had some effect on the perceived nature of influence exerted by each group. Student teachers who were placed in an inner-city environment, without having been trained specifically about that environment, were more likely to indicate that their pupils' parents and the community were sources of negative influence on their attitudes. Also, their perceptions of student discipline and beliefs about children's learning, generally, were negatively affected by being in the inner city and by not being prepared for that setting.

Other studies have failed to make direct comparisons of setting and training variables to perceived influences of significant others. The work of Karmos and Jacko (1977) focused only on positive influences on the student teaching experience. Both professional and nonprofessional sources of influence were mentioned by the student teachers, although the cooperating teachers were mentioned more often than any of the others. In addition, the cooperating teachers' most critical functions, in descending order, were perceived to be: a) promoting the student teachers' role development; b) providing the student teachers with personal support; and, c) assisting the student teachers to gain professional skills. These results are generally consistent with Friebus' (1977) findings.

Karmos and Jacko (1977) also found that student teachers reported that pupils served two critical functions. First, the pupils' responses to student teachers worked to legitimize the latter's place in the classroom. Second, their task-related behaviors worked to determine the success or failure of student teachers' lessons. In neither the Karmos and Jacko (1977) study nor the Friebus (1977) study were university supervisors given any significant mention, unlike Manning's (1977) work.
De Voss (Note 13) examined student teachers' enculturation from an even broader perspective. Through observations and a series of open-ended interviews, he was able to select case studies demonstrating the impact of different settings (classroom, university, school, home) acting upon the student teachers. By contrasting the "best" and "worst" cases and sifting through the series of critical incidents they contained, De Voss reached several conclusions. First, when student teachers and cooperating teachers were mutually supportive and similar in philosophy, orientation, and attitudes, the student teachers were more likely to have successful experiences. Secondly, the student teachers' ability to focus personal energy on the experience was associated with success. Those student teachers who had large portions of their time, energy, and attention consumed by the demands of unrelated settings (e.g., spouses and children, other jobs, etc.) were less likely to experience success in their placements.

Other investigators have explored critical incidents in student teaching. Southall and King (1979) were able to identify a lack of student teacher-cooperating teacher communication and unrealistic cooperating teacher expectations as the two most important and frequent problems with which supervisors had to contend. Differing expectations were also identified by Campbell and Williamson (1973) as a problem. Other problem areas were tied to a failure in interpersonal relations.

These problems indicate that multiple factors influence the socialization process. De Voss (Note 13) emphasizes the importance of considering the student teachers as active agents in their own socialization, since satisfaction with the experience was directly tied to the students' own abilities to utilize the opportunities for
learning. Further studies of socialization must consider the reciprocal influences of the various participants.

Attitude and Philosophy Changes

Traditionally, the study of student teacher socialization has focused on changes in students' philosophy and attitudes. A review of this work will substantiate the following two generalizations. First, student teachers' attitudes tend to change negatively during the course of student teaching. Second, student teachers' attitudes, values and/or philosophies tend to shift toward increasing conformity with those of their cooperating teachers.

Tittle (1974) reviewed at least five studies of attitude change in student teachers. Two (Butcher, 1965; Jacobs, 1968) documented a decrease in positive educational attitudes during student teaching, even though the instrumentation differed. Four others (Clarke, 1956; Corrigan and Griswold, 1963; Price, 1960; Tabachnick, 1980) yielded sets of data consistent with the general notion that student teachers' attitudes more closely approximated those of their cooperating teachers by the end of the placement. Two other studies (Leslie, 1970; Ringness, 1966) failed to find any significant impact of cooperating teachers upon attitudes and self-ideal image discrepancies of student teachers, respectively.

Boscher and Prescott (1978) considered educational philosophies of cooperating teachers as they impact student teachers during preservice training. They found no apparent cooperating teacher influence. Of the predictor variables considered, only preservice philosophical positions of the student teachers predicted their post-student teaching philosophical views, if the student teacher had come into the preservice experience with perennialism or essentialism biases. Thus, changing
attitudes did occur during preservice, but they were not influenced by the supervising teacher.

