Reflection and Teacher Education: A Case Study and Theoretical Analysis

Jesse Goodman
Washburn University of Topeka, Kansas

In 1904, John Dewey (1965) wrote that the primary purpose of teacher preparation programs should be to help students reflect upon the underlying principles of practice.[1] He warned that if programs emphasized only technical expertise and failed to help students understand the relationship between theory and practice, the growth of future teachers would be stunted and the education of children thus impaired. Although a technocratic approach to teacher education has continued to dominate the field, many individuals, especially within the university community, have agreed with Dewey's perspective:

> If we accordingly conceive of the education of teachers not simply as the training of individual classroom performers, but as the development of a class of intellectuals vital to a free society, we can see more clearly the role of educational scholarship and theoretical analysis in the process. For, though the latter do not directly enhance craftsmanship, they raise continually the sorts of questions that students need continually to have before them. . . . To link the preparation of teachers with such questions is the special opportunity of the university. (Scheffler, 1968)

There have been numerous proposals for programs to develop teacher-scholars (Stratemeyer, 1956); reflective teachers (Zeichner, 1981); teachers-as-inquirers (Bagenstos, 1975); teachers-as-researchers (Corey, 1953); teachers-as-participant-observers (Salzillo & Van Fleet, 1977); and self-monitoring teachers (Elliot, 1977). Each of these proposals, while differing in its specific methods of inquiry, promotes the investigation of both theoretical issues and their practical implications as a guide for the preparation of teachers.

Seminars that meet in conjunction with field-based student teaching have often been cited as promising settings for encouraging reflection. Discussion groups have been described as places where students can interact in an informal environment conducive to creative problem solving, relate educational theory to practice, develop insight into themselves and their student teaching experiences, and thus grow personally and professionally (e.g., Sarason, Davidson, & Blatt, 1962; Combs, Blume, Newman, & Wass, 1978; Zeichner & Teitelbaum, 1982; Feiman, 1979). Yet, in spite of the proposals for the development of reflective teachers and the establishment of seminars to serve as a setting for this reflection, there has been relatively little literature devoted to clarifying the notions of "reflection" and "teacher education." What is meant when we say we want students to be reflective? What is a reflective teacher? What should be the focus of this reflection? In addition to

this lack of clarification, there is little research that directly explores the seminar experience.[2] What happens in these meetings? What is discussed? What do students reflect upon in seminars? In discussing these concerns, this paper draws from a case study of the seminar experience of students in an elementary teacher education program that emphasized the importance of reflection.

One of the values of case studies is that close examination of a singular setting can yield insights into subtle areas of educational concern. With this point in mind, I describe the study's methodology and then portray the seminar's role in the education of students. Using these findings and building upon Dewey's (1933) notions of reflective thinking, I develop a more crystallized conception of reflection and teacher education than has been previously discussed in the literature. Finally, implications for practice are addressed.

Methodology

The methods used to collect and analyze data described below are associated with ethnographic field studies (Glaser & Strauss, 1975; Bruyn, 1969). This research approach allows for the generation of theory grounded in recorded data as well as the verification of existing theoretical notions. Grounded-theory research is able to combine a variety of data gathering methods in developing interrelated hypotheses about teacher education and reflection.

Setting and Sample Selection

The sample was located in the Elementary Education Program (EEP) at State University, a large southeastern university. (All proper names are fictitious.) The program was divided into two teams, each containing five seminar groups. Each seminar was composed of a faculty member and 20 to 30 randomly assigned students who stayed together as long as they remained in the program. Each quarter, some members graduated and new students replaced them. Nearly all of the students came from the southeastern part of the United States, but they reflected a variety of social and economic backgrounds. Each student was at least a junior in college; most were between the ages of 20 and 25 and most (approximately 95 percent) were women.

To collect data, the author joined one seminar in Team 1 as a participant observer. The seminar leader, Dr. Franks, was a strong advocate of the EEP's goals and principles and viewed the seminar as the most important component of the students' professional education. After collecting the life histories of Dr. Franks's students, the author selected 18 of them as the primary (although not exclusive) sample group. Care was taken to include students who were at different levels of their professional education, came from a diversity of backgrounds, expressed varied interests, and were of different ages and sex. The sample was selected by following the guidelines of theoretical sampling—that is, on the assumption that differences among the participants facilitate the discovery of theoretical questions, categories, and interrelationships (Glaser & Strauss, 1975).

Methods for Data Collection

Observations and interviews (both formal and informal) were the two main methods of data collection. In addition, the program's literature was reviewed, for example, student and faculty handbooks, articles written by faculty members, a university catalogue, and a weekly newsletter. Data were recorded in field notes during a six-month period covering two university quarters.[3] All of Dr. Franks's weekly seminar meetings and approximately 25 of his conferences with individual students were observed. The other four seminars in Team 1 of the program were also observed during the field work. The purpose of these observations was to discover what actually happened in the meetings. Rather than predetermining specific items to look for, a number of general questions were used as initial guides: How is the seminar organized? What types of interpersonal dynamics exist during meetings? What activities occur? What information, opinions, and beliefs are exchanged during these discussions? More specific observation questions were developed as the field work continued.

