The integration of theory with practice continues to be an important concept in preservice teacher education. This paper reports on findings of a study in which preservice teachers evaluated their preparation for internship course to determine how adequately they felt prepared for classroom teaching at the beginning of a 16-week practicum. Also noted are additional sources from which student teachers learned strategies for teaching and management, and the ways in which they developed reflective strategies for thinking about their teaching. Implications for practice include development of a professional development model through which some aspects of preservice and inservice teacher education can be linked. Figures and tables present frameworks for integrating theory and practice based on three epistemological traditions, and tables provide means and standard deviations for students' perceptions of their preparedness for teaching based on five areas of course content (lesson planning, unit planning, questioning and responding, classroom management, and strategies of instruction), and additional sources and strategies for acquiring more knowledge about the five main program areas. (Contains 16 references.) (LL)
Abstract

The integration of theory with practice continues to be an important concept in pre-service teacher education. The main purpose of the preparation for internship course in the College of Education, University of Saskatchewan is to help student teachers with the tasks of integrating theory and practice prior to beginning the 16 week internship teaching practicum. Discussed in this paper are the findings of a study in which pre-service teachers evaluated their preparation for internship course to determine how adequately they felt prepared for classroom teaching at the beginning of their internships. Also noted are the additional sources from which student teachers learned strategies for teaching, management, and the ways in which they developed reflective strategies for thinking about their teaching. Implications for practice include the development of a professional development model through which some aspects of pre-service and in-service teacher education can be linked.
Student Teachers' Evaluation of their Preparation for Internship Course: A Case Study

Introduction

The internship program, at the College of Education, University of Saskatchewan, is a sixteen week school-based experience which is undertaken by students during the third or fourth year of their teacher education programs. One of the main aims of the internship program is to help student teachers acquire practical knowledge. The major challenges for teacher educators in terms of preparing students for their internship experiences involve assisting students with the processes of integrating the complex and diverse theories they acquire in their pedagogical courses with their experiences in schools. One of the recently devised ways to do this has been the development of a course specifically designed to prepare students for teaching experiences in the internship.

Discussed in this paper are the findings from an evaluation study in which students were asked to evaluate the effectiveness of their preparation for internship course. These findings provide information which is likely to be useful to teacher educators who are involved with the development of integration courses within their own institutional contexts.

The study discussed was guided by four questions:

1. To what extent were students able to plan lessons and units, structure and present lessons, use questioning and responding techniques in interactions with students, and use classroom management strategies when they began their internship?

2. From what sources were these skills and strategies learned?

3. Were there other strategies which could have been used, prior to the beginning of their internship, to help pre-service teachers learn pedagogical skills and strategies more effectively?

4. How do students develop reflective strategies for helping them think critically about their teaching practices?

The paper begins with a brief description of the course, followed by a review of literature and the conceptual framework used to develop the course. The design of the research and the presentation of the data are found in the next section. A summary and discussion of findings follows, and the paper concludes with a discussion of the implications for practice and research.
The Preparation for Internship Course

The Preparation for Internship Course is designed to provide an introduction to general teaching methods which may be applicable to a wide variety of teaching-learning experiences in elementary schools. The course was specifically designed to assist students with integrating theory and practice through the use of simulated teaching situations, classroom teaching situations, assigned readings, and reflective discussions about students' experiences with theory and teaching experiences. A five day practicum in elementary classrooms was an integral and significant component of the course. These classroom experiences were designed to provide students with additional opportunities for observation, teaching, and self-reflection. The specific objectives for the course evaluated in this study stated that students would:
1. acquire a theoretical background for the knowledge of specific teaching strategies (interpersonal communication, planning, presenting, structuring, questioning, responding, and classroom management).
2. acquire a theoretical background for understanding what constitutes effective classroom contexts for teaching and learning.
3. develop skills related to self-reflection and self-evaluation in order to begin examining their own teaching in terms of the strategies and theories which have been presented during the class.

In the review of literature which follows, background information for the conceptual framework of the study, from which the objectives were developed is explored based upon the work of earlier writers and researchers.

Review of Literature

Student Teachers Development of Practical Knowledge

Student teachers have consistently expressed the need for pedagogical courses to be made more 'practical' (Miklos & Greene, 1987; Fennell, 1991a; 1991b). However, teacher educators and researchers see a need to accomplish practicality without becoming totally immersed in the technical, behavioural aspects of teaching. Miklos and Greene (1987) challenge teacher educators to look carefully at their own viewpoints and issues surrounding the debate about practical knowledge for teaching. On one hand, teacher educators face students demands for skills which will provide simple solutions to their classroom dilemmas. On the other hand they realize that "preservice programs should
provide the broad knowledge base on which effective practice can be built without becoming immersed in technical matters" (p. 203). Armaline and Hoover (1988) add that student teachers need to move beyond the apprenticeship style of merely imitating the activities of schooling which they have seen and experienced and think about and practice teaching according to differing philosophies and traditions.