However, Yee (1969) pointed out a major shortcoming in most prior studies of attitude change, particularly those using the Minnesota Teacher Attitude Inventory (MTAI). Most of the research failed to take into account the possibility that in a dyad influences on attitudes can be either mutual or bidirectional in causality. Further, the influences may effect increased congruity across the attitudes of each member of the dyad.

When statistical manipulations (e.g., the "frequency-of-change-in-product-moment") were performed to allow for multiple outcomes, Yee (1969) reached three major conclusions. First, cooperating teachers exerted a congruent influence upon student teachers' attitudes. Second, student teachers' attitudes shifted toward increasing conformity with cooperating teachers' attitudes. Third, when the attitude shifts in a dyad led to greater incongruity, there was no difference in the frequency of influence across cooperating and student teachers. These results were consistent with Yee's (1968) study, which indicated that few stable relationships (in terms of attitudes) across dyads existed and that most attitude shifts were negative in nature.

From a different, theoretically-based perspective, Mahan and Lacefield (1978) also examined the possibilities of mutual influence and greater congruity or incongruity in attitude changes as a function of student teaching. Their review of available descriptive research indicated that, generally, student teachers' values on several dimensions were more "emergent," or liberal, than those of cooperating teachers. This information, together with the observed trends towards increasing congruity and similarity to the cooperating teachers'
attitudes, enabled the authors to explain student change on the basis of cognitive dissonance theory. If a student teacher is exposed to a cooperating teacher's set of beliefs that are moderately different from his/her own, the resultant dissonance should be resolved over time by a shift in student attitudes. Moreover, given the limited discrepancy between student beliefs and the situational/organizational constraints surrounding the dyad, the shift should be one of increased similarity to the beliefs of the cooperating teacher. Finally, the extent of the shift should be a function of the duration of exposure to the cooperating teacher. In this study, student teacher perceptions did become more compatible with local reality over time. These findings were confirmed in the 1974 and 1975 studies reported by Mahan and Lacefield (1978).

It is clear from the Mahan and Lacefield studies (1978) that time plays a role in the magnitude of the shifts in student teacher attitudes. Lipka and Goulet (1979) also investigated age- and experience-related changes in teacher attitudes toward the profession. Using a self-report questionnaire based upon the "technique of retrospection," teachers served as their own historical comparison group. Lipka and Goulet failed to obtain significant differences between teachers' perceptions of values across chronological age (even when experience was used as a covariate). Significant differences were observed, however, in the perceived importance of values over time, independent of age. Unfortunately, there is no way to cross-check the sources of the changes.

These studies indicate possible changes that can occur in student teachers' attitudes. They also emphasize the complexity that must be considered in attempting to understand how these changes occur.
Further, careful study of these attitudes may identify the various factors responsible for attitude change.

Interpersonal Communication and Role Conflict

Other factors can be a source of difficulty in the communication and interpersonal relationships of the student teachers, cooperating teachers, and university supervisors. A few studies have examined role conflict and interpersonal communication.

Gettone (1980) looked at differing expectations about the roles and duties of student teachers as perceived by school administrators, master teachers, and student teachers. Student teachers saw themselves as more ready to assume a professional role than did school personnel, who saw student teachers as more similar to assistants, aides, or apprentices. Farley (1973) found that cooperating teachers and student teachers differed in opinions on the importance of instruction time; discipline policies, and educational innovations, as well as the duties of the student teachers.

Kaplan (1967) investigated the perceptions of student teachers, cooperating teachers, and college supervisors about the role of college supervisors and found that there was a lack of agreement about the evaluation and resource consultant functions of college supervisors. Prokop (1973), Simms (1975), Clemons (1973), and Campbell and Williamson (1973) have all declared that such differing expectations are central to role conflict.