Interviews were conducted with each of the students within the sample group on a weekly or biweekly basis. Other students and seminar leaders within the EEP were also interviewed. Three group interviews were held with Dr. Franks's seminar. At first, interviews did not have specific, predetermined questions. Instead, interviews were structured around various areas of concern such as the purpose of the seminar; perceptions of what happens in meetings; and individual responses to the organization of people, activities, and topics discussed in meetings. In reviewing the field notes, more specific questions emerged, which were then asked during the interviews to gain deeper insight into situations and to clarify misconceptions and ambiguities. Responses from Dr. Franks's students were often cross-checked with those from students in different seminars. Interviews were designed to discover the way in which individuals interpreted the world around them and the way in which these interpretations were used as the basis for their actions.

Analysis and Theory Generation

Glaser and Strauss's (1975) "constant comparative method" was used as a guide for theory generation. Throughout the fieldwork, interview and observation notes were reviewed daily. Incidents and bits of information were coded into tentative conceptual categories. As these categories emerged, questions arose that were used to guide further investigation into the field. The findings of these investigations were then compared to the initial categories. Special attention was given to data that seemed to challenge original conceptualizations. For example, in analyzing the role of the seminar, it initially seemed as if the data were falling into one of two categories, but as the investigation continued, it became clear that certain data did not easily fit into either and that they were, in fact, the basis for a third category. Through such constant comparison of data, the analysis became more crystallized. In addition to generating analytic categories, theoretical notions found in the literature were compared to those emerging from the fieldwork. This return to the data source, followed by modification and/or new generation of ideas, continued until the findings were ready to be presented in some detail.

Following Glaser and Strauss (1975), the theory presented here takes a narrative form, using examples from the data to clarify concepts and to demonstrate the interrelationship between theory and social reality; the theory should not be viewed as a static product but rather as an "ever-developing entity" (Glaser & Strauss, 1975, p. 32), open to modification by the originator as well as by other scholars. The data presented are not designed to "prove" the infallibility of the theory generated. Rather, the goal is to illuminate concepts and to thus provide a basis for further discussion and debate. The presentation of theory in narrative form reflects its "ever-developing" nature. Finally, it is noted that students and faculty within the EEP were given the opportunity to respond to the study's findings before a final draft was written.

The Seminar and Its Role

The seminar was one of three components of the EEP. Students took university-level education courses and taught in local elementary classrooms in addition to attending seminar meetings. Unlike most teacher education programs in the United States, which have either developed without any well-defined theoretical perspective or have emerged from a behavioral approach (Joyce, Yarger, Howey, Harbeck, & Kluwin, 1977; Elam, 1971), the EEP was founded as a humanistic alternative. Rather than defining good teaching in terms of gaining expertise in pre-specified, behavioral techniques, the EEP's literature emphasized the importance of the individual's feelings, attitudes, perceptions, and ideas. From this perspective, the way in which one "sees" oneself, other people, the educational process, and the broader world has a greater effect on the way in which one teaches than does knowledge of a specific skill:

> A teacher who sees a child as a trouble-maker, for example, will behave differently towards that child than a teacher who sees the same child as someone who is insecure and who doesn't think anyone cares for him. (interview with Dr. Franks)

While learning skills were considered important, the program's literature emphasized the notion that skills are a means for implementing one's beliefs and educational purposes and are not an end in themselves. Citing as guides the works of Combs (1965), Sarason et al. (1962), Wass, Blume, Combs, & Hedges (1974), and other humanistic educators, the program was designed to help students explore their own beliefs and purposes, expose them to new ideas and attitudes, and encourage them to examine the practical implications of various educational viewpoints.

The seminar was developed to implement many of the program's principles. According to the student handbook for Team 1, the primary purpose of seminar meetings was "to help each student discover his own personal meanings through exploration of self as well as ideas and experiences he has been exposed to." Unlike traditional courses, the seminars did not have a formal structure or specified curriculum; they were described by many faculty members as the place where students could reflect upon and integrate the ideas and

the experiences acquired in their university courses and fieldwork. Through dialogue, students could relate educational theory to practice and reflect upon themselves, their teaching, and the education of children.

To implement these goals, informality was stressed. Seminar meetings often provided refreshments and were held in students' apartments to help students feel more relaxed and thus to facilitate communication. In the words of the guidebook for Team 1:

> We intend to have students take the risk of thinking about new ideas, and if they are to do that, they will have to feel emotional support from the seminar. There is no place for competition or destructive criticism in a seminar, but instead . . . a feeling of safety and support must prevail.

