Teaching as Moral Reflection: Thoughts on the Liberal Preparation of Teachers.

Teacher educators are becoming increasingly concerned about having a model of teacher preparation. As part of its new standards for accreditation, the National Council for Accreditation of Teacher Education demands that professional education programs adopt a model that explicates the purposes, processes, outcomes, and evaluation of the program. This paper examines the technical and reflective concepts which are prevalent in the literature on teacher education models. The concepts warrant analysis because of the common misconception that they are polar opposites. By proposing a more complex relation, it is possible to generate four different images of teaching and to evaluate the benefits and drawbacks each has for the preparation of new teachers. The four approaches are: technical rationality (competency or performance based models); practical decision making (teachers as reflective decision makers); indoctrination (nonreflectively promoting a belief system about teaching); and moral reflection (deliberative, relational, and critical approaches). The fourth approach, teaching as moral reflection, is taken as the most desirable image for teacher education to promote. Some data are offered about the possibility of teaching reflection and the paper concludes with some thoughts about the importance of reflection occurring within community. (Contains 55 references) (SM)
Teaching as Moral Reflection: Thoughts on the Liberal Preparation of Teachers

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INTRODUCTION

Teacher educators are becoming increasingly concerned about having a "model" of teacher preparation. Not too long ago, teacher education programs could claim to be adequate by requiring a traditional combination of courses in general education, a specialty area, and professional education leading up to field experience. But those days seem to be disappearing.

As part of its new standards for accreditation, the National Council for Accreditation of Teacher Education now demands that "professional education programs have adopted a model(s) that explicates the purposes, processes, outcomes, and evaluation of the program" (NCATE, 1990, p. 45). For those who are baffled by such a requirement, NCATE offers a definition and examples in its glossary.

Teacher education scholars have long been proposing such unifying themes and concepts for teacher education programs. In 1983, Zeichner identified what he called four alternative paradigms of teacher education: behavioristic, personalistic, traditional, and inquiry-oriented. More recently, Zeichner and Liston (1990) have identified academic, social efficiency, developmentalist, and social reconstructionist reform traditions in teacher education. And Feiman-Nemser (1990) has described five similar conceptual orientations: academic, practical, technological, personal, and critical/social.

The import of these models lies in the belief that the preparation of teachers cannot occur without an underlying image of good teaching (Tom, 1986) and a cohesive "view of teaching and learning and a theory about learning to teach" which "give direction to the practical activities of teacher preparation . . ." (Feiman-Nemser, 1990, p. 220). Critics have argued that the current fragmented approach to teacher preparation does not add up to such a curriculum but rather to specialized "chunks" which lack relationship to one another (Tom, 1986). Because teaching is a complicated activity, prospective teachers must acquire well-organized, conceptual schemas for teaching, a task which can only be accomplished through a well-structured, theme-explicit program (Barnes, 1987).

The purpose of this paper is not to generate yet another way of conceptualizing teacher education models. Neither does it attempt to give a comprehensive overview of all possible models of teaching. Instead it looks at two concepts--technical and reflective--which are prevalent in the literature and often used to describe program models. These two concepts warrant further analysis because of the common misperception that they are polar opposites. By proposing a more complex relation, it is possible to generate four different images of teaching and to evaluate the benefits and drawbacks each has for the preparation of new teachers. After summarizing these four approaches, the paper offers some data about the possibility of teaching reflection and concludes with some thoughts about the importance of critical inquiry occurring in community.
THE TECHNICAL-REFLECTIVE RELATION

A reflective orientation to teaching is often contrasted with a technical orientation (See Figure 1). The technical is generally equated with a teacher's ability to demonstrate prescribed skills and behavior. The emphasis is on performance, often measurable performance, with the teacher's role limited to "piloting" students through a learning process conceived and designed by others (Borko et al., 1984). The reflective orientation focuses on a teacher's or prospective teacher's thinking about that behavior and the context in which it occurs. It emphasizes "the professional judgment needed to adapt or modify those skills in response to student needs and the curriculum goals" (Freiberg and Waxman, 1990, p. 124).

