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AUTHOR Garmon, M. Arthur
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ABSTRACT

This paper reports the findings of a year-long study of 11 preservice teachers' perceptions of the first year of a teacher preparation program. These students were interviewed individually at least four times, and reported that learning concrete teaching methods was one of the most valuable aspects of their preparation because these methods could be used in their own teaching, because they served as illustrations or examples of teaching possibilities, and because they facilitated the students' understandings of concepts they were being taught. Students also valued having opportunities to work in classrooms because these experiences helped to familiarize them with teaching practices, gave them firsthand knowledge of pupils, contributed to their knowledge of their own beliefs and abilities, and enabled them to see theory being put into practice. The aspects of their preparation which they identified as most unsatisfactory included the heavily theoretical nature of their courses, inadequate opportunities for spending time in classrooms, insufficient instruction in classroom management, and some instances of poor quality instruction. The paper concludes with a discussion of the implications findings might have for teacher educators. An appendix provides mid-year and end-of-year interview questions. (Contains 30 references.) (Author/LL)

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M. Arthur Garmon

Michigan State University

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Abstract

This paper reports the findings of a year-long study of eleven preservice teachers' perceptions of the first year of their teacher preparation program at a large Midwestern university. These preservice teachers reported that learning concrete teaching methods was one of the most valuable aspects of their preparation because these methods could be used in their own teaching, because they served as illustrations or examples of teaching possibilities, and because they facilitated the students' understanding of the concepts they were being taught. Students also valued having opportunities to work in classrooms because these experiences helped to familiarize them with classrooms and teaching practices, gave them firsthand knowledge of pupils, contributed to their knowledge of their own beliefs and abilities, and enabled them to see theory being put into practice. The aspects of their preparation which they identified as most unsatisfactory included the heavily theoretical nature of their courses, inadequate opportunities for spending time in classrooms, insufficient instruction in classroom management, and some instances of poor quality instruction. The implications that these findings would seem to have for teacher educators are discussed.

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Preservice Teachers' Perceptions of the First Year of a Teacher Preparation Program

The preparation of teachers is a problem that has received increasing attention from educators and policymakers during the past ten years. Reviews of recent research on preservice teachers (Koehler, 1985; Carter, 1990; Kagan, 1992) indicate that a considerable number of studies have focused on assessing the growth of their knowledge and/or the changes in their beliefs about teaching. In addition, much has been written about what prospective teachers need to learn and how they should learn it (e.g., Holmes Group, 1986; Reynolds, 1989; Goodlad, 1990). However, comparatively little attention has been given to prospective teachers' perceptions of their preparation programs. Erickson and Shultz (1991) have observed that "Neither in conceptual work, nor in empirical research, nor in the conventional wisdom and discourse of practice does the subjective experience of students as they are engaged in learning figure in any central way" (p. 466). While Erickson and Shultz were discussing precollegiate education, their observation seems equally valid in reference to teacher education. A similar concern was voiced by Bronfenbrenner (1976), who criticized educational research in general for affording insufficient attention to phenomenological analysis. He argued that "the impact of the setting cannot be understood without some information on how the setting, and its various elements, were perceived by the participants" (p. 25). The implication is that focusing only on the structure and content of teacher preparation programs and attempting to assess changes in preservice teachers' knowledge and beliefs may offer too narrow a perspective on the problem; we also need to understand how prospective teachers perceive the preservice experience itself. How do they regard their teacher preparation program? What do they consider to be the most and least valuable aspects of the experience? What are their primary concerns, and to what extent are these concerns addressed during their program? Securing a group of preservice teachers' answers to these questions provided me with valuable firsthand insight into how they experience the first year of their teacher preparation program, insight which should prove helpful in my future work with preservice teachers.

The perceptions of practicing teachers and recent graduates of teacher education programs have most often been assessed via follow-up survey instruments, and these surveys have revealed that many respondents believe that their teacher preparation programs were inadequate (Stone, 1987; Smylie 1989). However, Galluzzo and Craig (1990) have suggested that the survey method may not be the best one for obtaining teachers' perceptions of their preparation, and Kennedy (1991) has also raised some legitimate questions about the utility of this methodology. Needed are efforts to employ other approaches to gauging teachers' perceptions. The present study, employing interviews rather than questionnaires and being longitudinal rather than cross-sectional, represents such an effort.

The purpose of this paper is to report the major findings from a qualitative study of eleven preservice teachers during the first year of their teacher preparation program. While the findings presented are not completely new to the field, this study does provide another illustrative case of how prospective teachers evaluate their preparation programs. Student perceptions of the strengths and weaknesses of their preparation, as well as the rationales underlying these perceptions, will be examined. The implications that the findings of this study would seem to have for teacher educators will also be discussed.

Procedures

The major goal of this study was to gain an understanding of how a selected group of prospective teachers perceived the first year of their teacher preparation program. To achieve this goal, my attention was focused on identifying 1) the personal and background characteristics of the students that may have had some influence on how they perceived their teacher education program, 2) the students' values and beliefs about what teaching is, what it requires, and what it means to be "prepared," and 3) the students' perceptions of the courses and experiences they underwent as part of their program.

Participants

The participants in this study were eleven first-year teacher candidates enrolled in a teacher education program at a large Midwestern university. Ten of the eleven students had been enrolled in my section of an introductory educational psychology course during the fall of 1991. A brief description of the participants is provided in the table below.

NAME	GENDER	AGE	TEACHING AREA
Carolyn	Female	21-23	Elementary education
Dan	Male	21-23	Secondary education - biology
Denise	Female	21-23	Elementary special education
Julie	Female	21-23	Elementary education
Karen	Female	21-23	Elementary special education
Linda	Female	21-23	Elementary education
Marcia	Female	24-26	Elementary education
Mark	Male	27-29	Junior high special education
Patricia	Female	21-23	Elementary special education
Rita	Female	21-23	Elementary education
Sharon	Female	21-23	Elementary education

Though these students seemed to be typical first-year teacher candidates in most respects, the representativeness of the sample was not a factor in its selection. There were several reasons for selecting this particular group of students. First, I believed that having already established a relationship with these students would make it easier for them to be open and honest about their perceptions and concerns. Second, I already had available a significant body of written report data in the form of the journals and papers that they had done for their fall term education courses and believed that it was quite likely that these writings had captured many of their initial perceptions and concerns relative to their preparation for teaching. Third, these eleven individuals seemed especially interested in preparing themselves as well as possible for teaching and had each expressed an eagerness to meet with me regularly to talk about their experiences.

Program

All participants were enrolled in the Standard Program, which was the largest of five different professional education programs offered by the university. Most students were required to take an introduction to teaching course, an introductory educational psychology course, a course on school and society, and eight different methods courses. The program concluded with a semester of student teaching. Course requirements for students with special education or child development majors were slightly different. Also, the one student in secondary education was required to take fewer methods courses.

Data Collection

Each participant was interviewed individually a minimum of four times at approximately one-month intervals during the winter, spring, and summer terms of 1992. In two interviews (typically the first and last) students were asked to respond to a predetermined list of questions (see Appendix), but the other interviews were essentially unstructured. The first structured interview had the dual purpose of obtaining additional background information on each participant and assessing his/her present beliefs about teaching. The second structured interview was intended to assess any changes in the students' perceptions over the course of the year. The primary data source for the study was the monthly interviews with the participants, which were audiotaped and then later transcribed for analysis. These monthly interviews were unstructured and free-flowing, with students being encouraged to talk freely about their courses and experiences and what they were learning from them. Specifically, I sought to understand not only the students' perceptions of the courses and related experiences comprising their teacher preparation program, but also their conceptions of what it means to be "prepared" for teaching. In addition, students were asked to identify and talk about any experiences outside their formal program which they perceived as having some influence on how well prepared they felt. A secondary data source were student writings. I retained copies of students' journals, papers, and exams from my fall term educational psychology course, and students were asked to share copies of any writings done for other classes throughout the year which might provide insights into their thinking and beliefs about teaching.

Data Analysis

The data for this paper were drawn primarily from the two structured interviews. Each of these interviews were transcribed and then analyzed for patterns (defined as similar responses from at least three participants) and major themes (defined as similar responses from six or more participants). Similar responses were defined as statements from two or more participants which clearly related to the same idea (e.g., having opportunities to visit classrooms, insufficient instruction in classroom management, etc.) though were perhaps worded differently. Next, the unstructured interviews and students' journals and papers were analyzed for additional data relevant to the patterns and themes previously identified. Due to the mass of data collected, I decided to separate the reporting into at least three separate papers, the present one being devoted solely to students' perceptions of the strengths and weaknesses of their first year program. (Another paper will identify changes in students' beliefs about teaching during the course of the year, while the third paper will discuss factors that may have impeded student learning.) In preparing this report on the data, I included a large number of quotations (subjected to minimal editing) from student interviews and writings with the express intent of allowing the students to present their perceptions in their own words.

Results/Discussion

To their teacher preparation program, each of the eleven participants brought different personality characteristics, a different personal history, and a different blend of beliefs about teaching. During the first year of their program, they enrolled in many of the same courses but took them in different sequences and usually with different instructors. And yet, despite all of these individual differences, I found a high degree of agreement among students in their perceptions of their program. Although there was considerable variation in the students' overall assessments of their program (i.e., ranging from mostly positive evaluations to mostly negative evaluations), there were several particular aspects that were judged either positively or negatively with remarkable consistency from student to student. Two specific aspects of their preparation were cited by nearly every student as having been most valuable to them, while there were four areas that were identified again and again as inadequacies of the program.

Most Valuable Aspects of Preparation

This group of teacher candidates began their program with high expectations that they would learn specific techniques of teaching. The students were unanimous in their belief that being prepared for teaching means having a good grasp of specific teaching methods and procedures, and this perception did not seem to change appreciably over the course of the year. The students' responses to the end-of-year interview questions indicate that their initial expectations appeared to be the primary criteria used in judging the value of their program. In other words, most students seemed to be satisfied with their preparation to the extent that they felt they had learned practical teaching methods. Not surprisingly, therefore, students reported without exception that the two most valuable aspects of their preparation were 1) learning concrete methods that they could actually use in the classroom and 2) having opportunities to work with children in actual classroom settings.