To promote camaraderie, a number of seminar leaders were on a first-name basis with their students. A few leaders consciously tried to minimize their role as authority figures by being open to student criticism. During discussions, leaders often gave their opinions, but their ideas were neither spoken nor received as educational gospel. A great deal of attention was paid to the students' field experiences, and their concerns often became the focus of meetings.

This environment was not developed for its own sake. The rationale was strongly tied to the seminar's main purpose of promoting reflection among students:

> The problem [of developing a learning environment] is more complex than just making friends with students. That's relatively easy, but it's not enough. You also have to challenge students to think about who they are and what they're doing in the classroom. It's also easy to point out "unhealthy" attitudes or misperceptions to students, but if you don't have their trust, those "insights" don't get very far. The problem is how does one gain the students' trust *and* at the same time challenge students to go beyond their everyday, taken-for-granted experiences and perceptions. (interview with Dr. Mentzer)

An informal learning environment ideally allowed students to dispute issues, ideas, beliefs, and perceptions without becoming defensive.

While the goal of reflection was clearly stated in the EEP's literature and was supported by faculty members, individual students and seminar leaders interpreted it differently. Thus, the first step in developing a theory of reflection and teacher education is to examine the meaning given to these ideals by individuals. As will be demonstrated, the educational role of the seminar does not depend upon formal statements but rather upon the ways in which people interpret the seminar's goals and then act upon their interpretations.

The Liberal Role

Most of the practicum sites in which the students were placed reflected very conservative practices and attitudes toward education. In most cases, the curriculum and the nature of the instruction were highly structured, predetermined, and mechanistic. There were few opportunities for creative teaching or open inquiry into subject matter (Goodman, 1982). Relatively speaking, seminars presented a more liberal view. To counter the attitude that good teaching relies on standardized techniques, students were told, "There is no one right way to teach." They were also encouraged to "be unique" in their teaching style and to "discover their *own* beliefs" as they learned to teach.

Seminar leaders often expressed liberal views on teaching. For example, they often discouraged the use of threats and corporal punishment that exists in the public schools.[4] Many discussions focussed on non-punitive methods of discipline:

> A lot of students want to be more humanistic, but when they get out into the schools and are told by the system to "Control those kids!", they model other teachers or how they were disciplined themselves. Teacher Effectiveness Training (TET) [see Gordon, 1974] gives the ones who are inclined towards humanism some concrete tools to implement their beliefs. (interview with Dr. Franks)

Students were encouraged to be positive instead of negative, warm instead of distant, and flexible instead of rigid in their teaching of children:

> I never really thought you could get very close to your students until I came to this program. Both my parents are teachers, but they always warned me about not becoming friends with your students. Hearing that it is possible to get close to students and not let them take advantage of you made me re-think some of my beliefs. (interview with Dorothy)

Such liberal messages occasionally stimulated students to reflect upon themselves and their teaching.

The Utilitarian Role

On one level, it seemed as if the seminars were implementing Dewey's ideas and encouraging students to reflect upon the relationship between educational principles and practice. However, this reflection did not exist in most seminar meetings. While the seminar's language of *learning environment, growth, no-one-right-way-to-teach,* and *reflection* gave the impression of deep analysis upon complex educational concerns, such depth of exploration was rare. Instead, seminars generally focussed on classroom-management problems arising from the students' practicum sites. For the most part, people shared techniques on how to organize efficiently the day's activities, control discipline problems, and keep children on task:

> After everyone briefly spoke about their field placements, the discussion focused on Helen's problem: whenever the cooperating teacher would leave the room, the kids would "go crazy." The discussion centered on what could a teacher do to get the kids "under control." A number of suggestions were offered: turning the lights on and off, telling the pupils to put their heads down, threatening them with punishments, using "I" messages, getting other kids to help get things quiet, etc. Dr. Franks was asked what he would do. In addition to giving specific suggestions, he said he didn't believe in threats or punishments, but said it was important to be firm in these situations. (observation and summary of seminar meeting)

In this discussion and others like it, there was no true assessment of the situation. No one questioned whether this was really a crisis, and if so, why. No one asked why the pupils might be acting in this way, what the school and the classroom were like (their history, atmosphere, general structure), and why havoc occurred only when the co-operating teacher left the room. No one volunteered, or was asked, to share the reasoning behind their suggestions or to explore their ideas in greater depth. The goal was simply to find out what "worked" to solve the immediate problem.

One of the major educational principles of the program was that learning should be relevant to the learners; and seminars seemed to focus on the "needs" of students in an effort to model this principle. As a result, the purposes, belief systems, procedures, and structure of the school/classroom were usually taken for granted and thus not considered during meetings. Instead of questioning whether institutional demands were educationally and ethically sound, the goal of most discussions was limited to helping students meet these demands. Some students viewed the seminar as a place to "help us teach," and discussions that made teaching more complex by raising abstract issues or problems were often discredited.