Lasley (1980) found differences between student teachers and experienced teachers in terms of beliefs held about teaching. Prospective teachers expressed beliefs that teaching was a fulfilling career, while many experienced teachers were disillusioned with teaching, citing low prestige, low pay, and student misbehavior as
reasons. Preservice teachers tended to believe that their education courses did not prepare them for the reality of student teaching, and experienced teachers seemed to share this view.

The effect of cooperating teachers in the general areas of interpersonal relations and communications have been investigated by several researchers. Close matching of student teachers and cooperating teachers on conceptual levels has been advocated often in the literature. The assumption behind matching appears to be that those pairs working from a similar frame of reference will interact more effectively and smoothly.

The importance of the interpersonal relationship between student and cooperating teachers has been supported by some research findings. Supervisors asked to identify the problems encountered in working with cooperating and student teachers identified lack of communication between cooperating teachers and student teachers as their most frequent problem (Southall and King, 1979). Other problem areas were failure of the student teachers to meet expectations of the cooperating teachers and failure of the student teachers to follow through on suggestions from the cooperating teachers. These problems clearly relate to the interpersonal communication realm. Furthermore, they may be related to the different conceptual levels and different personal reference points for judging effective teaching.

Wide variation between student teachers and cooperating teachers was described by two studies. Thies-Sprinthall (1980) measured stages of both moral judgment and conceptual levels in cooperating and student teachers and investigated their relationship to ratings of student teacher effectiveness. When student teachers with high ratings were paired with cooperating teachers with low ratings, the latter rated the
student teacher as being average or below average in teaching effectiveness. Thies-Sprinthall suggested that this rating might occur because the cooperating teachers misperceived the performance of the student teachers. The "mis-matched" cooperating teachers may lack a common frame of reference to adequately communicate analyses and suggestions to the student teachers.

A study by Terwilliger (1965) looked at change in verbal behavior of the student teachers. No significant influence of the cooperating teachers upon the student teachers was observed. The influence of the cooperating teachers warrants investigation, if only to further support or minimize the need for matching cooperating teachers and student teachers on personal orientation variables.

The results of these studies emphasize the need to explore personal characteristics and the match-mismatch effects of these characteristics on the interactions within the student teaching triad. There are numerous areas of possible conflict and failure of communication. Considering the potential for problems, research needs to be conducted to explore these problems and examine ways in which persons overcome them.

Teaching Behavior

A major issue regarding student teachers is the way in which they acquire their teaching behavior. While there have been a few studies of cooperating teachers' impact on student teachers in terms of teaching, there must be further study examining the wide variety of effective teaching strategies and the way through which student teachers acquire or fail to acquire these behaviors.

Several studies have found that cooperating teachers play an important role in the student teachers' classroom performance (Price,
1961; Seperson & Joyce, 1973; Zevin, 1974). However, McIntyre and Morris (1980) found studies that may qualify those findings. Individual characteristics of both the cooperating teachers and the student teachers may mediate the influence of the cooperating teachers on student teachers' classroom performance (McIntyre, Buell & Casey, 1979).

Evidence that the student teachers were affected by the teacher practices of the cooperating teacher was found by Price (1961), Seperson and Joyce (1973) and Zevin (1974). Zevin used an adaptation of Flander's Interaction Analysis to measure the change in inquiry or lecture styles of teaching by student teachers in relation to the style of the cooperating teachers. In the case of lecture, this change occurred despite input by the university supervisor.

Copeland (1977) found that the cooperating teacher effects were not always clear cut and direct. When student teachers were exposed to different combinations of microteaching and modeling of a target skill by the cooperating teachers, there was an interactive effect between the microteaching and modeling. As a partial explanation, Copeland suggested that the cooperating teachers' influence was mediated by the context of the classroom: student teachers exhibited target skills taught through microteaching to a significantly higher degree in classrooms where the classroom teachers exhibited those skills.