Figure 1: A Dichotomous Relation

Reflective teachers would have the ability to look back on an event and consider it in relationship to its context, to "continually make judgments and decisions about classroom strategies and materials in order to provide effective instruction" (Borko et al., 1990, p. 124). They would make conscious judgments and act upon a situation in a manner consistent with craft, research, political, or ethical knowledge. Reflective teachers could alter their teaching context to a degree, as well as their own behavior to accomplish a desirable end.

Technical teachers would be quite limited in that regard. They would have little basis upon which to make strategic decisions or to consider consequences or alternative courses of action. They would simply have a repertoire of behaviors which are used in a relatively unvarying manner.

Although the dichotomy between technical and reflective is helpful, it actually confounds two independently varying dimensions of teaching. A better way to describe reflective teaching would be in a diagram such as this where you have four distinct quadrants (See Figure 2).
In this view, the contract to reflective is not technical, but non-reflective. And the contrast to technical is ethical or critical. Here, a new descriptor is added (the ethical/critical), and a teacher could be technically reflective, which is impossible to depict in the first diagram.

The first quadrant combines a non-reflective approach to technical preparation and generates an image of teaching or teacher education as technical rationality. In the second quadrant the focus is still on technical preparation but this occurs in a reflective context. The result is an emphasis on practical decision-making. The third quadrant captures approaches which depart from the traditional emphasis on technical preparation. Instead, these would focus on moral, ethical and social aspects of teaching, but in a non-reflective manner. For that reason, the approach would have to be labeled inculcation or indoctrination. The fourth quadrant again emphasizes the social and moral aspects of teaching, but this time reflectively. The metaphor for teaching in this approach would be moral reflection (See Figure 3).

It is this last approach which I believe is the most comprehensive and justifiable approach to teacher preparation, holds the greatest promise as a viable image of teaching, and is most in keeping with a liberal arts tradition, especially when liberal education is conceived of as "preparing the student for active participation in the making of the world (Beyer et al., 1989, p. 14).
However, this topic also provides an ideal opportunity to consider moral dimensions of the teacher/student relationship and issues of equity and fairness. Pre-service teachers should read about, observe and engage in reflective dialogue on such questions as: Are there certain kinds of students who are systematically ignored, not called on? Why does that occur? Is it important to consider the way questions and wait time are distributed? What messages are communicated to students who go through an entire school day, maybe even an entire semester, without the opportunity to engage in classroom dialogue?

In his study of prospective teachers, Hursh (1988) suggests the wisdom of such an integrated approach. Based on his interviews, Hursh argues not only that undergraduate pre-service students can be taught to be critically reflective but also that they cannot even begin to make sense out of teaching without incorporating ethical and critical criteria into their observations, analysis and practice. He argues that that is what they desire to do and try to do, even when their courses do not encourage critical reflection.

CONCLUSION

The last aspect of reflecting teaching I would like to briefly discuss, and which I have already alluded to under connected teaching, is the importance of reflection taking place within community. Another way of say that is, rather than reflective teachers, we need schools with reflective cultures, a formidable task given what we know about school contexts. But a community context for reflection is necessary because individual analysis needs to be confirmed, challenged, expanded, and refined; it needs to be stimulated to new understanding (Cinnamond and Zimpher, 1990). This best occurs in an open-dialogical community, such as a school faculty, or, better still, a group of parents, students and faculty, where a diversity of opinion is present and cognitive dissonance bound to occur.

Individual reflection too easily becomes closed in on itself, producing either a practical decision-maker or an ideologue rather than a moral and critical pedagogue. School expectations and values need to be mutually constructed. Cinnamond and Zimpher (1990) argue not only that reflective teachers should dialogue with community, but that they have a duty to dialogue with community. The import of this duty becomes apparent when one remembers that teaching as moral reflection implies a commitment to action. For critical theorists in particular, reflection is not for the purpose of mere understanding, but rather for the purpose of collective social action--action which seeks to emancipate the group from the dictates of irrational or unjust habits, customs, and social relations.