Although the development of a learning environment was supposed to help students to express themselves and to promote reflection, in most seminar meetings, it simply meant that group-sharing was a valuable goal in itself, regardless of the particular content of one's contribution. A number of seminars developed a show-and-tell atmosphere:

> The discussion centred on the problem of motivating the children to read, i.e., finishing their assigned workbook pages. One student "shared" that her teacher gave the kids a picture of either a smiling, or frowning, or neutral face that reflected the child's work for that day. Another suggested that it was unreasonable to expect children to be "good" all morning long. "Being positive" and "warm" were also suggested. Robin then "shared" that in her reading group she let the kids tell personal stories, and at the end of the period she hadn't finished the reading assignment. As a result, she felt she had failed. The next time she was "a lot firmer" and didn't let the kids wander from their reading. She finished the assigned story, the kids finished their workbooks, and she felt much better. After each person spoke, Dr. Wagner concluded their comments by saying, *good, super, wonderful,* or *nice.* (observation and summary of seminar meeting)

Again, there was no questioning of feelings, assumptions, or definitions in this discussion. For example, the "need" for external rewards and punishments to "make kids learn" was taken for granted; the educational and ethical implications were not addressed. There was no display of concern for stimulating or nurturing a child's intrinsic desire to learn. Definitions of *good kids* as "quiet kids," *workbook work* as "reading," *on-task time* as "learning," and *getting through the material on time* as "the goal of teaching"—all went unchallenged. Feelings of pressure and possible guilt about not keeping to time schedules also went unexplored. The real concern in this discussion was that everyone "shared."

At times, this concern for an informal learning environment actually inhibited direct discussion of conflicting points of view:

> Dr. Young then said, "We have about twenty minutes left. Does anyone have any management techniques that they've found to be successful?" A few students responded with some suggestions, and then Bob asked with a great deal of frustration in his voice, "Isn't there any alternative to this reward/punishment syndrome that we always talk about?" His question took everyone by surprise, and there was tension in the air. After a minute (it seemed like ten), one student said, "When we were bad, we were either spanked or had to stay after school." Dr. Young replied, "I don't think punishments are very effective." Another student said, "I think if you're warm to kids they will want to please you and will do what you want." A few more suggestions were given and people started to feel more at ease. Bob's chal-

lenge, of course, was essentially ignored. (observation and summary of seminar)

Instead of developing a learning environment that allowed for dissent and challenge, most seminars limited their interpretation of an informal learning environment to the maintenance of "nice" feelings among group members.

The program's language gave the impression that seminars helped students to reflect upon and develop their own educational values and purposes and, thus, to avoid taking the everyday realities and belief systems found in the practicum sites for granted. However, the lack of penetration into the complexities of education prevented any in-depth inquiry. Substantive questioning of the curriculum (what's worth teaching and why), the nature and purpose of instruction, the complexity of interpersonal relationships, the power structure of schools/classrooms, and the role of school in society were rarely discussed. Seminars tended to have a utilitarian emphasis. *Discover-your-own-beliefs, being unique,* and *no-one-right-way-to-teach* were generally interpreted as "finding the techniques that work for you." Reflection, for these individuals, meant thinking about which techniques seemed best in any given situation. The techniques were seen as ends in themselves rather than means to implement some broader educational purpose. For example, in discussing discipline problems, the emphasis was placed almost exclusively on sharing techniques that stopped or prevented "inappropriate" behavior. The question of social control versus freedom was never raised as an underlying issue. By emphasizing "how-to questions," and ignoring "what and why questions," the seminar's utilitarian role prevented the occurrence of serious inquiry.

The Analytic Role

Although the utilitarian role of the seminar dominated the experience, there were exceptions to this general pattern. Students often complained about their field placements and, at times, would question the value of what was going on in them. These questions occasionally became the catalyst for analytical discussions:

> Dr. Franks asked the students to share some insights they'd gotten from their field placements this quarter. Tom shared the value of being part of the team planning that decided the ability groups of the children. Kate asked, "Don't you just hate the way the kids get on each other for being in one group versus another?" A discussion commenced with some students suggesting that ability grouping promoted a lot of stigmatizing, which was unethical and hindered learning, and others pointing out its efficiency in dealing with the diversity of skill levels found in their classrooms. (observation and summary of seminar meeting)

There were also moments when seminar leaders or students raised non-utilitarian issues that required serious thought:

> One seminar discussion really made me think about what it means to be a child in school all day. The discussion compared the working conditions of children with those of adults. We often make children do things that no one would expect adults to do in their jobs. Most adults get to talk to each other when they work, but not kids. Most adults also don't like being told exactly what to do, where to go, how to think, or what to think every minute of the day, but this is exactly what we expect from kids in school. (interview with Alice)

In the eyes of a few seminar leaders, the best meetings occurred when students spontaneously raised specific educational problems and analyzed the underlying principles, implications, and issues in a subsequent discussion:

> In one meeting a student complained about the busy-work that was required in some of her [university] courses. In addition to discussing her particular problem, I wanted the students to think about how much busy-work is given to children in the public schools. I wanted them to think about why we give children busy-work, who does it benefit, and what are the effects on the classroom and the children's learning. (interview with Dr. Mentzer)

Students' immediate concerns only occasionally served as a catalyst for analytical discussions.