However, conflicting results have been reported for cooperating teacher influence on student teacher classroom performance. McIntyre, Buell, and Casey (1979) found that student teachers did not model the verbal behavior of their cooperating teachers. There are many possible explanations for this finding: (a) the experimenters may not have waited long enough for the modeling effects to be visible, (b) pupil behavior may not have permitted the student teachers to demonstrate the
targeted verbal behaviors, and/or, (c) the student teachers may have been instructed by their supervisors to behave in a particular manner.

Recent research on teaching effectiveness provides some guidelines for teaching practice in some grades and content areas (Good and Grouws, 1979; Soar and Soar, 1972; Brophy and Evertson, Note 14; McDonald, Elias, Stone, Wheeler, Lambert, Calfoe, Sandoval, Ekstrom, and Lockheed, Note 15; Stallings and Kaskowitz, Note 16). The guidelines can be useful to student teachers in their new role, especially at the elementary level for reading and math instruction. Competencies in giving academic feedback and keeping students academically engaged, for example, seem to be valuable skills for student teachers to acquire. Other findings may be equally valuable in areas of direct and indirect teaching, task structuring, classroom management, and questioning practices.

Medley (1977) states that no one particular skill or competency is consistently related to effective teaching behavior across different learning outcomes and different groups of students. Instructional functions, such as cueing, reinforcement behaviors, and maintaining student time on task, are considered by Burke, Hansen, Houston, and Johnson (Note 17) and Doyle (1977) to be a more appropriate conceptualization for studying teacher competencies than singular teacher abilities. Knowing what teaching strategy to use in the appropriate context, and how to follow through on it, seems to be paramount (Brophy and Evertson, 1976; Schalock, 1979).

Research on effective teaching does reveal clusters of teacher behaviors important to student learning. However, there has been little attempt to date to coordinate this line of research endeavor with what occurs in teacher preparation. The question of whether effective teachers (those able to produce gains in pupil achievement) are also the
most effective cooperating teachers in working with student teachers has not been addressed, yet, this clarifying link is essential to the purposes of teacher education.

Supervision

The topic of supervision cuts across several of the previous sections, and certainly many of the previous topics (e.g., attitudes and teaching behaviors) are clearly influenced by the variable of supervision. Several recent studies demonstrate clearly the role that supervision plays in student teaching.

Recalling the notion that the best made plans may fail, Copeland (1977) and Doyle and Ponder (1975) have analyzed the distinction of performance versus acquisition of sets of behaviors in the context of student teaching. The latter two authors contend that most empirical investigations of the effectiveness of skills training in teacher education are based upon an assumption which may be erroneous. They question the premise that teachers can behave independently of or control the many contingencies operating in the classroom context.

Copeland (1977) conducted an investigation which addressed the performance/acquisition distinction. Findings indicated that when cooperating teachers were trained in supervision, regardless of how often they utilized a particular skill, the student teachers found enough support to risk trying out laboratory-learned skills. When cooperating teachers utilized a target skill quite often, regardless of whether or not they were trained in supervision, the student teachers were likely to adopt the skill. Lastly, when the cooperating teachers were neither trained in supervision nor exhibited a target skill with much frequency, the student teachers were unlikely to complete, and/or
be rewarded for, the transfer of laboratory-learned skills to the classroom.

The question of directive and nondirective techniques of supervision of student teachers has been investigated by Copeland (1980) and Copeland and Atkinson (1978b). In the earlier study, student teachers were asked to view videotapes of directive and nondirective supervisors in conference and then rate the supervisors according to eight concepts. The student teachers rated the directive supervisors significantly differently on seven of the concepts and clearly preferred the directive behavior. The later study by Copeland (1980a) added the variables of supervisor sex and student teacher sex to the analysis. Again the directive approach was preferred, and student teachers appeared to prefer supervisors of the opposite sex. Women gave higher ratings to nondirective male supervisors than to nondirective female supervisors.