Learning Concrete Methods

All eleven students asserted that one of the most valuable aspects of their program's first year was learning specific methods and teaching techniques. They seemed to value most learning those things which they could see as being readily useful in the classroom. This focus on immediate practical applicability reflects the students' overriding desire to learn what to do when they face children in the classroom. What all of these students evidently wanted and expected to learn from their education courses was the nuts and bolts of teaching, that is, the procedural knowledge that they would need to step into a classroom and start teaching. Many seemed to feel that if they were not learning specific methods, then they were not learning to teach. Approaching their education classes with this mindset, most of the students could see little, if any, value in the less practical aspects of their courses. In fact, they seemed to attribute value to a particular course in direct proportion to the perceived practicality of the ideas presented in the course, a tendency illustrated by the remarks of several students.

> One way I felt, like, better prepared is that a couple of my classes have given more of, like, methods you can use in the classroom instead of just theory. Like 450 was just a lot of theory, and there's not much you can do with that anyway, you know. It's just School and Society, but I do feel that one of the good things was that there's been a couple of classes that have really centered on methods and getting you started and what you can do to prepare and get things ready. [Sharon, 6/15/92]

> I'm supposed to be taking all these methods classes this year, and really truly the only methods class I took that I'm actually coming away with any concrete, you know, ideas or sample units or whatever is my math methods class. . . . we had to make things, make up our own manipulatives and stuff and I feel like, you know, if I had to go in and teach a math lesson that I would have some supplemental ideas that would be real beneficial, so I feel I can teach math. [Denise, 6/10/92]

Although all of the students placed great value on learning concrete teaching methods, their reasons for doing so were not all the same. For the students quoted above, the specific methods were valued apparently because they could see themselves putting them into practice in a classroom. In contrast, other students appeared to value being given specific methods and techniques not so much because they expected to use those particular methods in their classrooms, but because they regarded them as models or illustrations of what they might do. These students appeared confident that they would be able to generalize beyond the specific examples they had been given.

> I guess what I'm looking for a lot of times from the classes is concrete ideas that at least will, you know, if I don't do that exactly, at least I have an example, and then I can come up with an idea on my own and say, "Okay, this is, you know, sort of like it; it would probably work okay." So I don't feel that something I'm thinking of is totally off the wall or, you know, shouldn't be done. [Marcia, 6/18/92]

> I really think I've learned a lot in my methods classes. I wish they'd given us more actual activities and ideas for activities, 'cause that was one of my favorite things, when a teacher would say, "I have this handout that I use with my kids. It works really well. Would you guys like a copy?" And we always did, and it's nice to have your own little file so, you know, at least you have the idea for it so if you don't use that one, you can at least build off of it for your own grade level. [Rita, 6/2/92]

Yet another reason some students placed such a high value on practical applications is that they apparently enabled them to better understand the concepts they were being taught. In other words, being presented with concrete examples and illustrations seemed to facilitate the students' appropriation of the concepts.

> All my TE classes talked a lot about [conceptual change]. When I got done with that [science methods] course, . . . okay, I understand, but now how do I do that? Tell me how I do that. Give me a lesson plan that does that. Don't tell me to make up a lesson plan that teaches for conceptual change; help me make one that does, so that I know it does this, because when I got all done I could see myself and other people in the class that, if they [were teaching] a science class, they probably would go back to read the chapter and do the test in the back. I mean, after all was said and done . . . I don't think any of us could say, "Well, okay, now I know how to do that to change it." But that hasn't happened in every course. I'm taking a math methods course right now that is excellent. I mean, he gives practical aspects and says, "Look, this is the way you're going to get this through to your kids, and here's why. This is why this is going to work. And don't do this because--," and he'll tell you why, and you'll go, "Yeah, that makes sense, because that's the way a kid at this certain level thinks or that's the cognitive stage he's in, and this is why this is going to work," and there are some TE courses that I've had that were better at projecting that than others. [Mark, 2/28/92]

Other researchers (see Carter 1990; Kagan, 1992) have noted how novice teachers, despite being exposed to innovative methods of teaching during their teacher education coursework, tend to revert to traditional methods when they begin teaching. The explanation generally advanced is that the students' prior beliefs about teaching wash out the effects of their exposure to new methods. Data collected in this study suggest another plausible explanation for this phenomenon: some novice teachers may not employ innovative teaching methods because they don't really understand how to do so, and they fall back on traditional methods by default. These data call into question the apparent assumption of teacher educators that once novice teachers are armed with instructional theory, they will be able to supply the practical details of instruction on the own. For example, Julie was a student who readily accepted the philosophy of teaching math for conceptual understanding, as espoused by her math methods instructor, but she complained that she felt "let down" because her instructor failed to show her ***how*** to teach that way. The information presented was more theoretical than practical, and she did not feel as though she knew enough to actually apply the theory. As a consequence, she said,

> I will probably go with a basal because that's what I'm going to feel comfortable with, for at least the first year, and those students in my classroom aren't going to get anything. They're going to get as much as I got out of math when I was a kid, and I tell you, I didn't get very much. [Julie, 6/15/92]

Likewise, Mark, who was quoted earlier, expressed agreement with the idea of teaching science for conceptual change, but because his methods course had not provided him with sufficiently concrete information about how to teach for conceptual change, he indicated that he would probably teach straight from the textbook, probably for the same reason as Julie. In contrast, because his math methods course had suggested practical applications of the concepts being taught, Mark felt better equipped to teach in that manner. Of course, what happens in his teaching of either subject once he actually gets into a classroom remains an open question, but innovative teaching would seem to be much more likely to occur in math.

Having Opportunities to Work in Classrooms

Another unanimously-valued aspect of the students' first-year experiences was having opportunities to work in classrooms. Courses which provided occasions for students to visit actual classrooms were nearly always more highly valued than those not providing such occasions. In addition, because the teacher education program provided only limited opportunities to work with children, five of the eleven students supplemented their program experiences by serving as volunteers in teachers' classrooms or in daycare centers. When reflecting on the year, these students all reported that these supplemental experiences had been vitally important contributors to

their learning. Students' responses in interviews suggest that there were four primary but interrelated ways in which they had benefited from their experiences in classrooms: first, by becoming more familiar with classrooms and teaching practices; second, by gaining firsthand knowledge of pupils; third, by increasing their knowledge of their own beliefs and abilities; and fourth, by seeing theory being put into practice, whether by themselves or by practicing teachers.

First of all, working in classrooms provided students an opportunity to familiarize themselves with common classroom routines and teaching practices. They reported having had little, if any, exposure to elementary classrooms since their own experiences in elementary school, though three of the students have parents who are (or were) elementary teachers. Understandably, therefore, they had much to learn about the regularities of classrooms from the perspective of a teacher, and they all found that their classroom experiences were very enlightening.

> I think I learn the most when I go into the classroom, like in my [special ed. class], we went in and we got two students, and we taught them once a week, for an hour and a half. . . . We wrote papers about it, and I really felt like then I could see what I was doing and evaluate that. [Karen, 2/9/92]

> . . . going into the classroom and observing teachers kind of answered a lot of questions. You know, to see it in motion, because you hear all these things and this and this and this, but until you really see it, it's kind of hard-- It's just kind of floating up there, and you're like, "That's really ideal. Will that really work?" And you can see that it does work. [Sharon, 3/26/92]

For Denise, volunteering in a special education classroom helped to fill in and enhance the images she had formed from books and other sources.

> I observe them instructing, I observe them teaching, and I see how they interact with the kids. I see different ways, like I read about it in the books. I've learned different ways that she handles the classroom, the way that she has the classroom set up. . . . So, I've learned things about how different classrooms are set up. I've observed, you know, methods of trying to get attention, trying to keep order. [Denise, 4/7/92]

Patricia seemed to garner similar benefits from her experience of observing in a classroom:

> I saw how she managed the classroom, you know, the techniques she used, what she did when the kids, you know, got quiet, and I think I've learned. It's nice being able to see someone actually do it [rather] than just having, you know, to learn about it all [yourself]. . . . It kind of helps to see someone else. [Patricia, 2/19/92]

Students like the four mentioned above, who had the opportunity to work or observe in a classroom on a regular basis throughout the school year, seemed to have a distinct advantage over those students who had few or no such opportunities. These students felt that their field experiences enhanced their learning in their education classes, as Rita explained:

> Because then when you go back to your classes, you have--, you understand a lot more, you can participate a lot more in the class, you can bring insight into the class, rather than learning everything from books. Sometimes the books work, and sometimes they don't. You're in a classroom, you see what works, what doesn't. You see, you see thirty different personalities in one classroom and how they relate and how the teacher deals with them, and one classroom is different from another 'cause the kids are different. And so, there's so much more that--, there's so much that goes on in the classroom, I think every student should be required to see it in action as a prospective teacher, and get ideas from the teachers that are working in that classroom. [Rita, 6/2/92]

In their journals and interviews they frequently drew connections between what they saw or did in the field and what they were learning in their courses. Occasionally, they would also note when something presented in class did not seem to mesh with their experience in the field. In essence, the field experiences seemed to give these students an additional frame of reference for making sense of the information presented in their courses. In contrast, students with limited opportunities to visit classrooms obviously made fewer such connections.