Toward a Theory of Reflection

In developing a theory of reflection and teacher education, three areas of concern must be examined: (1) the focus of reflection, (2) the process of reflective thinking, and (3) the attitudes necessary for reflective individuals.

The Focus of Reflection

Perhaps the most important task in clarifying our conception of reflection is that of examining what students reflect upon. Van Manen's (1977) notions of "levels of reflectivity" is helpful in this regard. He identifies three levels of reflection, each one emphasizing a different focus. The first level is concerned with the techniques needed to reach given objectives. The worth of these objectives is taken for granted, and the criteria for reflection are limited to technological issues (e.g., accountability, efficiency, and effectiveness). At this level of reflection, students are concerned with "what works" in keeping their pupils quiet and on task.

At the second level of reflection, students focus on the relationship between educational principles and practice. However, as Dewey (1933, 1965) emphasizes, it is not enough to give merely an educational rationale for certain practices. This level of reflection also implies the need to assess the educational implications and consequences of both actions and beliefs. As a result, there is debate over principles and goals.

The third level of reflection incorporates both ethical and political concerns into educational discourse. Principles such as justice, equality, and emancipation are used as criteria in deliberations over the value of educational goals and practice. At this level of reflection, students begin to identify the link between classroom life and broader social forces and structures. Students consider the ethical and social implications of what happens in their classrooms.

The seminar's utilitarian role most clearly illustrates Van Manen's first level of reflection. Discussions focussed on which techniques got the children through the lesson on time in a smooth, orderly fashion. However, in a more subtle way, the liberal role also promoted the first level of reflection. Although attracted to the liberal messages presented in seminar discussions, without an analysis of what these liberal messages actually meant, the students adopted

them as rhetorical slogans without substance. Telling students to "be creative" without analyzing why it was difficult to be creative in classrooms that demanded the memorization of facts and skills through drillwork and standardized tests did little to promote students' thinking. For example, Kate viewed "being creative" as changing the basic curriculum and method of instruction used in most classrooms. Robin, on the other hand, interpreted "creativity" in this way: "I think it's important to be creative. . . . I usually let them [the pupils] color their workbook pages when they finish their work." Likewise, having students share "liberal" management techniques did little to help them to question the underlying power structure found in most classrooms. While it seemed on the surface that the seminar's liberal role promoted Van Manen's second and third levels of reflection, it actually reinforced the first level.

The theory of reflection and teacher education advocated in this paper incorporates Van Manen's second and third levels of reflection. The first level of reflection is, in fact, a distortion of Dewey's and other educators' conceptions. The second and third levels of reflection were manifested only when the seminar took on an analytic role in the education of students. This role encouraged students to challenge existing instructional patterns and belief systems found in the practicum sites and promoted reflection upon underlying questions of education, ethics, and the social implications of schooling. In developing a theory of reflection and teacher education, it is crucial to clarify the focus of this reflection.

The Process of Reflection

Along with understanding the importance of one's focus of reflection, it is also necessary to examine the process of reflective thinking. Dewey (1933) clearly states that the process of reflection does not merely refer to a method of problem solving but to a way of thinking or being. "Not the thing done, but the quality of mind that goes into the doing, settles what is utilitarian and what is unconstrained and creative" (Dewey, 1933, p. 215). In developing our theory, three different "ways of thinking" are examined to clarify more accurately this notion of reflection.

The first way of thinking is in direct opposition to that of reflection. Dewey (1933) refers to this process as *routine thought*. Schools, like other institutions, influence individuals by setting up predefined patterns of behavior, attitudes, and ideas (Berger & Luckmann, 1967). An individual who thinks routinely is guided by tradition, authority, and official definitions of social reality within a given setting. Students who thought in this way perhaps considered the means to reach a given goal, but they took for granted the official ends toward which they were directed. For example, students in the field were not judged on their ability to reflect upon the implications of their actions or school policy and procedures. To the contrary, they were judged specifically on how well they "managed" the immediate situations that confronted them. The demands of most schools were clear: get the children through the material (curriculum), on time, with as little disruption as possible (Goodman, 1982). Students were hard pressed to meet this demand and wanted to know specific techniques to help them in the endeavor. Seminar discussions that wandered too far from this central concern were viewed as

irrelevant by a number of students. But routine thought cannot be confused with reflection; it lacks the patience necessary to work through one's doubt and perplexity:

> Right now I'm trying to figure out what's important to teach. Not just the academics, but teaching children about life, and how to live it fully. . . . If I got in a school that imposed the "back to basics" on me, I would just have to . . . come up with ways of sneaking other subjects in. (interview with Alice)

As exemplified by Alice, before one can be reflective, one must be willing to tolerate ambiguity and to search for one's own solutions.