Clearly, the style of supervision and preferences of student teachers interact in a complicated manner. A preference on the part of student teachers for directive supervision has strong support in these studies. Keeping in mind the pressures on the student teachers to perform at an acceptable level within a certain time period and within various contexts, a preference for concrete, professional advice is not surprising. Conversely, the student teachers may feel that they are being needlessly frustrated by the requirement to self-analyze, self-diagnose, and self-evaluate under the watchful eye of the nondirective supervisor. These findings demonstrate the possible impact of supervision on the student teaching experience.
Contextual Influences

It is now axiomatic that the contexts in which people live and work are instrumental in shaping and modifying behaviors. This influence has been suggested by several of the prior research efforts reported in this review. With few exceptions, the influence of the school/university context upon teachers and students in these settings has been studied from the perspective of the practicing educator inservice rather than from the vantage point of the teacher in preparation. Of necessity, then, this concluding section of the review will depend upon information believed to be related to, although not directly drawn from, the interactions, of cooperating teachers/student teachers/university supervisors and the contexts in which they execute their roles. Three contexts are considered: the university, the elementary or secondary school, and the family and home of the pupils.

The University Context

This section of the review will attend to the formal organizational properties of the university setting as they impact upon the student teaching experience. Such properties include rules and regulations, policies regarding evaluation and recommendation for certification, evaluation of student teachers and assignment of student teachers. The research literature dealing specifically with student teaching does not include disciplined inquiry into the relationship of these organizational variables and the enactment of the student teaching experience.

In addition to the direct influences the university exerts on teachers-in-training through courses and supervision, the academic environment also has an indirect impact on the student teaching experience. This indirect impact occurs through the university
community's values, beliefs, and standards. Teacher education evolved independently of the academic community and has only gradually, in the last century, emerged as a function of higher education (Hughes, Note 1). Through the years, several authors have commented about teacher education as a "stepchild" of the university (Goldhammer, 1977). There is some question as to whether the values and standards necessary for effective teacher education are compatible with academic values. Goldhammer (1977) argues strongly that the "culture of higher education often runs counter to skill-building and professional development programs" (p. 12). Specifically, he mentions the lack of values, prestige, and recognition given by the academic community to persons engaged in the skill-building aspects of teacher education.

This criticism has been a constant theme through the history of teacher education. James Conant (1963) sought to solve this same problem through the creation of "clinical professorships" on an equal status with the more typical discipline-oriented professorships. Individuals who assumed these new professorships were to be evaluated in terms of their clinical skills and their training of reservice education students, rather than the more typical criteria of research, productivity, or conventional scholarship. This proposal has not received widespread acceptance and no general, satisfactory resolution to the problem of different values across institutional systems or contexts has been found. The education community has often been divided and has often accepted traditional university values of research and productivity, thereby undermining its own skill training (Goldhammer, 1977).

The degree to which this conflict is resolved by the education department of a university can influence both the teacher education
program and the perspectives of students in the program. The university community provides some very potent socializing influences, with regard to students' perceptions of the importance of skill-building and academic preparation. The influence may be felt through the type of program in operation or through the philosophies and value positions held by faculty members.

Perhaps the most obvious way in which the value of practice and skill-building is upheld occurs through the degree to which the university provides a supportive environment for practice (Goldhammer, 1977; Hunter, 1980). Often clinical supervision is an added responsibility to an already overburdened staff. As such, it is assigned to graduate students and assistants who must "pay their dues." For them it is often a low priority task with little benefit. The degree to which they function effectively as supervisors depends heavily on support, encouragement, and rewards available for that service. Therefore, the student teaching experience may be affected sharply by the degree to which the university provides a supportive environment for those charged with supervision of student teachers.