Secondly, the students' field experiences gave them valuable firsthand knowledge of pupils. For the most part, their prior experiences working with school-age children had been limited to babysitting and to interacting with younger siblings and relatives. By having opportunities early in their program to work in actual classroom settings, some students acquired important insights into what pupils are like and how to work with them, insights which are likely to enhance their learning through the remainder of their program. For instance, Julie's volunteer work increased her understanding of kindergartners and first graders:

> I'm in the participatory activities lab; that's just a bunch of learning centers, and like, kids come in, and then they have their reading groups; half the class comes to the lab, and they walk around and they do the activities, and my job is just pretty much to interact with the kids, help 'em with, write things that need to be written down, and stuff like that. And that helps me, that helps me get a sense of where their mentality is, so I know how to relate to them. [Julie, 2/28/92]

When required to develop lesson plans or unit plans for a particular grade level, some students reported having only a vague sense of what pupils at that level were like and of what they might be capable. These students sometimes (apparently depending on the amount of structure and assistance provided by the course instructor) found such assignments frustrating, or they questioned their utility. Other students, like Karen, who had the opportunity to plan and then to present a lesson to a small group of pupils, all reported learning valuable lessons from these assignments.

> Well, I did a lot of, you know, actual hands-on things, you know, where we'd actually plan a lesson and teach a lesson. I think that helped a lot because you can plan to your heart's content and, you know, it's not going to flow in the way you think it's going to flow when you go teach the students. I mean, I had that happen several times. [Karen, 5/28/92]

In an experience similar to that of some of her classmates, Marcia's sustained contact with pupils helped her to realize that she needed to re-examine her thinking about classroom management.

> When I started I sort of had my head in the clouds figuring that management was no big deal and that, you know, I would love these kids, they'd all love me, and we'd all just learn together, and now, you know, with my volunteering and stuff, I go in there and I love these kids and I'm sure they love me, but they're still (laughs), you know, running around and stuff, so I'm realizing. . . . that there's a lot more than, you know, than I'd originally thought for classroom management. [Marcia, 6/18/92]

By realizing early on that "I need more experience and more ideas," Marcia had more time to better prepare herself in that area, as well as having both an experiential base (albeit limited) to draw on and an arena where she could try out new ideas. In contrast, for a student like Carolyn, who had almost no contact with pupils prior to her student teaching, the realities of classroom management came as a rude shock for which she was almost completely unprepared.

A third benefit of classroom experiences was that they enabled students to increase their knowledge of self-as-teacher by allowing them opportunities to test their beliefs, as well as their skills, in a variety of areas. This seemed to be just as true for students who visited classrooms only in connection with their coursework as it was for students who remained in a particular setting for one or more terms, though, obviously, the latter group had many more opportunities to do so. As exemplified by the experiences of Karen and Marcia cited above, students frequently talked about how their observations and experiences in classrooms were influencing their beliefs about teaching and about themselves. In our interviews, they commented on how they had gained new ideas or insights from their observations or how the practices of their teacher did or did not correspond with their own beliefs. In addition, students who had opportunities to manage student behavior or to teach lessons to individuals or small groups were quick to volunteer their assessments of the experiences and to rate their own performances. Not being present to observe, I cannot comment on the accuracy of their self-evaluations, but students seemed as willing and able to identify weaknesses in their performances as they were strengths, and they also identified for

themselves specific ways in which they felt they needed to improve. Even when an experience did not go particularly well, students generally claimed to value having had the opportunity and always seemed to feel as though they had learned something from it.

Finally, the most frequently cited and perhaps the most important benefit of working in classrooms was the students' having opportunities to see theory being put into practice. As noted earlier, the participants in this study nearly always attributed the highest value to those courses which afforded them opportunities to work with children in actual classroom settings. Providing a much-needed bridge between theory and practice, their experiences in real classrooms seemed to contribute significantly to the students' learning. They reported again and again that these experiences facilitated their understanding of the concepts being taught in their education classes. For example, Sharon made the following comment about her math methods course:

> She made us work with kids. . . . we got to go in [a local school] and talk with kids, which was very beneficial because you could see firsthand what she was talking about, and then you could, what we had talked about in class, you could work with in class and work with these kids and see the results, not just from a book or from what this person wrote in this article, but by firsthand experience. [Sharon, 6/15/92]

For Dan, a field experience during the spring term in his science methods course helped him to pull together and better understand some of the theoretical material presented in his courses through the year.

> I mean just for a week, I got to teach, but at least that gave me some idea that sort of involved everything that I've learned throughout the year. I mean, I had, we had a little bit of classroom management in there, because we had to keep 'em in line, and engaging students and motivating students and knowing your subject and, so it just all tied in. . . . Everything--, a lot of things we learned in our classes was theory, and now I could see how that theory, how you could apply it, or how it really works, so I have a better idea of sort of what to expect. [Dan, 6/10/92]

His only opportunity during the year to visit a classroom, the experience proved to be beneficial for Dan in another important way. He was a student who throughout the year had expressed uncertainty about his decision to become a teacher and who had also demonstrated a lack of confidence in his ability to teach. Having the opportunity to teach a small group of pupils in an actual classroom served not only to reassure him about his decision to teach, but also to bolster his confidence in his abilities. It is questionable, of course, whether a single experience constitutes a valid basis for such feelings of reassurance, but for Dan anyway, the one experience provided him more of a basis than what he had before.

In contrast to students like Sharon and Dan, who had only one or two opportunities to visit actual classrooms under the auspices of the teacher education program, Mark was enrolled in a special education practicum during spring term and received a much more intensive field experience. For approximately nine weeks, he spent four mornings a week in a special education classroom and then met twice a week in the afternoon for class. Mark felt that his practicum experience was the most valuable part of his first-year program because it gave him the opportunity to see practical applications of what he was learning in his courses.

> It gives me some real--, for the first time, we're going to, we're in the field so we're going to a classroom and actually applying things that we've talked about in class, which is nice because most of my other TE courses, you don't have that opportunity. You're given the instruction, and the instructor says, "This is the way it is" or "This is what will work," and then you never have an opportunity to find out whether he's right or wrong or not, where this we talk about it, and then you go to a classroom and do it. [Mark, 4/20/92]

All of the participants frequently expressed the desire to actually test the ideas they were being exposed to in their classes, but for the most part, they had few opportunities to do so. In Mark's case, however, in addition to enabling him to practically apply the theoretical material he was

learning, his field experience allowed him to actually test the ideas being taught and to discover those with which he was or was not particularly comfortable.

> . . . you really get to apply some things--, try out some things in the field almost immediately upon learning them, which I think has been really, really good. And some of the stuff, you know, that I've learned I don't like. I mean, you understand that [something] might work for some people but it has not worked for me. But, you know, at least you get a chance to find that out right away instead of, you know, storing all this away and maybe you'll get to use it and maybe you won't. [Mark, 5/20/92]

In earlier conversations, Mark had questioned the usefulness of some of the theoretical material presented in his courses. He had said that even though he agreed with some of the theoretical ideas presented to him (e.g., the conceptual change approach in the teaching of science and the whole language approach in the teaching of reading), he did not feel as though his methods classes had equipped him with the practical knowledge necessary to actually implement these ideas. However, Mark reported that his field experiences enabled him to see the utility of some of the things he had learned earlier.

> We talked a lot about different kind of theories in [Reading Methods], . . . and prior to this, I was, you know, I expressed concern to you about I'm not sure if I'm going to be able to use any of this from [Reading Methods] or not, and now I am now, so in some respects, this has made me feel better about some of the other classes I've had because it is an opportunity that you can say, "See, I read this in [Reading Methods], and I wasn't just reading it for the test, you know. I'm going to use some of this," and I like that. [Mark, 4/20/92]

When I asked Mark to provide a specific example, he explained how in his courses he had heard several times about the concept of activating children's background knowledge, but not until his practicum did he come to truly understand the meaning and the use of this concept.

> . . . that idea of activating background knowledge and, you know, drawing upon that for kids for what they already know. . . ; we talked about that in [Reading Methods]. We talked about that in [Introductory Educational Psychology] actually, some of the activating background knowledge and stuff like that, and now in POSSE we're doing just that. I mean, you start right out by getting kids to predict, and all predictions are really drawing on, if you haven't read anything of the material, it's drawing on what you already know about a certain subject, not necessarily what's in the information, so, you know, it didn't even--, I guess it hadn't dawned on me until, even in POSSE, then all of a sudden it was like, [the instructor said], "You know, some of you might have talked about KWL or DRTA or any of the other programs. Well, this is how they work--, you know, this is how to relate to it." And it's like, <u>finally</u> (laughs), you know. We did learn this for something besides just being able to answer it on the test. In some respects this was the first time that that's happened, for any of my methods courses. You know, my math methods course I liked real well, but we didn't teach a math lesson to anybody. I learned some things that I think are going to work, but I don't know. I never got an opportunity to try it on anybody. [Mark, 4/20/92]

Mark reported that hearing the experiences and the ideas of other practicum students during the class sessions was also very helpful, and he felt that in this course he was more able than in other courses to solicit feedback from his instructor and to thereby benefit from her knowledge and experience.

> We go to the kids' classroom in the morning, and then we have class time in the afternoon. I mean, things that will happen tomorrow in the classroom I can talk about tomorrow afternoon with my instructor, where most of them, gol, you take it and then, you know, my math methods instructor he's gone now. I mean, for practical purposes I don't have any contact with him again and it would be nice to be able to go back and say, "What do you think about this? This is what a kid did," but you don't have those opportunities. [Mark, 4/20/92]

Though their teacher education courses provided them only limited opportunities to visit classrooms during their first year, about half of the participants supplemented them by volunteering their services in area classrooms or daycare centers. These students all reported that these

experiences helped them to better understand some of the theoretical material presented in their education courses. A prime example is Rita, who was able to spend Fridays from January to June in several different classrooms in her mother's school. In our monthly interviews, Rita consistently attempted to make connections between what she was learning in her courses and what she was seeing and doing in the classrooms she visited. For example, she explained how her observations in one classroom had enhanced her understanding of the whole language approach that she had learned in her reading methods course.