While routine thought is clearly distinguishable from reflection, most individuals equate reflection with *rational thought*. The view that often comes to mind is of a teacher (or student) who processes information logically, sequentially, and orderly: she or he does not merely accept external views of reality but researches relevant information and comes to a decision based upon careful deductive reasoning. However, this commonly accepted notion is severely limited in scope.

Unfortunately, many educators who encourage reflection within teacher education fail to recognize the importance of *intuitive thought*.[5] While rational thought involves the organization of information, selection of categories, dissection of the whole into parts, sequential-thought progression, critical judgment of correctness, and explanatory language systems; intuitive thought involves imagination, humor, non-judgmental associations, emotions, integration and synthesis, holistic perception, tacit sensitivity and understanding, and non-sequential thought expression (Garrett, 1976).[6] Intuitive thought is associated with the spark of creative ideas, insight, and empathy:

> Some of my best ideas come to me in a flash, like magic. For example, I was trying to figure out how I could get the kids to appreciate the craftmanship found in Native American cultures. Just telling them didn't seem enough, but I couldn't think of what else to do. Then suddenly it came to me. I had them try to build some of the tools used by traditional Native Americans, and as they struggled to build these tools, I discussed the skills needed to live off the land. (interview with Kate)

Good teaching often requires the ability to be spontaneous and to avoid overdependency upon curriculum manuals, time schedules, and standardized procedures. Rather than depending upon "policy" to determine classroom activity, intuition gives one the ability to "think in action" (Schon, 1983). For example, Alice did not believe in "endless lists of classroom rules to insure order." Instead, she mentioned a "sixth sense" that helped her respond to children with just the right amount of control, warmth, humor, and seriousness, emphasizing one quality over another depending upon the situation and needs of the children:

> Alice broke up an argument between two boys just as it developed into a fight. With a stern voice, she told them to sit at their desks and to remain during recess to discuss what just happened. A few minutes later the class left the room, and Alice began the conference by speaking to the boys with a "gangster" accent: "So tell me yous guys, what seems to be the trouble here?" The boys laughed a little, and then she facilitated a discussion so that each boy was able to express his feelings and thoughts. In addition to helping solve the immediate dispute, she told them she could understand why they would want

to fight over this issue, but she could not allow fighting in her class. She ended the meeting by asking them to think about ways to deal with anger and settle disputes without violence. She told them that if they had any suggestions to let her know. (observation and summary of Alice)

As Dewey (1933, p. 124) notes, intuition often marks the difference between the artistic thinker and the intellectual bungler.

It is the position of this paper that reflective thinking occurs with the integration of the rational and intuitive thought processes. In legitimating intuition, one should not discount the importance of rationality. It is one thing to have flashes of inspiration and creative insights, but it requires careful planning and rational decision-making to put novel ideas into practice. The most reflective students, individuals like Kate and Alice, seemed to be both rational and intuitive, childlike and mature, humorous and serious. They were able to take flights of fancy and then come back to reality, and in doing so , become more controlled and conscious of their actions and ideas. As Ornstein (1972, p. 80) suggests, "It is . . . the complementary workings of the intellect (rational thought) and the intuitive which underlie our highest achievements." While routine thought is the antithesis of genuine reflection, reflective individuals are able to blend rational and intuitive modes of thinking in one dynamic thought process.

Reflective Attitudes

Finally, in developing a theory of reflection and teacher education, it is necessary to examine the underlying attitudes of reflective individuals. Dewey (1933) identifies three attitudes as prerequisites for reflective teaching. The first attitude is *openmindedness*—an "active desire to listen to more sides than one; to give heed to the facts from whatever source they come; to give full attention to alternative possibilities; and to recognize the possibility of error even in the beliefs that are dearest to us" (Dewey, 1933, p. 29). Human beings tend to order and label their world in a consistent fashion. Because our sense organs simultaneously receive thousands of "messages" from the external world each moment, our brains perform the useful function of sorting all this information in a way that is consistent with past perceptions. Therefore, the interaction between the individual and his or her sensory stimulation, along with the filtering process which is consistent with past experience, potentially creates a narrow and limited view of reality. Students who are "openminded" examine the rationales that underlie what they may initially take for granted as right and natural in the schools. They realize that traditional perceptions of education may or may not be valid, and they are willing to question their own views of and reactions to the school culture.