In summary, the university has an indirect influence on student teaching through its value system and its support role. The values that become incorporated into teacher education programs and are articulated by faculty provide some primary socialization experiences for preservice teachers. Likewise, student teaching is influenced by the supportive role played by the university in its assistance to basic supervisory personnel. Each of these aspects must be considered in attempts to better understand student teaching.
The Public School Context

While it is generally agreed that cooperating teachers exert a great deal of influence on student teaching, there has been little examination of the impact of the public school environment or context on the student teaching experience. Some general advice from the field suggests that this context may be important. Several of the guidelines developed for student teachers include recommendations that students be exposed to children of various backgrounds and levels of ability. And, recently, educators have placed more emphasis on student teaching experiences that include various ethnic groups. Despite these suggestions, little is known about the effects of these experiences.

Poole (1972) suggests that school context is quite important to student teachers' perceptions of adequate training. In this study student teachers were asked to rate 30 statements about their experiences with their cooperating teacher, the principal, and other staff; physical arrangements within the school; and contacts with fellow student teachers. They were also asked to rate the value of the student teaching experience.

The questions about experiences in the school were factor analyzed, revealing six factors: (a) experience in well-organized, supportive situations; (b) experience of criticism; (c) good working relationships with other staff; (d) lack of support; (e) good working relationships with fellow students; and (f) good, informal, working relationships with the children. When these factors were correlated with the student teachers' perceived value of the experience, the strongest predictor of each student's rating (that s/he had learned a great deal from student teaching) was having experienced a well-organized, supportive environment.
Those students who indicated that their present program had provided adequate preparation for student teaching felt that they had made a contribution to the school and that they had experienced good informal working relationships with the cooperating teacher and the students. Those students who reported that student teaching appeared to be merely an evaluative experience indicated that they had experienced considerable criticism and lack of support.

While the results of this study suggest the importance of school context for creating favorable conditions for student teaching, there is one serious drawback: no independent assessment of the school conditions was made. A more potent examination of school context variables would include an outside assessment of the school environment variables to determine whether or not those variables still correlated with student teacher satisfaction. Further research is clearly needed to assess the role of school environment in student teacher satisfaction and success.

Another very significant part of the public school influence on student teachers is what Hoy and Rees (1977) call "bureaucratic socialization." They define this socialization process as an organization's "attempt to mold role ideology and role performance of personnel through a variety of procedures and mechanisms designed to make individual beliefs, values, and norms correspond with those of the organization" (p. 23). In their study the authors assessed students' bureaucratic orientation before and after their clinical experiences. They found that student teachers' beliefs and orientations were more bureaucratic following the student teaching experience. They were more likely to state that orders were to be followed without challenge and
that one should be loyal to superiors without questioning their authority.

Pruitt and Lee (1978) commented that it is not surprising that teachers are subordinate and traditional in their outlooks. These authors note that most teachers, especially cooperating teachers, are caught in a web of conformity. "They are often rewarded for conformity through promotions, salary increases, light schedules and subtle administration favors" (p. 71). Likewise, student teachers find themselves trapped in this bureaucratic net. If they conform to the demands, they find the teaching experience rewarding. Pruitt and Lee (1978) note that "innovative and idealistic student teachers often meet stern opposition, become frustrated and then conform in a 'last ditch effort to salvage a grade'" (p. 71). The combined pressures of certification, graduation, and approval from the cooperating teacher and university supervisor usually result in a high degree of conformity.

It is important to consider both the supportive and bureaucratic influences of the public schools. The same system of colleagues that can serve a support role to the student teachers can also create pressure to conform to the rules of the school organization. The student teachers' active participation in this process needs to be examined more fully so as to develop a greater understanding of the various public school characteristics and their effects upon the student teaching experience.

In addition to the separate influences of the university and the public school, their interaction has considerable influence on the functioning of student teaching. Several writers have indicated that a collaborative university-public school relationship is an important determining factor in a successful student teaching program (Andrews,
There has been little research of institutional relationships other than reviews of various practices (Slay, Note 9). Central questions that emerge from the review of practices center around the roles and responsibilities of the participants in supervision, and the decision-making organization of the university and public school regarding student teaching.