What I have basically argued, then, is that all professional knowledge for teachers should be presented in a manner which encourages critical reflection on school practices; technical content needs to be rooted in ethical and critical considerations; carefully selected strategies infused throughout professional preparation can facilitate reflection; and reflection should take place in dialogical communities for the purpose of emancipatory action.
Endnotes

1) Some of these programs ask students to determine whether or not their actions match the performance criteria on the observation instruments. I do not regard this as a form of practical decision making since it is a straightforward application of an external standard. Once coding procedures are understood, little professional judgment is required. Teaching knowledge is not regarded as complex, uncertain, or situation specific.

2) See Apple (1982, 1986) for further analysis of technical control over and the de-skilling of teachers.

3) Initial research evidence from Michigan State's thematic programs supports this claim (Barnes, 1987).

4) "The Free Enterprise System is Working" was actually taught in a slogan-like way through bulletin boards, clubs, and vocational education courses in a school I studied (Valli, 1986). Yet I doubt that these teachers would ever think of themselves as ideologues. They probably would have a hard time believing they were indoctrinating rather than educating.

5) It is impossible for me to imagine any teacher preparation without a value-orientation. Competency-based programs, for instance, are based on the value of "scientific" knowledge about teaching and can inculcate a narrow range of behavioral prescriptions for teaching.

6) This claim is supported by Belenky et al. (1986).

7) For further examples see Valli (1990).
References


NCATE (1990). Standards, procedures, and policies for the accreditation of professional education units. Washington, DC


Technical Rationality

Often referred to as competency or performance based models, programs which foster technical rationality are based on "positivistic epistemology and behavioristic psychology" and emphasize "the development of specific and observable skills of teaching which are assumed to be related to pupil learning" (Zeichner, 1983, p. 4). The goals of such programs are to transmit those principles and procedures which form a scientific basis for teaching, and to help prospective teachers master the knowledge and skills of teaching so that they are proficient in basic teaching tasks (Feiman-Nemser, 1990).

As an indication of the continued popularity of this approach, over half of the 29 teacher education projects funded by the U.S. Department of Education in 1985 had skill development as the primary orientation of their funded improvement projects (NETWORK, 1987). Intended outcomes of these programs included mastery of explicit teaching and classroom management skills, demonstration of teaching competencies as measured by the Mississippi Teacher Assessment Instruments and the Florida Performance Measurement System, knowledge and use of principles from research on tracking and effective teaching practices, and ability to demonstrate the 112 effective teaching behaviors that are the focus of the Kansas teacher assessment instrument.

Berliner (1988) recently encouraged this type of technical preparation for beginning teachers. Comparing the developmental stages and needs of novice and expert teachers, Berliner suggests the "struggle to develop reflective practitioners, sensible decision makers, and proficient problems solvers" is a more proper goal "for teachers who are more experienced than the
Novices” in preservice programs (p. 26). Although he denies recommending “a narrow form of job training” (p. 27), he warns against presenting too much material to pre-service students, advocating instead a focus on following scripted lessons, observing and classifying classroom phenomenon, and practicing classroom routines. Teaching skills like decision-making and priority setting, Berliner argues, are better left until the developmental stage of competence is reached—somewhere around the third year of teaching.

Although the development of perceptual and management skills is an obvious necessity for beginning teachers, I have two reservations about delaying the reflective aspects of teacher preparation. The first reservation is that given schools, school-systems, and staff development as they now exist, it is hard to believe that systematic attention will be paid to problem solving, decision-making and priority setting during in-service years (Little, 1985; Wildman and Niles, 1987; Clift et al., 1990).