> I've seen how the teacher has put into practice everything we've talked about. It's given me assurance that it works and what works and how far I can go with it, and I think I can go farther than this teacher. She's just starting in this, but I can see it in practice and it draws all these loose ends together. [Rita, 6/2/92]

Rita felt strongly that her first year of teacher preparation would have been inadequate had she not, on her own initiative, spent so much time in classrooms. She believed that these experiences had a profound effect on her knowledge of and views about teaching. In her year-end summary she wrote,

> After seeing a classroom with separate reading groups I do not think that I ever want to teach anything other than whole language, thematic, and collaborative learning. I enjoyed my time at [the school] and had a lot of opportunity to talk to different teachers and just absorb information. I was very fortunate that my mother is the L.D. teacher at [the school] and could often give me insight into situations with teachers and students. . . . I often had chances to talk to the two Title One teachers about teaching theory as well as activities that I could do with my students. [Rita, 6/6/92]

Interestingly (but maybe coincidentally), at the end of the year Rita was the only participant who demonstrated a favorable attitude toward the predominantly theoretical nature of her education courses. It is especially interesting in light of the fact that during the fall term, while enrolled in my section of the introductory educational psychology course, she had expressed a pronounced distaste for theory.

> I still see little use for those theories. I guess I know precisely what I want to see in my own classroom and technical theories [of learning] such as those do little more than confuse me. [Rita, 12/3/91]

It seems reasonable to conclude that her change in attitude was, to a significant extent, an outcome of the many opportunities she had to visit different classrooms and to talk with teachers about their practice.

Unsatisfactory Aspects of Preparation

When students were asked to identify inadequacies in their first year preparation, they cited three main deficiencies: courses that were too heavily theoretical, inadequate opportunities to spend time in real classrooms, and insufficient instruction in classroom management. In addition, a majority of the participants indicated dissatisfaction with the quality of some of the instruction they had received. Even the two students who were the most pleased with their first year (Mark and Rita) identified most of these same areas as needing improvement.

Courses Too Theoretical, Not Practical Enough

Repeatedly throughout the year, students expressed their displeasure with the heavily theoretical nature of their education courses. At the end of the year, nine of the eleven students identified this as an inadequacy of the program. They had entered the teacher education program with the expectation that they would learn how to teach, but after the first year they seemed to feel as though they were learning only *about* teaching, not *how to* teach. As one student put it,

> I guess they're called methods courses, and you know, I mean, math, science, reading, and I am not learning how to teach these things. [Karen, 2/9/92]

While students did complain that their courses were too theoretical, they actually did not seem to object as much to the theoretical content itself as to the fact that it wasn't accompanied by sufficient opportunities for practical application. As noted earlier, all of the students valued courses in which theory and practice were well integrated; however, they felt that most of their co ses lacked this kind of integration.

> I think it's really important for teacher education majors, especially for the first year or two that they go out, that they are given some information from their university that is not just theory. I mean it's something you can carry in there and say, "Now, this is what you can do the first week," or "This is what you can do the first year." Because, you know, we get a lot of theory . . . . [Not] until that course [a special ed. practicum] and with limited other courses, did I actually get something that I thought, okay, I can actually go teach this to a kid; this is something specific. . . .
> In some respects, right, I understand that theory is important, and I'm not saying that it shouldn't be there. I just like it when the theory is backed up with practical applications, not elimination of the theory, 'cause I think that's fine. [Mark, 7/23/92]

Students generally reported deriving little benefit from courses which did not offer sufficient practical illustrations and applications. Linda's experience in a reading methods course offers a prime example. According to Linda, the course was primarily a lecture, and she dutifully copied pages and pages of notes during each class session, but in an interview with her more than two-thirds of the way through the course, I discovered that she had actually understood very little of the material presented. When I asked her to tell me what she had learned, she said that she had learned what a basal reader was, that you should have students read for understanding, and that you shouldn't use phonics. However, she couldn't explain how you have students read for understanding or why you shouldn't use phonics. I next asked Linda to tell me what the instructor had said about a number of the topics listed on the course syllabus, but she could remember almost nothing. Finally, I examined Linda's notes and asked her to explain a couple of different statements she'd written. She couldn't tell me what they meant, saying she'd written them down because the professor had put them on the overhead. Though she may sound like a poor student, Linda is actually very conscientious, and by obediently completing all of her assignments and memorizing the necessary information for the midterm and final exams, she earned a grade of 4.0. However, reflecting back on the course, she commented, "I didn't understand what we were supposed to do in there. I was just lost the whole time" (6/1/92). Linda's case clearly indicates that merely presenting students with wonderful ideas and theories in no way assures that they are actually learning them and understanding how to apply them. From this course it is doubtful that she acquired much information that she will be able to use effectively in the future. In her classes the following term, Linda felt that she was learning more because,

> . . . well, my classes this time have given us good examples, told us a lot of their experiences, and that really helps, and they bring us things that they do in their class and show us what to do. That really helps because then you can actually see something. [Linda, 6/1/92]

A number of Linda's peers offered similar comments about the benefits of having practical illustrations of the ideas being presented, including this observation by Rita:

> Whereas the other classes they just give you these ideas, and they leave 'em out there as ideas, but in this class [Reading Methods] you have to do it. I mean, it's part of our grade, so we are putting it into practice, and we learn a lot about the different ways that it works, and we actually get worksheets to help us set it up, and I found those really valuable. [Rita, 3/11/92]

The provision of practical illustrations appeared to make concepts more accessible for the students and easier for them to understand. When I asked one student why she felt her math methods course had been more valuable to her than her reading methods course, she explained:

> . . . 'cause like in the math class I had, you know, we did a lot of--, we interviewed kids, so that helped me know what to look for when I'm, you know, when I'm teaching a math class. This interview made me see these things the kids are asking and I watched a couple of classrooms, so I saw how the kids

> were thinking and stuff, and those were concrete things, so at least I have an idea of what to look for better when I'm teaching the math class. With the reading class I had, we read the textbook and then went into class and re-read the textbook, and I didn't feel that there was a lot of--- We watched some videos, which was pretty good, but it just wasn't the same extent. I didn't feel that I had the same--I don't know--exposure, you know, actually dealing with real life situations and stuff. Textbooks, just--I don't know. I don't care for them. You know, it's fine to read as a supplement, but I don't like a class being completely based on the text. . . . [I like] concrete examples or even, you know, associating the text more with real life classroom situations instead of just memorizing, you know, a lot of terms and stuff, which is what we did. So even if they could just sort of make the connection so you can see how these things are being--, you know, to help us see how they're being used or whatever, and I think that was lacking some. (Marcia, 6/18/92]

In sum, students didn't feel as though they learned as much in courses which failed to make explicit connections between the theoretical ideas presented and their application in real classroom situations.

I would be remiss if I failed to point out that not all practical experiences were equally valued by the students. There was a pattern of comments suggesting that sometimes activities intended as practical applications, if not sufficiently structured and of appropriate difficulty for the students' level of knowledge, were of little value to them and actually elicited feelings of frustration. Students also accorded less value to applications on which they received little or no specific feedback on their performance. For example, students were frequently called on to prepare units or lesson plans in their methods courses. While most students seemed to find these activities valuable, some expressed frustration when their instructors were too vague about how the assignment should be done, when they felt as though they had too little knowledge of pupils to know what would be appropriate for them, or when their work was returned to them with only a grade or with only a few general comments. Denise's response to a reading methods course which incorporated a practical application assignment is illustrative of experiences reported by several students.

> That whole class was kind of a mystery to me. . . . I mean, I had, I had no idea. We had to put this initial assessment kit together where we got to pick the grade. "If you were to walk into a second grade classroom or a third grade classroom, whatever, how would you assess these kids as to their reading level?" Well, I don't know. I've never been in the classroom. I don't know. You're supposed to be this expert teacher who's been teaching for x-amount of years; why don't you tell me what you've done in the past? What have you done? Do you just come in and say, "Johnny, read this"? What do you do? Do you hand out an attitude survey? I don't know. I mean now I have a better idea, but I had to figure this out all on my own, and I got a crappy grade as a result of it because I don't know what I'm doing. [Denise, 6/10/92]

More than simply a matter of accommodating personal preferences, providing appropriate practical illustrations of theoretical ideas appears to be extremely important to student learning and understanding of these ideas. The data collected for this study strongly suggest that when theory is not grounded in appropriate practical applications, students generally have more difficulty making sense of it, especially those students with the most limited exposure to classrooms and pupils. This finding is consistent with Anderson's (1984) notion that a person's schema "provides much of the basis for comprehending, learning, and remembering the ideas in stories and texts." A student who does not have a well-developed knowledge structure in a particular area is likely to have more difficulty comprehending abstract concepts. However, being provided with appropriate illustrations and experiences can serve to expand the students' knowledge structures and thereby facilitate their comprehension of relevant concepts.

Furthermore, when students learn theory disconnected from practice, they may be unable to make the proper connections between the two when appropriate situations arise, and without such connections, one will not be able to inform the other. Mark, for example, despite supposedly learning in earlier courses the concept of activating student's background knowledge, apparently did not discern the relationship between this concept and one of his practicum teaching activities

until it was pointed out to him by his instructor. Maybe eventually the connection would have dawned on him without her assistance, but when? Education courses might well be supplying students with a wealth of potentially valuable information, but little of its value is likely to be realized unless students are also equipped with an understanding of when and how to use it. The evidence gathered in this study suggests that this understanding will not come about as long as students remain as passive recipients of knowledge. Students apparently need multiple opportunities to actively use the knowledge they are acquiring, accompanied by meaningful and specific feedback, in order to see and understand the connections between this knowledge and real classrooms.

Inadequate Opportunities for Spending Time in Classrooms

The second inadequacy identified by the students is very closely related to the first: eight of the eleven participants felt that their program did not provide them sufficient occasions to observe and work in real classrooms. While there was wide variation in the number of opportunities students had to visit classrooms, even those having the most opportunities indicated that they would have liked more. The students all seemed to believe that such experiences contributed immeasurably to their learning.