Home-Parent-School Context

Teachers interact regularly with the parents of their pupils, both in formal scheduled conferences and in less formal situations arising spontaneously out of individual children's behavior and adjustment patterns in school. Federal legislation has promoted many parent involvement activities in school districts across the nation (Moles, Note 18), and parent involvement is now being encouraged by school personnel more extensively than in previous years. Nevertheless, little attention to preparing teachers for the important role function of working cooperatively with parents could be found in the literature on teacher preparation.

The most common definition of parent involvement is that from Gordon and Brievogel (1976): home-school interactions are seen as components of "citizen participation," in which the complementing of educational processes by involvement of parents is fostered and emphasis is placed on receiving and transferring information about children. The authors clarified three models of parent involvement: (1) the Family Impact model, with assumptions that the family is in need of help from the school to work more effectively with children; (2) the School Impact model, with assumptions that parents need to participate in school decision-making more fully to improve the quality of schools and the education of their children; and, (3) the Community Impact model, with
assumptions that the family is the primary influence on child development and schools the secondary; but that they share a common goal, and consequently, need to share decision-making authority in the education of children.

Writings about parent involvement have emphasized different approaches. Better communication with parents has been emphasized by Hubbell (1979), Hymes (1974), Lightfoot (1978), and Filipczak (Note 19). Buskin (1975), Craft (1979), Kappelman and Ackerman (1977), Miller (1980), Roberts (1980), Wallat and Goldman (1979), and Olmstead (Note 20) stressed parental input in which parents can help instruct their children, and Rich (1979) has suggested that teachers can use parents as tutors to raise achievement levels in children. Despite current forces countermanding the work of the public schools and some instances of inadequate teachers, research still indicates children can learn when parents are supportive of the schools (Bronfenbrenner, Note 21). Bronfenbrenner talks of parental caring as "irrational involvement" and says that this sort of motivation is necessary to the educational development of children.

The discrepancy between the recognition of parental authority and ongoing practices in teacher education programs is now being investigated in a study by the Southwest Educational Developmental Laboratory in Austin, Texas. In a first phase of this study, Stallworth (Note 22) says that it is not possible at this time to identify specific teacher competencies which could be included in parent involvement in the schools. He suggests that it is first necessary to make some decision about the type of parent involvement model to be implemented in a community.
Stallworth looked at the attitudes of 575 teacher educators in a six state region. He found that these professionals overwhelmingly endorsed the family impact model of parent involvement and felt that parents should have input but not final decision-making power over curricular or administrative matters. The majority did agree that parent involvement training was important, that it should be included in the undergraduate teacher preparation sequence, and that attention should be given parent involvement in inservice training of teachers. The teacher educators indicated that they believed preservice teachers should be exposed to role-playing activities with parents, be required to interview parents, hear speakers about parent involvement who represent the school and community, and have an opportunity to conduct a parent-teacher conference. Only 4.2% of the sample indicated that they taught a course in parent involvement, but 55.5% did address the subject in one or more classes. Approximately 30.3% of the sample of teacher educators included no emphasis on parent-teacher relations in their classes. Stallworth acknowledges the political conflicts inherent in the different parent involvement models outlined by Gordon and Brievogel (1976). Further research is needed to understand the effects of parent involvement experiences in student teaching and the impact of the home on teacher preparation.

Summary. This section of literature review has demonstrated the desirability of and need for examining the contexts in which student teaching takes place. Of particular interest are the influences of the formal and informal university variables as demonstrated in program requirements and in values held by members of the institution, the public school context and its impact upon participants in the student teaching experience, and the relation of the home and family contexts of
pupils in student teachers' classrooms to the enactment of student teaching.