Nor can we rely on teachers’ natural development to attain these goals. Berliner himself states that only modest numbers of teachers arrive at the proficient stage of development. Yet it is precisely this stage which is characterized by deliberative or reflective action. Narrow skill preparation in the pre-service years could be further justification for states and school systems to mandate competency based curriculum and top-down accountability systems. Legislators could say that teachers have not been trained to think about their practice; that all they do is execute what someone else has conceptualized for them.2

My second reservation about limiting pre-service education to practicing prescribed skills is that such concentration might actually inhibit the development of critical judgment. Although he has been criticized for being overly deterministic (Johnson, 1979; Therborn, 1980; Valli, 1986), Althusser’s (1971, 1973) point about the impact of practical ideologies is significant here. We, quite literally, become what we do. Practices and rituals which we perform on a routine basis shape our consciousness and subjectivity. These “practical ideologies” tend to set the range of what we view as desirable and possible. If teacher education programs promote the narrow, imitative, and technical aspects of teaching, graduates of those programs are quite likely to have a narrowly delimited vision of being a teacher as someone who skillfully carries out her or his craft, a mere technician. If teacher education programs have a strongly articulated orientation, they can habituate students to the future roles they will play.3 Otherwise, students might later resist more critical forms of thinking as outside their purview.

Thus, I would reject a non-reflective, technical preparation of teachers and would reject technical rationality as an appropriate image of teachers for two similar reasons: teaching is too complex and situation specific for good teachers to be merely rule-followers (Schon, 1987) and teaching is fundamentally a moral responsibility, not a technical skill (Tom, 1984). To restrict preparation or thinking about teaching to technical questions, seriously distorts the nature of the practice.

Practical Decision-Making

In the next quadrant, teachers are reflective decision-makers. They do analyze their own activity and the consequences of those actions—but only within the bounds of pre-established goals. Cruickshank’s Reflective Teaching program is perhaps the most widely known example of this approach. Cruickshank & Associates developed content, objectives and evaluations for 36 Reflective Teaching Lessons. The strategies are left up to the users. Small groups of teachers and learners concurrently teach identical content and objectives and use identical assessments of achievement and satisfaction. The whole group then discusses the teaching-learning experience—the assumption being that common reflection on experience provides useful insights for the
improvement of teaching. Reflection is implicitly defined here as the retrospective comparison of the effectiveness of different teaching strategies (Cruicksnank, 1985).

Programs which emphasize practical decision-making fall into what has been called the small arena of the problematic (Tom, 1985). Decisions are made within that relatively narrow scope of inquiry which we call the teaching-learning process. They include matters of instruction, instructional design, individual differences, group processes and dynamics, student motivation, discipline, and classroom organization. Besides a practical decision-maker, this type of teacher could be called self-analytic, a problem-solver, hypothesis maker, self-monitoring, or adaptive (Zeichner, 1983; Tom, 1985). These teachers attempt to make sense out of phenomena which they find puzzling or perplexing (Grimmett et al., 1990). They question classroom phenomena which technical teachers would take for granted, choose among alternative ways of framing problems and dilemmas, and assume responsibility for those choices (Schon, 1983; Ross, 1989). These teachers are not merely skilled in routines. They do not simply follow habit, example, or tradition. Rather, in Dewey's words, they are thoughtful about theories and principles of education (Dewey, 1904/64).

The limitation of this approach to reflection and the reason it does not function as a comprehensive image of teaching is that it leaves the goals, social context, and often even the curriculum content of education unexamined. In this approach, "reflection is viewed as an end in itself" rather than "a means toward the development of ethical judgments, strategic actions, and the realization of ethically important ends" (Liston and Zeichner, 1987a, p. 127).

In its most extreme version this approach communicates that the role of the teacher is to accept educational goals and social structures as they exist, that a teacher's sole function is to manage instructional resources in the most effective way possible to meet taken-for-granted goals. But by taking goals for granted, teachers become mere instruments of preserving current social arrangements. Particularly for those who find oppression, inequality, or injustice embedded in race, class or gender relations--which then make their way into the classroom--this would not be a viable orientation to teaching or teacher education.

Indoctrination

A third possible orientation to teacher education is that of indoctrination: strongly but non-reflectively promoting a belief system about teaching. A distinction made by C. Wright Mills over 25 years ago is helpful in portraying this approach. Mills argued that there are three types of believers--vulgar, sophisticated, and critical (Paul, 1987). Vulgar believers operate only with stereotypes and slogans: Power to the People, the Free Enterprise System is Working, and so forth. They have no interest in listening to opposing arguments, or even in analyzing their own beliefs. Sophisticated believers are interested in knowing opposing points of view, but only for the purpose of refuting them. They are still not open to the possibility that their own belief system might be flawed: based on inadequate evidence or logical argumentation. Their concern is only in furthering their own point of view.