> I would have wanted more experience in every class; I wish every class would have had a little week where you could go out and teach, 'cause I think that would have really, really helped. . . . putting the theory into practice. [Dan, 6/10/92]

As discussed in the previous section of this paper, the students felt that their coursework was too theoretical and included too few practical illustrations. But they not only wanted more examples of the material's relevance to and utility in the real world of teaching, they also evidenced a strong desire (or maybe a need) to actually see the ideas being applied in classrooms or, better yet, to try them out for themselves.

> I really think that it's important to work with kids, just so you can see it in a more--- It's easy to sit there and listen to the examples, "This is how you would run the classroom, and it's perfect, and blah, blah, blah," but that's not how it is in real life, and you don't even get a chance to interact with the kids and stuff, and I found that really important. (Sharon, 6/15/92)

In addition to wanting to see real life instantiations of the concepts they were being taught in their courses, over and over students expressed a desire for opportunities to test the ideas for themselves to determine whether or not they would really "work."

> I mean, we're just coming through here taking the classes and, like besides those two classes, I mean, you're not dealing with students. I mean, and I think if the kids could--- I mean, if we could be, be with the students more or something to see things if they work or not work or whatever [inaudible]. I hear some of the complaints from people. You know, they wish they were in classrooms more. We learn all these great things, and then, you know, you can't, you can't do it until, you know, you're really a teacher yourself. [Patricia, 2/19/92]

There appeared to be at least one more reason why students wanted more opportunities to visit classrooms. Along with testing the ideas they were being taught, some students also wanted to test their own teaching capabilities.

> I haven't had any time in the classroom to actually teach, so I don't really know how well I'm going to perform in a classroom until I do something like that, so it's kind of hard to say what my strengths and weaknesses are. . . . I don't know how the students are going to like my teaching style or anything like that. I don't know how my mentor is going to like my teaching style. I've never had a chance to practice it anywhere, you know, until I'm just kind of thrown into a [student teaching] situation; that's what I feel like I'm being, just kind of shoved in, and it's scary. [Carolyn, 6/11/92]

> I would like to have gone into the classroom more. . . . .I mean, 'cause you learn a lot more when you're--- 'Cause, you know, we do lessons to our peers, but it's just not the same as when you go and actually do it to students. I mean, it's just not the same at all, and you need experience. And some--, you know, some people go through this whole [year], and never have gone in a classroom. How do they know that they even want to do that, if they've never really been in the classroom? [Linda, 6/1/92]

Linda's comment implies that having some early experiences in classrooms might be an important means for some candidates to begin assessing the appropriateness of their decision to become a teacher. Several other students made similar observations, including Rita, who said:

> They don't require you to be in a classroom up until the time you student teach in your last semester of college. You've already spent, invested a year and a half, going on two years, on being a teacher, and then you get put in a student teacher position, and you hear so many stories about, "Well, I didn't realize, but this isn't the thing for me; I can't do this. I don't want to do this." And so I think that's really--, that is a major flaw in the program. [Rita, 6/2/92]

The mere fact that students would like more opportunities to spend time in classrooms does not, of course, mean that they necessarily should be given more. However, my conversations with students clearly suggest that having insufficient opportunities might well serve to impede students' learning and appropriation of many of the concepts with which they are presented in their courses. One consequence of the heavily theoretical orientation of their courses was that, even when they felt that they had learned and understood the ideas presented to them, students sometimes indicated that they had little or no idea of how to actually apply the ideas in a classroom. Earlier in this paper I cited examples of students expressing agreement with a particular approach to teaching yet feeling that they had not been given enough practical experiences or applications to enable them to feel comfortable about actually using the approach themselves. The implication is that students may need numerous opportunities for guided practice with new approaches prior to being expected to use the approaches by themselves. For example, like many of his classmates, Mark commented that the classes that presented ideas "backed up with practical applications" were the most helpful to him, but he goes on to suggest another important idea:

> . . . those were the ones I found the most particularly helpful, and sometimes it caused me to say, "I wonder if the program that I've done, I like it because it's good or if I just like it because it's the only one I know, 'cause I don't have anything else to even compare it with." I mean, I like the programs I know, but I have no--, I don't have much to compare them against, so I obviously like 'em better than the ones I've only had theory application in lecture-type material because I don't--, I haven't seen how they work. [Mark, 7/23/92]

What Mark is suggesting is that he is much more likely to adopt a teaching practice which he has had opportunities to see and try out for himself over a practice about which he has only been told. Since most of the other students in this sample had even fewer opportunities than Mark to see and try out the teaching practices they were learning, they are probably even less likely than he is to feel comfortable about adopting practices they've been exposed to only in theory. Much of the literature on prospective teachers (see Carter, 1990; Kagan, 1992) has asserted that they are resistant to new ideas presented in their education courses, preferring to act in accordance with their prior beliefs about teaching. Perhaps an alternative explanation for the low impact of teacher education courses is not that students are resistant to the new ideas, but maybe that they aren't given sufficient opportunities to firmly grasp the new ideas during their preparation programs before being sent off on their own to implement them. As Mark and a number of others have indicated, they would be reluctant to attempt on their own an approach which they don't feel confident about implementing, even though they might agree with the approach in theory. Because they don't feel confident, what they do is fall back on what they know, on what they have seen many times, and the result is that they end up teaching the way they themselves were taught. But moreso than being a testimony to the strength of their prior beliefs, this circumstance may point out the weakness of the educational intervention to which they were exposed.

In light of the data collected in this study, the assumption that if students are given a theoretical base, they will be willing and able to provide the practical details on their own seems highly questionable. The participants in this study, even in this period of "unrealistic optimism" (Weinstein, 1990) about teaching and about their abilities, seemed unwilling to employ a new method if they didn't feel sure about how it should be done. How much more reluctant are they likely to be once they are confronted by the realities of the classroom? It is possible that the ability to operate effectively from a primarily theoretical basis requires an experiential repertoire and a command (understanding) of a wide variety of practices that novice teachers lack. It is perhaps significant that the student (Rita) who at the end of the year expressed the greatest appreciation for the theoretical aspects of her first-year preparation was one of two students who had the most extensive exposure to classrooms. Maybe providing sufficient opportunities for students to see ideas being applied in actual classrooms and to test the ideas themselves is actually critical to maximizing their learning and appropriation of the theoretical material presented in their courses.

> Well, I've learned a lot. I just--, sometimes I don't think I know how to apply what I've learned. Someday, somehow, this is supposed to all click, I'm sure, but right now I've got a lot of different things that I know and--, you know, I mean, [for example], I learned a lot in computers, but that's not going to be with me next year, I mean, until I'm with a computer and a child and I try to fit that all together. [Karen, 5/28/92]

Insufficient Instruction in Classroom Management

A third frequently-mentioned (eight of eleven students) inadequacy of the first year of teacher preparation was their instruction in classroom management.

> I think classroom management is the least thing taught. They teach you more about how to do a unit or how to do that or whatever. There's only a little section on classroom management. (Patricia, 6/30/92)

At the end of the year, classroom management was the area where the students felt they needed to learn the most and the area about which they voiced the most apprehension. Whereas, during the year, they had often debated social and moral issues related to schooling, learned about new approaches to teaching different subject matter, and constructed numerous unit plans and lesson plans, students reported having received little, if any, guidance in how to manage a classroom.

> I think the preparation has been inadequate by that they haven't taught you how that--- There isn't a class, I mean, there might be a class offered, but not through [our program], of really controlling the classroom, learning the classroom environment, what it means to really be in that classroom being the teacher, you know. Like maybe a class with maybe a teacher's perspective? I mean, you learn about all these social issues and you learn about all these practices, but you don't really learn about what it's like to be a teacher, or, or what the day is really like, or how to handle the students . . . . I think there should be a class offered that helps students get to a level of where they feel comfortable with all kinds of, you know, classes--- How, how to manage the students anyways, you know? [Julie, 6/15/92]

In contrast to Julie, most students conceived of classroom management primarily in a narrower sense, as being equivalent to discipline, and they decried the fact that they were not being taught how to manage pupil behavior.

> I want to know more about classroom management, and I do wish we had more preparation somewhere in our teacher ed. about classroom management, because I haven't heard a single thing. Everybody's like, "Well, you have to find out about it on your own." Well, give us some ideas. Don't--, not necessarily specific examples. . . . there's, you know, there's different discipline methods that you can use. "These are what some teachers have used; you can try them in your situation." I wish someone would sit down and do that because nobody has done anything. I mean, they haven't mentioned any form of discipline whatsoever. You're left clueless, and you're trying to find out this information, but it's not written. It, I mean, I haven't found it in a book yet, and it's--, we're supposed to just get it out of osmosis, you know? It's just going to settle on us from the air, and I wish we had something where we were taught at least some concepts behind [it], some more indepth. I remember we had a little bit

> in [Introductory Educational Psychology], but it was so theoretical that it was sort of [beyond me]. I didn't get a lot out of it because I'm like, "Well, what was that word again?" I don't even know what that word means, and it's supposed to do something with discipline, and I forgot a lot of that. So, I want some more. [Rita, 6/2/92]

Rita's comments, though not completely accurate, typify the frustration many of the students felt at the lack of instruction in managing pupil behavior. When students were asked to identify their major concerns about their preparation for teaching, classroom management was by far the most frequently mentioned area, identified by nearly every student. Interestingly, however, students like Rita who had many opportunities to work with pupils in classrooms generally seemed even more conscious of their needs in this area than students not having many such opportunities. Because of her experiences as a volunteer in a local teacher's classroom, Marcia, for example, was forced to re-examine her idealistic notions of classroom management and learned that being loving was not enough. But her experiences also made her aware that her education courses were not giving her what she needed in this respect. Similarly, the scant instruction that Rita had received in classroom management had been, from her perspective, so theoretical that it was of little use to her in the classroom. On the other hand, some students don't become fully aware of this inadequacy of their preparation until they student teach. Such was the case with Patricia, who did her student teaching during spring term.