The second attitude necessary for reflection is *responsibility*. It is not enough to be simply open to a variety of ideas. There must also be a desire to synthesize diverse ideas, to make sense out of nonsense, and to apply information in an aspired direction. It is this attitude that fosters consideration of the consequences and implications of classroom activity. As mentioned in our discussion of Van Manen's work and as suggested by Zeichner (1981), "responsible" students ask why they are doing what they are doing in classrooms in a manner that goes beyond questions of immediate utility:

> I received [during my childhood] a lot of unhealthy messages and images about people and society from school, T.V., movies, and other stuff. In part, I want to teach in order to help develop healthier children which, I hope, will result in a healthier society. (interview with Kate)

In thinking through their ideas, reflective students take into consideration the educational, psychological, and social implications of classroom life. They are responsible not only to their children's education but also to the society as a whole.

The final attitude described by Dewey (1933) is *wholeheartedness*. This attitude gives individuals the internal strength necessary for genuine reflection. Although many students seemed to have the potential, most practicum sites, with their emphasis on competency test scores and getting through the material on time, tended to inhibit reflection. Students were too insecure or fearful to be very reflective:

> Even if I knew how to teach this way—creative, innovative approaches to instruction and curriculum—the question is whether I would even risk it. Let's say the kids get really turned on, but because you haven't drilled them on their skills they don't do well on the tests. Then what happens? You get screwed for not following the set curriculum. (interview with Bob)

Many students expressed fears of making mistakes, being criticized, being "different," disturbing traditions, and making changes. Wholeheartedness enables students to work through their fears and insecurities, and, therefore, it gives them the courage to analyze and evaluate the schools, society, children, education, and themselves.

Summary

As with many concepts in education, reflection seems to have become sloganized to the point where it means many things to many people. If this notion is to be useful in teacher education programs, it is imperative that we clarify the meaning of the term. Hopefully, the research data reported in this paper will stimulate the discussion and debate—the interchange—that is sorely needed. As previously mentioned, the research was not designed to prove a particular theory of reflection and teacher education.

What we have seen is that reflection suggests much more than taking a few minutes to think about how to keep the children quiet and on task; to the contrary, it implies a dynamic "way of being" in the classroom. First, then, reflection suggests a need to focus on substantive, rather than utilitarian, concerns. Second, a theory of reflection must legitimate and integrate both intuitive and rational thinking. Finally, certain underlying attitudes are necessary in order to be truly reflective. If reflection is to be a worthwhile goal within teacher education, then our notion of it must be comprehensive.

Implications for Practice

As Zeichner (1981) points out, while not being a panacea for the major problems facing education today, seminar experiences do offer the potential for helping students become more reflective. However, the findings of this

study suggest that the existence of a seminar component within a particular program does not necessarily mean that reflection will result, even when this is a stated goal of the program. Within the EEP, the seminar played three different roles in the education of these students, and for the most part, only one of these roles promoted reflection among the students.

The findings of this study raise an important question for teacher educators to consider: What functions should a seminar play in the education of students? As Friedenberg (1973) suggests, this question can best be answered by looking at the relationship of teacher education to the schooling of children. If educators are pleased with the basic operations of the public schools, then seminars should attempt to help students meet the needs of the institution:

> The preservice student should not be exposed to theories and practices derived from ideologies and philosophies about the way schools *should be* [quoted emphasis]. The rule should be to teach, and teach thoroughly, the knowledge and skills that equip beginning teachers to work successfully in today's classroom. (Smith, 1980)

Since the practicum sites demanded technical, managerial expertise, and for the most part, ignored substantive issues of education (Goodman, 1982), they encouraged the seminar's utilitarian role in teacher education.

However, if educators are critical of the present schooling in our society, then the task of teacher preparation becomes more complex. Seminars reflecting this perspective would challenge the existing instructional patterns and belief systems found in the practicum sites; they would promote reflection among the students. While it may seem on the surface as if the liberal role of the seminar addresses these concerns, this study does not substantiate that perception. For the most part, the liberal role of the seminar in the EEP actually tended to reinforce a utilitarian orientation.

If educators truly question the current education found in our schools, they will acknowledge that seminars need to play an analytic role in teacher education. However, the findings of this study suggest that educating students to become thoughtful, questioning, and reflective teachers is a formidable task given a comprehensive theory of reflection, the technical emphasis found in most practicum sites, and the students' desires to meet practicum demands.

For the many educators who desire to promote reflection among students, a number of suggestions can be made based upon the study's findings and the current literature in the field. First, as stated in the EEP's literature, seminars must create an environment that is conducive to open inquiry. Since reflection requires the exploration of personal attitudes, thought processes, and underlying issues of practice, the atmosphere within seminars must promote feelings of trust among its members. However, this environment must also allow for dissent and conflict as students explore ideas. Giroux and Penna (1977) correctly point out that emancipatory learning experiences cannot exist in conventional top-down pedagogical structures. Raising "substantive issues" is no guarantee that students will become reflective. Seminars must create environments that are both supportive and challenging.