Teachers and teacher educators who are vulgar or sophisticated believers would hold fast to certain positions. These positions could range from things like promoting direct instruction, assertive discipline, or creationist science to denouncing all tracking systems, special education, or student testing as inherently racist, to claiming that all Catholic schools are better than public schools. These believers can range from ultra-right to ultra-left to mainstream in political views. What they have in common is a lack of openness to modifying a position, considering alternatives, or sources of evidence. They have closed world views which they attempt to impose on others.
Indoctrination is so contrary to ideals about liberal education in a democratic society that it is difficult to imagine teacher education promoting it. As Richard Paul (1987) said in an article on dialogical thinking "Instruction that does not further the development of human rationality, though it may properly be called training, is not education. The cultivation of the educated mind and person presupposes the cultivation of rational skills and passions. Insofar as school furthers, utilizes, or reinforces irrational belief formation, it violates its responsibility to educate" (p. 131).

Yet teacher educators have voiced concern about the possibility of indoctrinating rather than reflectively educating future teachers. This concern was expressed as early as the 1930's over the social reconstructionist movement (Tom and Valli, 1990) and continues today in various forms. Does the prescription of a specific value orientation or moral stance entail inculcation (Tom and Valli, 1990)? Are prospective teachers indoctrinated if programs fail to present a plurality of morally defensible positions or unduly limit the examination of alternative perspectives (Liston and Zeichner, 1987a; Liston and Zeichner, 1987b)? Are they indoctrinated if teacher educators fail to make explicit the political agendas they hope to advance (Ellsworth, 1989)? Although these concerns often arise about radical pedagogy, they apply to any form of pedagogy which is implicitly or explicitly based on a value-orientation.5

**Moral Reflection**

In contrast to vulgar and sophisticated believers, Mills describes critical believers. These believers are willing to enter sympathetically into opposing points of view because they can recognize weaknesses in their own. They learn from criticism and understand that a belief system needs to be refined by a fuller and richer consideration of available evidence and reasoning. They desire exposure to the best thinking in alternative points of view and realize that interpersonal and social issues generally have "important values lurking in the background" (Paul, 1987).

In this quadrant falls the type of teaching I call moral reflection, the only one I find to be an appropriate image for teachers. Although there is considerable diversity and overlap, three approaches are found here: the deliberative, the relational, and the critical (Valli, 1990). Each is concerned with helping prospective teachers reflect on the moral aspects of teaching and assumes that educational decisions are inevitably based on beliefs, however tacit, about what is good or desirable.

The deliberative approach encourages thoughtful consideration of educational issues. Prospective teachers are made aware of and reflect upon "the ethical decisions implicit in ordinary classroom instruction" and analyze "the purposes of schooling and the political and moral choices implicit in routine teaching decisions" (Kleinfeld and Noordhoff, 1988, p. 10). Those who view teaching from this perspective are concerned about the rightness of conduct and about general questions of value, of what really matters in life (Tom, 1984).

Since schools are compulsory and students have less power than teachers, one key moral dimension is the student-teacher relationship. Another moral dimension is the curriculum. The moral argument is that the selection of content should not be random, but based on the identification of a worthwhile direction for learning. (Tom, 1984). From this moral perspective, reflective teachers would consistently monitor the rightness of their conduct in relation to students and would develop curriculum with a conception of the most desirable, worthy end. The determination of what is "moral" is left up to the individual teacher's judgment—as it is constrained and shaped by community consensus. The moral is intuited or guided by tacit conceptions of value.
The relational approach also involves some moral deliberation. However, it is primarily rooted in relatedness and responsiveness rather than reasoning (Valli, 1990). One example of this moral orientation is Nel Noddings' (1984) Caring: A Feminine Approach to Ethics and Moral Education. In Noddings' view the teacher is a care-taker whose job it is to reflectively apprehend the reality of the student, the "cared for." This type of moral reflection, in which the focus is on the whole student, stands in stark contrast to reflecting on teacher effectiveness research, where the focus is on discrete teacher behaviors within pre-determined ends. A caring teacher would be less concerned that students do well on achievement tests and more that they "support worthy institutions, live compassionately, work productively but not obsessively, care for older and younger generations, be admired, trusted, and respected" (Noddings, 1987, p. 10).