> "In what particular ways do you feel that your preparation has been inadequate?" Classroom management. I think if you talk to anybody, they'll say that, 'cause when we had our--- We all got together for student teaching, like two of our seminars. One seminar--, the first one we had, we had to talk about, you know, how do we feel student teaching is going, and everyone said across the board that classroom management--, they don't teach--- You know, everything they teach here is all flowery and, you know, blah, blah, blah, and you get there, "Wrong!" It's not like that way, so a lot of people were really frustrated. . . . I mean, they talk about it, you know, and you read about it, and they say, "Well, you can do this, this, and this." But when you get in there, it's a totally different thing; it's totally--, every classroom's different, and even some general things don't even, don't even help. [Patricia, 6/11/92]

A friend of mine, who had served as a field supervisor for more than 30 student teachers during the year, remarked that every one of these student teachers had complained about difficulties with classroom management. The problem certainly appears to be widespread. Since classroom management is known to be major area of difficulty for novice teachers, one would expect a teacher preparation program to devote more attention to this area, not less. Why classroom management is, in fact, accorded such little attention in teacher education courses is something that is difficult to understand.

Quality of Instruction

Asked to identify ways in which their first year of preparation had been inadequate, seven of the eleven participants in the study made references to the quality of some of the instruction they had received. Despite the largely indeterminate nature of "quality" instruction, the students' perceptions in this respect showed far more agreement than disagreement. There were several instances of two or three students being enrolled in the same section of a particular course, and though interviewed separately, they offered very similar perceptions of the course and its value. To be sure, there were many instances of students' reporting their own idiosyncratic complaints about particular classes or instructors; i.e., assessments which appeared to be primarily a reflection of their own individual reaction to some personal peculiarity or teaching practice of the instructor. For example, Linda and Karen, both very shy individuals, reported strong negative feelings toward instructors who would call on them and put them on the spot in front of their classmates. These types of idiosyncratic responses were ignored in the data reported here because whether a student personally liked or disliked an instructor was considered irrelevant. The issue of interest was the quality of instruction. There were numerous occasions when students reported liking an instructor but disliking his/her instruction (or vice versa), indicating that they were able to separate their personal feelings about an instructor from their perceptions of his/her instruction. In the students' complaints about the instruction they received, I was able to discern two main patterns.

First, what students complained about most frequently was instruction that did not seem well adapted to their needs. They expressed considerable dissatisfaction and frustration with courses in which purposes and expectations were unclear.

> Well, my [Reading Methods] didn't help me at all. It was just very--- I didn't understand what we were supposed to do in there. I was just lost the whole time. [Linda, 6/1/92]

> I'm not the only one that's feeling this way. Everyone in the class feels that there's really no instruction from--, on, on the professor's part and that any information I gain is going to be from the other members in my group and the book, and not so much from this professor. We're working on a project right now, and we don't know what it is the professor wants. I mean, it's, it's just really, it's really, it's really hard to describe. [Denise, 4/21/92]

> I'm learning it by myself. I don't feel like I'm being taught it. Like with the science class, . . .I'm not learning anything in there. I don't ever want to go to that class. I can't wait. It's the longest class I have, but I just--- I don't feel like I'm being prepared at all. [Karen, 2/9/92]

They were also dissatisfied with courses in which the instruction seemed to be geared either too high or too low.

> This class is just like not really teaching me how to teach kids. . . . there's a lot of terminology that they're using that's going right over my head. . . . We just took a test, #2, and the majority of the class did poorly on it, so he made this curve really, really big, and it was funny, though, because everybody was just ticked because he had two questions on there [that seemed irrelevant]. . . . See, I don't understand, 'cause I don't see how this question relates to anything, except my math skills. [Julie, 2/28/92]

> . . . they didn't teach anything. Honestly. I didn't, I didn't learn-- In my social studies class we did a textbook analysis; we did a module, which by my own--- I learned something from that just by myself, not from him teaching, and I learned--, and we had a test. We had a multiple choice, 82-question multiple choice test. That's all we did. And lectures! I've never, never skipped a TE class until this term, never! Because there were always important things to learn, but he--, it just--- You didn't learn anything. He reiterated the same things over and over. . . . [Sharon, 6/15/92]

> I feel like they [instructors] either assume that we already know it, like whole language or something like that, you know; teachers will start--, my reading teacher will start talking about it assuming that we know this, and then they will spend two weeks lecturing on something that we did already know. I just don't feel like they have any idea what to teach us. [Karen, 2/9/92]

The second main theme in student complaints related to what might be termed "uninspired teaching." Several students reported having negative reactions to courses in which the instructor appeared disinterested and uninvolved, merely going through the motions of teaching. The perception that the instructor was not putting much into the course seemed to affect, rightly or wrongly, the students' willingness to invest themselves in what was being taught.

> I just think, I think that a lot of the teachers here, not a lot, a couple of my professors have--- It was--, they've said, they said at the beginning of this term and at the beginning of winter term that this, these are the last couple terms they'll be teaching, and you could tell their heart wasn't in it. They just looked kind of like blah. I don't--, you know, "We'll just get this done, and, you know, it'll be done and over with," and I had a problem with that 'cause it--- I just didn't learn anything, and for me that was really scary, especially doing my student teaching in the fall. I just felt that, like, two of my last, you know, out of the last two terms, I had two classes where I just, I didn't feel like I learned anything that was appli--, I could apply to my student teaching. So that was very difficult for me. [Sharon, 6/15/92]

> I think some of my classes--- Well, . . . like the professor, I mean, it depended on the professor's attitude. You know, some of my courses I felt like my professors didn't have a very good attitude towards teaching or towards what they were teaching us, and that reflected on, you know, what we think. [Karen, 5/28/92]

> I think even teachers' attitudes or their dynamics, how they present material, whether they're--- If you have an instructor that seems genuinely enthused about the information that they're giving you, it's easier. Even uninteresting information is more palatable, even to the point that I think, I think that a teacher ought to fake it sometimes, because some of the instructors gave out maybe good information but in, in a manner that maybe was just the way they were that didn't set you on fire, and I'm not saying it has to be solid entertainment the whole time, but the ones that were genuinely interested and enthused about the information they presented were way more effective. [Mark, 7/23/92]

The preceding comments illustrate that prospective teachers learn not just from what their instructors teach but also from how they teach it. Students are possibly even more critical of the instruction in their education courses because they evidently expect these instructors to model the good teaching practices they are teaching. Students appear to be sensitive to apparent contradictions between how an instructor tells them to teach and how that instructor teaches.

> Certainly we have been exposed to some things in some of the courses that flabbergasted us. It is at the very opposite end of, of what we're being taught, like maybe they might say, you know, you try to gear more for comprehensional kind of things, not so much memorization, and then we're given a multiple choice test to determine whether or not we've gained that, and that seems contradictory in terms, you know. "Don't do this, but how we're going to find out whether you're going to do it or not is multiple-choice test you to find out," and I fi. 1 that interesting. It, it happened several times. [Mark, 7/23/92]

> He just stood up there and lectured. It was just--- He could have had the lecture in five minutes and it lasted two hours. You know, they tell you to teach one way, but then they don't actually teach that way. I mean, he tells us that we're supposed to have the students thinking, but then he didn't have us doing any of that. You know what I mean? They tell you to teach, they teach it one way, or tell you to teach one way, but then they don't do that. [Linda, 6/1/92]

I should point out that from the ten or so education courses that they took during the year, most students expressed dissatisfaction with the instructional quality in only two or three, and though we seldom discussed non-education classes at any length in our interviews, the majority of the participants felt that the instruction in their teacher education classes overall was far superior to that in their classes in other departments.

Summary/Conclusions

The major findings reported in this study are by no means new; rather, they echo what has been said previously by other researchers . Consistent with Nemser's (1983) observation, the preservice teachers in this study appeared to evaluate their preparation program primarily on the basis of whether and to what extent it provided them with practical teaching methods. The most valued courses were those which offered practical teaching methods and experiences, whereas the courses least valued were those which offered mostly theoretical information. Consistent with the findings of Goodlad (1990), the preservice teachers in this study all expressed a desire for more field experiences in conjunction with their coursework, and like the students in Goodlad's sample, "they felt deficient in class management and wondered why no comprehensive course was offered in that area" (p. 248). Consistent with the conclusions of Fuller and Bown (1975) and Kagan (1992), the data collected suggest that teacher education programs like the one in this study are still failing to provide preservice teachers with the knowledge and experiences they need.

While, admittedly, these findings are not new, they are important because they reiterate the need for future research to address several questions: Why do the practices of teacher educators continue to run counter to what existing research says about the learning of prospective teachers? What are the various forces and constraints that seem to militate against the implementation of practices more consistent with what we know? Once identified, how might these factors be counteracted or eliminated? Furthermore, the results reported here seem to have a number of important implications for teacher educators. In the remaining pages of this paper I will discuss some of these implications.

Meeting the Needs of Prospective Teachers

The first and probably the most important implication of this study is that teacher educators need to acknowledge and then address the real needs of prospective teachers. Kagan (1992) reviewed 40 learning-to-teach studies and concluded that "university courses fail to provide novices with adequate procedural knowledge of classrooms, adequate knowledge of pupils or the extended practica needed to acquire that knowledge, or a realistic view of teaching in its full classroom/school context" (p162). The students participating in the present study have, in their own words, further corroborated this conclusion. However, in a response to Kagan, Grossman (1992) pointed out that her review does not represent the entire teacher education community. Apparently, teacher educators with different agendas have different conceptions of the needs of novice teachers. What the novices themselves are saying doesn't appear to be particularly important because, presumably, teacher educators can determine what novices need better than they can themselves. While this is probably true to some extent, Delpit (1988) has reminded educators of the importance of hearing the voices of those they serve:

> We must keep the perspective that people are experts on their own lives. There are certainly aspects of the outside world of which they may not be aware, but they can be the only authentic chroniclers of their own experience. We must not be too quick to deny their interpretations, or accuse them of "false consciousness." (p. 297)

Additionally, it seems rather contradictory to, on the one hand, argue that students are capable of thinking deeply about educational issues, yet on the other hand, to continue to disregard their thoughts and perceptions about their own education. Student perceptions of their preparation are important because people behave in accordance with their perceptions, whether or not those perceptions are accurate (Purkey & Novak, 1984). Maehr and Braskamp (1986) have suggested that "internal psychological factors--the person's thoughts, perceptions, and feelings" are more important than external realities in determining a person's motivation (or lack of it). Thus, students' perceptions (accurate or not) that much of their coursework is unrelated to their needs probably affects their motivation to learn what is presented to them. Their perceptions should not dictate the content of the preparation program, but they certainly warrant more consideration than they are presently receiving.