Since the vast majority of students are primarily concerned with meeting the demands of the practicum sites, Feiman (1979) and others (e.g. Zeichner,

1981; Sarason et al., 1962; Cohn, 1981) suggest that, whenever possible, reflective discussions should be based upon students' field experiences. For example, specific management or discipline problems could stimulate discussions on the alienation of children, social control versus freedom, and internal versus external discipline. The technical problems of motivating children to finish their work could lead to discussions on the goals of instruction, the value of the curriculum, conceptions of knowledge and learning, the relationship between children's drillwork and factory work in society, and criteria of learning. There are opportunities to raise substantive issues within seminars, especially if educational principles are linked to specific problems. In addition, rather than just criticizing current practices, it is necessary for these discussions to consider the constraints and possibilities for genuine alternatives.

Berlak and Berlak (1981) suggest using the language of dilemmas to help novice teachers face complex educational issues. By using this language, seminar leaders can raise substantive concerns within a practical context and, at the same time, avoid unnecessary defensiveness. It is more productive to have students analyze a dilemma than to push them to defend a particular position. Others suggest the use of ethnographic studies to help students reflect upon their teaching and the education of children. Cohn (1982) describes how ethnographic case studies could be used to link educational research to classroom practice. Students would read case studies of classroom life and then use these studies to reflect upon the practices found in their own practicum experiences. Zeichner and Teitelbaum (1982) describe how students can do ethnographic case studies as part of their practicum and seminar experience. As Salzillo and Van Fleet (1977) suggest, students could perform a dual role in their field experiences. On one hand, they are student teachers; on the other hand, they could become participant observers who critically analyze the social reality of their practicum sites. In this situation, seminars would help students conduct research that is both substantive and practical.

Finally, if we wish to substantially educate future teachers, and not just technically train them, then we need to examine the relationship between theory and practice in our own programs. While the faculty and students within the EEP generally accepted the reflective principles and goals of the seminar, this terminology remained ambiguous enough for individuals to feel comfortable with their own interpretations. The content of seminar meetings depended upon the way in which individuals interpreted these goals and principles. Concepts such as reflection, relevancy, discover-your-own-beliefs, group dialogue, and supportive learning environment took on different meanings within different seminars. This is not to suggest that the problem then becomes one of getting people to accept and act upon the "true" intent of a given philosophy. No matter how noble a set of principles may sound, if that set is rigidly interpreted and forced upon people, it becomes dogma. Nevertheless, on-going dialogue would appear to be a crucial component in an inquiry-oriented teacher education program. Principles should not be taken for granted but continually re-examined. As part of this examination, we need more research that illuminates the complexities of learning to teach. It is important that we go beyond stated principles, goals, and intentions and

explore the empirical reality of teacher education as it unfolds over time. Developing quality teacher education requires more than just a conceptual framework. It is equally important to see how these intentions are interpreted and manifested.

Notes

1. To enhance the reading of this paper, the following word guide is provided:
Educator—one who teaches or supervises students at the college level
Student—one who is enrolled in a college-level teacher education program
Pupil—a child enrolled in an elementary or middle school

2. This lack of research is surprising. Seminars have been fairly common since World War II (Bigelow, 1946) and can be found in 90 percent of student teaching programs in the United States (Yates & Johnson, 1981).

3. During the first quarter, the author spent 40 hours each week conducting field work, which included a daily review of field notes. During the second quarter, approximately 20 hours each week were devoted to writing up results from the initial analysis of field notes, and 20 hours were spent in the field. For a complete discussion of the rationale, theoretical principles, and methods used to collect and analyze the data see Goodman (1982).

4. The Department of Health, Education, and Welfare conducted a survey of disciplinary actions taken against school children in the 1975/76 school year. The EEP was located in one of five states that used corporal punishment as a formal disciplinary action on more than 10 percent of the student body.

5. In his study of "outstanding" teachers, Jackson (1968) concluded that many of these individuals were largely intuitive, rather than rational, in their approach to classroom decision making. Because they did not clearly express their rational justifications for their decisions, it was assumed that they were not reflective. However, it has been a serious mistake among educators to equate intuitive thought with routine thought.

6. These two ways of thinking have been acknowledged in many formulations—for example vertical/lateral (De Bono, 1970), secondary/primary (Maslow, 1971), convergent/divergent (Guilford, 1967). Recent neurological research supports such dichotomies. Some have suggested that the brain has two hemispheres that think in very different patterns. The left hemisphere thinks rationally while the right thinks intuitively (Sperry & Agresti, 1968; Gazzaniga, 1967; Bogen, 1969).

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