Proponents of the third approach, the critical, argue that as social institutions, schools help reproduce unjust class, race and gender relations, and that teachers must reflect on and help change teaching practices and school structures which perpetuate such arrangements. The purpose of teacher preparation, for critical theorists, would be assisting their students to understand how schools contribute to an unjust society as a basis for developing skills and dispositions for emancipatory action (Valli, 1990).

Reflective programs based on a critical perspective promote a vision of schools as sites for personal empowerment and social transformation. They challenge students to examine their assumptions and biases in order to break through the limits of conventional thought (Zeichner, 1981-82). Students are technocratic approaches to teaching, and view schools from the perspective of those who benefit from them the least (Beyer, 1984).

Like all approaches to teacher education, none of these is without its critics. The deliberative approach to moral reflection has been criticized for overly relying on everyday notions of right and wrong and not being more grounded in a range of moral philosophies (Liston and Zeichner, 1987b). The relational approach has also been faulted for its potential to exploit caregivers (most often women), for equating caring with naturally feminine work, and for its silence on questions of power and oppressive structures (Diller, 1988). The last perspective, critical theory, has been criticized for presuming the existence of a teaching force disposed to radical politics and for its tendency to border on the inculcation of a particular world view.

Despite these criticisms and the diversity which exists among the deliberative, relational and critical approaches, I believe that teaching as moral reflection is the most desirable image for teacher education programs to promote. It does not disparage teachers' intellectual capacities by turning the teacher into a mere technician; it properly situates the role of the teacher in the moral arena; and it makes explicit the role of the school in reproducing or transforming social relations.

TEACHING MORAL REFLECTION

Whether or not reflection can be taught is a point of considerable controversy. The research findings of Perry (1968) and Kitchener and King (1981) suggest that reflection is developmental and that college students seldom reflect at higher levels. They seldom use logic and evidence in making decisions, in differentiating between conflicting positions, or in modifying their judgments.

For fear of reducing reflection to merely one of many skills teachers have in their repertoire, critical theorists also warn against proposing it as a simple skill which can be taught. They would rather see the concept of reflection conveyed as a general disposition toward teaching which organizes one's actions. This disposition has been described by Dewey as
openmindedness, wholeheartedness, and a sense of personal responsibility (Zeichner and Liston, 1987).

Nonetheless, there is evidence from a number of sources that reflection is not merely developmental and that teaching pre-service teachers to reflect need not be reductive, but can actually assist reflective dispositions (Korthagen, 1985; Zeichner and Liston, 1987; Valli and Taylor, 1989).

A recent review of the literature by Ross (1987) indicates that capacity for reflection is not merely a function of age, but a function of both age and educational experience and that critical reflection can be developed by carefully selecting strategies which teach reflection as a unitary, holistic construct, not as a sequentially ordered set of discrete skills. These strategies include communicating that knowledge is socially constructed, modelling reflection, and providing guided practice in reflective thinking and teaching.

Another literature review gives evidence that action research is one strategy which can foster a disposition toward reflection (Noffke and Zeichner, 1987). The authors found that student teachers who engage in action research projects develop more elaborated and differentiated definitions of their concerns. In addition, one of the studies in the review indicated that reflection can become a long-term habit, with teachers more critically evaluating their personal solutions to the teaching problems they encounter.

Analyzing data from a fifth year rural Alaska program, Kleinfeld and Noordhoff (1986) similarly report considerable growth in students' ability to reflect on their thinking and to identify potential improvements in their lessons. Students increase their ability to imagine the context in which they will be teaching and to adapt the lessons to that context. There was also evidence that students were more able to identify culturally appropriate objectives.