There is also a danger that teacher educators, being focused on pursuing their own agendas, may lose sight of the fact that the concerns and motivations of novice teachers are probably quite different from their own. For example, an experienced educator is far more likely to conclude that theoretical knowledge should be acquired before procedural knowledge than is an inexperienced 22-year-old novice faced with the imminent and perhaps frightening prospect of teaching for the first time. Their perspectives on and, hence, their perceptions of the issue are completely different. Good teachers are always mindful of the learner's perspective. Anderson (1989) contended that good teacher education instruction is grounded in the same principles as good K-12 classroom instruction, and one of these principles involves "knowing what information to present and when to present it in order to support students in their efforts to understand a topic or solve a problem" (p. 106). Among teachers, this principle is reflected in the old adage that good teachers "start students where they are and take them as far as they can go." This concept of "where students are" has been referred to by Vygotsky (1978) as their zone of proximal development, and he explained that instruction geared too far in advance of this zone for a particular student is usually ineffective. Nevertheless, some researchers (e.g., Grossman, 1992) seem to be suggesting that in teacher education, instruction should begin, not where students are, but where we would like for them to be. Such an approach is not likely to promote student learning. Teacher educators, like all good teachers, must adapt their instruction as necessary to respond to the needs and concerns being voiced repeatedly by the students in this and similar studies, whether or not they like what they're hearing. As Eisenhart, Behm, and Romagnano (1991) observed,

> It does not appear that teacher education programs can mandate some other needs just because the program proponents think them more appropriate or sophisticated. . . . Rather, it seems more productive to think about ways to address and then build upon the students' needs. (p. 67)

Reflecting back on her teacher education coursework, one student recently offered an interesting observation about many of her professors: "They didn't make me feel like my concerns or my thoughts were very important because they knew everything." I submit that we need to listen more to the thoughts and concerns of our students because there is much that we might be able to learn from them.

Integrating Theory and Practice

Another important implication of this study is that prospective teachers would benefit enormously from a better integration of theory and practice in their preparation program. The data collected in this and in other studies (e.g., Goodlad, 1990; Eisenhart et al., 1991; Kagan, 1992) seem to indicate that teacher educators are making a grave mistake if they continue to ignore prospective teachers' complaints about their coursework being too theoretical. Whereas many teacher educators seem to regard procedural knowledge as merely "utilitarian," as somehow less important than theoretical knowledge, which they regard as "substantive," novice teachers, in contrast, appear to regard learning about theories and current issues as interesting but the procedural knowledge is what seems to be most important, most substantive, for them at this point in their preparation as teachers. In the preceding pages I have cited numerous examples of how students' learning of complex theoretical material was impeded by the lack of sufficient practical illustrations and opportunities for application. I have also reported how the courses which students found most valuable were those in which theory and practice were better integrated. These findings suggest that if prospective teachers are to make sense of much of the theoretical material presented in their education courses, they will need more opportunities both to observe and to participate in practical applications. Expecting students to, on their own, make the necessary connections between what they learn in their courses and how it is applied in classrooms, without providing them opportunities for making such connections, may be unrealistic on the part of teacher educators. Berliner's (1988) expert-novice studies would seem to indicate that experienced individuals can benefit from decontextualized instruction because they have richly-developed knowledge structures to which to connect the information to make it meaningful. Novices, on the other hand, lack such structures and, consequently, have more difficulty making sense of the information until they gain more experience. Though certainly not experts, the participants in this study who seemed to do the best job of making connections between theory and practice were those who spent a lot of time observing or working in classrooms.

Teacher educators like Goodman (1988) and Grossman (1992), who believe that the preparation program should present novices with theoretical (substantive) knowledge in preference to procedural (utilitarian) knowledge, often invoke the words of John Dewey (1904/1965) to support their position:

> To place the emphasis upon the securing of proficiency in teaching and discipline *puts the attention of the student teacher in the wrong place, and tends to fix it in the wrong direction* [emphasis in original]--not wrong absolutely, but relatively as regards perspective of needs and opportunities. (pp. 317-318)

Mentioned much less frequently, however, is Dewey's assertion that "the teacher who is plunged prematurely into the pressing and practical problem of keeping order in the schoolroom has almost of necessity to make supreme the matter of external attention" (p. 319). To forestall this premature preoccupation with classroom control and to allow them sufficient time and guidance to develop a solid theoretical base for their teaching, Dewey advocated that prospective teachers, prior to being given any responsibility for managing a class, undergo a long period of observation in classrooms, during which time they would learn about pupils and schools and gradually be given more and

more responsibilities, eventually some actual teaching and, finally, a teaching apprenticeship. I would argue that the typical teacher education program today is so far removed from the model proposed by Dewey that the selective citation of his ideas in support of these programs hardly seems justifiable. Our principles should be consistent with our practices, and if they aren't, one or the other should be modified. If teacher candidates are provided with a lengthy period of guided observation as Dewey proposed, then an early emphasis on "proficiency in teaching and discipline" may indeed be inappropriate. However, if teachers candidates (like the participants in this study) are going to be "plunged prematurely" into the realities of teaching with few, if any, opportunities for guided observation in classrooms, then we do them a grave disservice if we fail to prepare them by providing the procedural (utilitarian) knowledge they will need. Furthermore, as great and as important a philosopher as Dewey was, his ideas should not be regarded as immutable prescriptions to be slavishly adhered to irrespective of the extent to which the real conditions of teacher preparation resemble the ideal conditions. While citing Dewey, Goodman (1988) himself acknowledges that

> No matter how noble a set of principles may sound, if that set is rigidly interpreted and forced upon people, it becomes dogma. . . . 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. (pp. 23-24)

Along with a conceptual framework, the structure and content of teacher preparation programs should be shaped, as much as possible, by available empirical evidence and by due consideration of the limitations and constraints within which the programs are required to operate.

Changing Prior Beliefs

A recurring theme in recent research on preservice teachers (e.g., Feiman-Nemser & Buchmann, 1986; Hollingsworth, 1989) is that their prior beliefs about teaching often seem to impede their learning in education courses. However, my experiences with the participants in this study suggest that a lack of change in students' beliefs may often be attributable more to the weakness of the educational intervention than to the strength of the students' prior beliefs.

One reason that students didn't adopt the ideas presented in their courses was that, for one reason or another, they didn't understand them. A considerable number of the students reported having courses in which they were lost much of the time because, in their perception, the instructor did not present the information in a clear enough manner. Not surprisingly, these courses generally seemed to have little impact on the students' belief systems. Even more frequently students reported gaining a surface understanding of a concept but not the deeper understanding of when and how to apply it. As noted in the previous section, some students indicated a reluctance to implement ideas that they didn't understand sufficiently, even when they agreed with them in principle. They seemed to cling to their prior beliefs moreso for security than out of resistance, their understanding of the new ideas being so tenuous that they were reluctant to commit themselves to them. I would argue that in cases such as these the main problem lies in the educational intervention itself. Hollingsworth (1989) concluded that if teacher education programs are to facilitate novice teachers' learning of new concepts, "it seems important to provide both an opportunity and an expectation to apply important ideas presented in methods courses" (p. 181). The participants in this study continually complained about having too few practical illustrations of the concepts they were being taught and few, if any, opportunities to actually apply the concepts themselves in classrooms. Clearly, their program could stand improvement in this respect.

Another reason why students did not adopt ideas presented in their courses was that, because of their prior beliefs, they disagreed with them or failed to see their relevance or importance. In the minds of some researchers, herein lies a major problem with novice teachers: their tendency to use

their prior beliefs about teaching as a filter for interpreting the information presented in their teacher education program. I would submit, however, that that is what every intelligent person does--and it could not be otherwise. "We do not really see through our eyes or hear through our ears, but through our beliefs," Delpit (1988, p. 297) has said. As you read this paper, you are filtering the information through your prior beliefs and experiences and, on that basis, are deciding what makes sense or what doesn't , what you agree with or what you disagree with. Novice teachers do the same, and I question whether their beliefs are any more resistant to change than anyone else's. As a group, the participants in this study were not only very willing to examine their existing beliefs, but also very open to new ideas. They were excited about teaching and extremely eager to learn more about the new world which they were preparing to enter. Still, it seems rather naive to assume that when they are exposed to a particular body of information, they will all interpret the information the same as the person presenting it and that they will then necessarily change their existing beliefs. Posner, Strike, Hewson, and Gertzog (1982) identified four conditions necessary for conceptual change. They explained that conceptual change will occur only if (1) the individual is in some way dissatisfied with his/her existing belief, (2) the incoming information is intelligible, (3) the new information appears plausible, and (4) the individual can see future usefulness in the information. Thus, an effective intervention for prospective teachers must do more than merely expose them to new ideas; their existing beliefs about teaching must be identified and then appropriately challenged, both conceptually and experientially, if conceptual change is to occur. Consequently, I question the continuing characterization of prospective teachers' prior beliefs about teaching as a major impediment to their learning In actuality, a bigger problem may be the failure of teacher education programs to properly address the changing of students' beliefs. An important first step, as Holt-Reynolds (1991) has suggested, is to recognize the legitimacy of students' prior beliefs about teaching.