**Summary and Overview**

It was noted at the beginning of this review that most of the literature pertaining to student teaching is nonempirical, craft-oriented, and scattered widely across different perspectives and topic areas. In an effort to collect and systematically present the information, this review has focused on student teaching as the experience of a basic triad (student teacher, cooperating teacher, and university supervisor) embedded in several overlapping contexts (see Figure 1). To better understand the processes and outcomes of the experience, the demographics and individual differences characterizing each of the three central participants were reviewed.

In doing so, gaps in the literature and both unanswered and uninvestigated research questions were identified. Among these were the lack of large-scale demographic information characterizing cooperating teachers and university supervisors as distinct groups, and the apparent lack of investigation of variables such as sex, age, and ethnicity in relation to preservice training outcomes. However, information describing "typical" student teachers and teacher educators was presented.

Available data pertaining to several psychological constructs such as teacher concerns, empathy, scholastic aptitude, flexibility, cognitive complexity, and creativity were discussed. More questions were discovered than answered in these instances also. For example, empathy is a construct often-mentioned in the contexts of supervision and consultation, but it has rarely been applied or investigated in the domain of student teaching -- despite the logical inclusion of such
activities in student teaching. Similarly, factors such as flexibility and cognitive complexity warrant further investigation of their poorly understood roles in student teaching, particularly with regard to the outcomes of the experience. It would be useful for practitioners and teacher educators to know, for example, whether or not matched levels of cognitive complexity enhance the success of student teaching either through student teacher "satisfaction" and/or in terms of teacher practice.

In the second section of the review, general constraints determining who may fill each of the roles in the triad were examined. Thus, the focus was on the preparatory experiences, training, and selection of student teachers, university supervisors, and cooperating teachers. Several problems in practice and unexplored topics in the literature were highlighted. For example, there appears to be a prevailing imprecision and dissatisfaction in the selection processes applied to cooperating teachers and university supervisors; yet few researchers or practitioners have set forth operational standards for selection which can be evaluated for their appropriateness and utility vis-a-vis student teaching outcomes. Reasons for the "selection by default" process which sometimes seems to be in effect pertain to the institutional contexts in which selection is occurring. The selection of student teachers appears to suffer from parallel problems.

Reviewing the roles and functions of cooperating teachers and university supervisors was equally telling of practical problems and new research questions. First of all, evidence for the value of the traditional university supervisor role has been equivocal. Secondly, the cooperating teacher role of socialization agent has been both analyzed and researched, but there is still only a minimal understanding
of the dynamics of student teacher socialization. This is probably reflective of the tendency on the part of educational researchers to be overly constricted in their research foci. Third and perhaps most ironic is the dearth of carefully constructed investigations of the in situ acquisition of teaching behaviors, particularly with regard to the presumed influences of the cooperating teacher. Last, styles of supervision, student teacher preferences for supervision, and their interaction effects have not been well-investigated. In view of the obvious complexity of the student teaching experience, it seems essential that future research include at least minimal evidence of how the participants were selected, of what sorts of training experiences they received, and of the nature of the participants' interactions—all as they relate to the likelihood of success or failure of student teaching.

In the closing section the contextual influences impinging upon and coloring the student teaching experience were reviewed. This included some consideration of the university or teacher training institution which establishes and regulates the student teaching experience, together with the public schools which permit the mission to be fulfilled. Further exploration of the ways in which each institution regulates student teaching, and the consequences of the institutional interactions, needs to be conducted to assess which conditions, regulations, communication norms, etc., are associated with positive student teaching experiences. Lastly, the contextual linkages of home and parents to the schools, as a general source of influence upon student teaching, were presented. In this instance, it was possible to generate several research questions concerning the effects of different
types and degrees of parental influence in the public schools upon the nature and outcomes of student teaching.

Throughout the review, other more specific topics in need of research were highlighted. Also, broad issues such as key methodological problems and promising areas of inquiry were discussed. Much further study of teacher preparation is needed to understand the links between individual characteristics and the processes of training, as they occur within their institutional contexts. This work may begin to provide a research basis for adapting and improving teacher preparation.
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