Another study, of a deliberative approach to reflective teaching, indicates that with structured activities throughout their professional preparation and frequent supervision, students increase their awareness of the complex classroom environment, see the relatedness of seemingly isolated classroom phenomena, start to own teaching problems rather than displacing them on students, and begin to resist pulls toward a custodial, authoritarian teaching style (Valli, 1989).

In a study of a preservice program, Hursh (1988) also discovered that teacher education students show evidence of incorporating practical, ethical and critical thinking into their reflection about teaching as they participate in classes, even when faculty led discussion do not support, reinforce, or push students in that direction.

The 135 interviews in Women's Ways of Knowing (Belenky et al., 1986) also strongly suggest that a certain kind of teaching, which the authors call connected teaching, facilitates personal growth and reflection. Connected teaching acknowledges and builds on people's existing ways of knowing so that learners reflect on their current knowledge and on alternative viewpoints in order to deepen that knowledge.

Richard Paul (1987) indirectly supports this point when he says that it is only by bringing out a student's own ideas in a dialogical setting that the student can begin to reconstruct and progressively transcend partial, limited, or distorted conceptions. He says that "as long as school learning is simply superimposed on .. . activated ignorance, that ignorance will continue to rule .. . and scholastic learning will remain largely inert" (p. 134).
Few teacher education programs yet have a strongly articulated and implemented reflective orientation throughout all program components: foundations courses, methods courses, assignments, student teaching, supervision conferences, and so forth (Zeichner, 1987). Until reflection is consistently implemented at a programmatic level, it is impossible to argue that pre-service teachers are incapable of moral reflection. Perhaps they have just not been prepared or have not been given the opportunity to reflect.

One relatively simple way to begin an articulation among program components is to consistently embed consideration of what are typically regarded as "technical teaching skills" within their moral and social context—in other words, to engage with pre-service teachers in moral and critical reflection over technical concerns.7

Although technical and moral knowledge should be kept definitionally distinct, they should not be treated as unrelated. Teaching knowledge is now too often conveyed as value neutral (Noddings, 1987). Technical, "how to" questions are portrayed as ends in themselves, giving the mistaken perception that they are value-free. This technical, reductionist tendency pushes the social, political and cultural aspects of schooling to the periphery and concentrates on pedagogical and behavior management techniques.

"How to" questions, which are rooted in the instructional and management sources of teaching knowledge, should be presented in the context of an subordinated to questions of goals, purposes, values and meanings, which have their roots in the social context of schooling (Valli and Tom, 1988). My proposal links the categories of practical decision making and moral reflection and overcomes the conceptual dichotomy in teacher education, symbolized by the distinction between foundations and methods courses but a distortion of the way teachers engage in practice. Let me give some examples.

A recently published conception of reflective teacher education is a set of "pedagogical questions" which revolve around the enduring problems of teaching (Tom, 1987). Separate sets of craft and moral questions are offered, however, suggesting that there is no overlap in craft and moral considerations.

An example of a proposed craft question is "How can I develop learning environments which entice youngsters to want to learn a particular topic or skill?" It is a "how to" question, a question of technique. A proposal moral question is "Is a particular topic significant enough for me to compel a youngster to learn it?" Although this question has a clear relationship to the craft question, the relation is never made explicit.

Preparing teachers for moral and critical reflection can be facilitated by treating technical questions with their broader social and ethical context. If pre-service students are asked to reflect on the technical question of creating learning environments which entice youngsters, they should simultaneously have to deal with moral questions like: How can I be reasonably sure that what I am enticing students to learn is worthwhile? Can different types of environments equally entice, but have unequal moral bases (such as different amounts of stress, a different locus of control, competitive vs. cooperative task structures, etc.)?

Or take the topic of teacher questions. This can be, and I suspect often is, taught at a purely technical level. Students are taught how to construct lower and higher order questions; how to unobtrusively call on a student to regain attention; how to promote multiple responses; how to use prompting techniques; and how to avoid multi-focused questions. These are all important skills.