> If we acknowledge the power of history-based, lay beliefs and conceptualizations about teaching, and if we accept these as coherent, cohesive, and therefore legitimate premises for practical arguments, we are, in effect, also suggesting that our role as teacher educators centers more nearly around fostering the professionalization of the lay belief-based practical arguments preservice teachers already possess rather than around focusing exclusively on the development of professional behaviors. (p. 21)

Preparing Teachers to Change School Practices

For many teacher educators, preparing novice teachers to transform current practices in schools is a primary objective of the teacher education program. Although the goal of improving school practices is certainly worthwhile and commendable, programs with a structure and content similar to that experienced by the participants in this study may actually work against the attainment of such a goal. My conversations with these prospective teachers suggest that before novices can be educated to transform tomorrow's classrooms, they may first need to learn how to survive in today's classrooms. While students appeared to enthusiastically embrace most of the new teaching approaches they were exposed to, their willingness (and probably their ability) to implement these practices seemed dependent on their having sufficient opportunities to see and apply them in classroom situations. Students reported having little or no idea of how to go about implementing theoretical approaches which were presented to them without adequate practical illustrations. Even when students were provided with practical illustrations of a particular approach, they still seemed to have a strong need to try it for themselves, not only to secure their understanding, but also to determine whether or not it really "worked." Since most of them had few opportunities to test new approaches in actual classrooms, many participants indicated that, rather than attempting to implement the new approaches on their own, they would stick with traditional practices, at least initially, even though they believed they were less desirable. Goodman (1988) observed this same reluctance in several students despite their admitted attraction to a particular approach to teaching that was presented in their courses. Goodman offered the following explanation:

> their lack of previous exposure to this type of teaching, their fears of permissiveness, and the lack of opportunity for experimentation in field placements, kept most of them from using this as a core for their teaching perspectives. (p. 130)

Earlier I described a student (Julie) who, on the one hand, expressed considerable regret at the prospect of having to subject her students to the same type of math instruction she herself had endured but who, on the other hand, did not feel as though she had been adequately prepared to do otherwise. For Julie and the other participants, it seems clear that their survival in the classroom will take precedence over any efforts to change practices. Providing students with too few practical experiences in classrooms and failing to equip them with the tools they feel they need to survive would appear to reduce the initial likelihood of their implementing innovative practices.

The message that they were expected to change current practices in schools came across clearly to most of the students, and they seemed to be pretty well aware of the magnitude of the task they were being called on to perform.

> I hope I have a strong support group when I begin teaching. In a way I feel like a lump of meat being thrown to the wolves: "Here, teach these kids all these new ideas about math, and make sure they really understand it and want to learn more. Oh, sure, we know that you weren't taught that way, but just remember, it's up to you to change the whole system of math in the classrooms. Go to it." (Marcia, 3/2/92]

Though students agreed that existing practices need to be changed, most did not evidence a particularly strong commitment to their role as change agents; in fact, several admitted that they would probably adopt the practices (within limits) of other teachers in their building to avoid being an outsider. For all of their idealism, they nonetheless seemed to recognize, even **before** they were thrust into the realities of a particular teaching situation, how difficult it will be for them, as beginning teachers, to change teaching practices that are already firmly entrenched in schools. They doubted their ability to do so. But perhaps even more importantly, this group of students, while agreeing in principle with the new approaches presented in their courses, seemed far more committed to their own survival and development as teachers than to the enactment of the change agendas of teacher educators. The implication is that, as a number of other researchers (e.g., Fuller & Bown, 1975; Berliner, 1988; Kagan, 1992) have already suggested, novice teachers may need to address their survival concerns and resolve questions about their personal competence before they're willing and able to seriously attend to broader concerns.

References

Anderson, L. M. (1989). Classroom instruction. In M. C. Reynolds (Ed.), *Knowledge base for the beginning teacher* (pp101-115). Oxford, England: Pergamon.

Anderson, R.C. (1984). Role of the reader's schema in comprehension, learning, and memory. In R.C. Anderson, J. Osborn, and R. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts* (pp. 243-257). Hillsdale, NJ: Erlbaum.

Berliner, D. C. (1988). Implications of studies on expertise in pedagogy for teacher education and evaluation. In *New directions for teacher assessment* (Proceedings of the 1988 ETS Invitational Conference, pp. 39-68). Princeton, NJ: Educational Testing Service.

Bronfenbrenner, U. (1976, April). *The experimental ecology of education.* Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

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

Delpit, L. D. (1988). The silenced dialogue: Power and pedagogy in educating other people's children. *Harvard Educational Review, 58*(3), 280-298.

Dewey, J. (1904/1965). The relation of theory to practice in education. In R.D. Archambault (Ed.), *John Dewey on education* (pp. 314-338). Chicago: University of Chicago.

Eisenhart, M., Behm, L., & Romagnamo, L. (1991). Learning to teach: Developing expertise or rite of passage? *Journal of Education for Teaching, 17*, 51-71.

Erickson, F., & Shultz, J. (1991). Students' experience of the curriculum. In P.W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 465-485). New York: Macmillan

Feiman-Nemser, S., & Buchmann, M. (1986). *Knowing, thinking, and doing in learning to teach: A research framework and some initial results.* (Research Series No. 180). East Lansing, MI: Michigan State University, Institute for Research on Teaching.

Fuller, F. F., and Bown, O. H. (1975). Becoming a teacher. In K. Ryan (Ed.), *Teacher education: 74th yearbook of the National Society for the Study of Education, Part II* (pp. 25-52). Chicago: University of Chicago Press.

Galluzzo, G. R., & Craig, J. R. (1990). Evaluation of preservice teacher education programs. In W.R. Houston (Ed.), *Handbook of research on teacher education* (pp. 599-616). New York: MacMillan.

Goodlad, J. I. (1990). *Teachers for our nation's schools.* San Francisco: Jossey-Bass.

Goodman, J. (1988). Constructing a practical philosophy of teaching: A study of preservice teachers' professional perspectives. *Teaching & Teacher Education, 4*(2), 121-137.

Grossman, P. L. (1992). Why models matter: An alternate view on professional growth in teaching. *Review of Educational Research, 62*, 171-179.

Hollingsworth, S. (1989). Prior beliefs and cognitive change in learning to teach. *American Educational Research Journal, 26*, 160-189.

Holmes Group. (1986). *Tomorrow's teachers.* East Lansing, MI: Author.

Holt-Reynolds, D. (1991). *Practicing what we teach.* (Research Report 91-5). East Lansing, MI: Michigan State University, National Center for Research on Teacher Education.

Kagan, D. M. (1992). Professional growth among preservice and beginning teachers. *Review of Educational Research, 62,* 129-169.

Kennedy, M.M. (1991). *Research genres in teacher education.* (Issue Paper 91-1). East Lansing: Michigan State University, National Center for Research on Teacher Education.

Koehler, V. (1985). Research on preservice teacher education. *Journal of Teacher Education, 36*(1), 23-30.

Maehr, M. L., & Braskamp, L. A. (1986). *The motivation factor: A theory of personal investment.* Lexington, MA: Lexington Books.

Nemser, S. F. (1983). Learning to teach. In L. Shulman & G. Sykes (Eds.), *Handbook of teaching and policy* (pp. 150-170). New York: Longman.

Posner, G. J., Strike, K. A., Hewson, P. A., & Gertzog, W. A. (1983). Accommodation of a scientific conception: Toward a theory of conceptual change. *Science Education, 66,* 211-227.

Purkey, W. W., & Novak, J. M. (1984). *Inviting school success: A self-concept approach to teaching and learning* (2nd ed.). Belmont, CA: Wadsworth.

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

Smylie, M. A. (1989). Teachers' views of the effectiveness of sources of learning to teach. *Elementary School Journal, 89,* 543-558.

Stone, B. A. (1987). Learning to teach: Improving teacher education. *Childhood Education, 63,* 370-376.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University.

Weinstein, C. S. (1990). Prospective elementary teachers' beliefs about teaching: Implications for teacher education. *Teaching & Teacher Education, 6*(3), 279-290.

APPENDIX

Mid-Year Interview

1. What can you tell me about your personal background (family, hometown, personality, school experiences, other significant experiences, etc.)?

2. What can you tell me about your experiences with minorities?

3. Why are you attending Michigan State University?

4. Why are you participating in this study?

5. Why are you in the Standard Program instead of one of the other programs?

6. When and why did you decide to enter the teaching profession?

7. What major concerns did you have when you entered the teaching program?

8. How and in what ways do you expect your program to prepare you for teaching?

9. What are the characteristic qualities, abilities, and practices that you associate with a good teacher? Why?

10. In what important ways are good teachers different from poor ones?

11. What are your potential strengths as a teacher? Why?

12. What are your potential weaknesses as a teacher? Why?

13. In order to be well-prepared for teaching, what, if anything, do you feel you need to learn about each of the following topics? Why?

    a) Human relations skills

    b) Instructional practices and techniques

    c) Content (subject matter) knowledge

    d) Classroom management

    e) Selection and use of class materials

    f) Planning and organizing for teaching

14. Are there any important aspects of your preparation for teaching that will most likely occur outside the official teacher education program? If so, what? Why

End-of-Year Interview

1. After going through the first year of your teacher preparation program, in what particular ways, if any, do you feel better prepared for teaching? Why?

2. In what particular ways, if any, do you feel that your preparation has been inadequate? Why?

3. As you look ahead to the second year of your program, what major concerns do you have, if any, relative to your preparation for teaching?
Why?

4. What are the characteristic qualities, abilities, and practices that you associate with a good teacher? Why?

5. In what important ways are good teachers different from poor ones?

6. What are your potential strengths as a teacher? Why?

7. What are your potential weaknesses as a teacher? Why?

8. In order to be well-prepared for teaching, in which areas do you feel you still need to learn the most? Why?
   a) Human relations skills
   b) Instructional practices and techniques
   c) Content (subject matter) knowledge
   d) Classroom management
   e) Selection and use of class materials
   f) Planning and organizing for teaching

9. How well prepared are you for teaching minority students? Why?

10. In what particular ways, if any, has your participation in this research project influenced your thinking about your preparation for teaching?