During recent times, reflective thinking strategies are often suggested as ways to meld ideas from differing philosophies into usable practical knowledge. Reflection in teacher education "is not a distinct programatic emphasis but rather a generic professional disposition" (Fieman-Nemser, 1990, p. 221). Van Maanen (1977) notes that individuals can and do differ in the focus and levels of reflective teaching and thinking. Similar to teachers' professional knowledge, reflective thinking also emerges in different ways from different epistemological traditions.

**Three epistemological views of teaching and reflecting.** Practical, professional knowledge and reflection about teaching emerge from three contrasting epistemological traditions: positivistic, interpretive, and critical. The link between knowledge and practice and reflective thinking is conceptualized differently in each tradition (van Maanen, 1977; Tom & Valli, 1990). In the positivistic tradition, practical knowledge is based upon law-like generalizations which are value-free and fall outside of specific contexts. The primary concern of reflection in the positivistic tradition is the efficient and effective application of pedagogical knowledge. Beyer (1991) refers to this level of reflection as procedural-technical.

Practical knowledge, developed through the interpretive tradition, is concerned with local meaning, local action, and is context specific. In the interpretive tradition, the knower and the known are closely related. Reflective thinking from this tradition concerns the clarifying the assumptions and pre-dispositions of competing pedagogical goals and the consequences to which a teaching action will lead in a particular context. From the critical tradition, practical knowledge is based upon commitment to reforming educational practices through such values as equality, justice and caring. Critical reflection is concerned with the degrees to which teaching acts are meeting important human needs. Beyer (1991) refers to these levels of reflection as ameliorative.

In summary, pre-service teachers need to learn practical knowledge about teaching, however, practical knowledge, independent of the scrutiny of critical reflective thought, is viewed as being of limited value to the development of the teaching practices of pre-service teachers. In the next section, the development of reflective thinking is discussed.
Different suggestions have been made about the development of reflective thinking with student teachers. Van Maanen (1977) suggests that becoming reflective is a developmental process. Similarly, Korthagen (1985) has conceptualized a reflective theory in which student teachers can be placed on a continuum of reflective ability, with those who have acquired the competence for reflection at one end and those needing more direction at the other. Zeichner and Liston (1987) indicate that reflective thinking is built on attitudes of open-mindedness and responsibility, and the skills of observation, inquiry, reasoned analysis, and systematic problem solving. Wubbels and Korthagen (1990) suggest that "One has a 'reflective attitude' if one displays a tendency to develop or alter mental structures, thus indicating an orientation towards one's own professional growth" (p. 32). Roth (1989) indicates that preparing the reflective practitioner is not a standardized process, but rather an inquiry process involving reflection and decision-making. He further concludes that "This is not so much a cyclical process as it is a spiral, with one set of experiences and decisions building on the previous ones" (p. 35).

Journals as tools of reflection. Bolin has conducted two studies (1988; 1990) on the use of journals as tools for recording reflective thinking. In the first, she suggests that journals are useful tools for pre-service teachers to use in developing reflective practice because the journal-writing process allows them to become more deliberative about their experiences. Bolin contends that journals can be used by teacher educators to challenge pre-service teachers to analyze and reflect more clearly on their simulated and actual teaching experiences. In a second study, however, Bolin (1990) notes that the journal may not be an effective tool for developing reflective thought in all students. When not a meaningful part of their experiences, journal keeping may be viewed by students as a tedious exercise. Bolin's observations indicate that the student in the study wrote descriptions, focusing on the 'what' but not dealing with the 'why', of his teaching experiences. Bolin concludes that this student "represents those many bright, capable students for whom learning to teach is learning to do" (p. 18) rather than learning to think about doing.

Conceptual Framework

Zeichner (1983) notes that most teacher education programs seem to be eclectic, combining two or more epistemological traditions. Fieman-Nemser (1990) concurs emphasizing the need for a balance created by such combinations. These views also
answer the concerns of Miklos and Greene (1987) for programs built upon a broad knowledge base which is not confined to merely technical matters. Dilemmas often arise, however, as teacher educators and their students attempt to create the most viable blend of reflection, theory, and practice. The conceptual framework for this study (Figure 1) is an attempt to create such a blend. This framework was also used to create the preparation for internship course on which this research is focused. (Insert Figure 1 approximately here.)

The framework is expressed as three interconnecting circles, and is based on processes drawn from the positivistic (technical), interpretive, and critical epistemological traditions. One of the processes is the acquisition of teaching skills and strategies which is believed to provide a firm 'technical basis' of teaching. Relating the technical to the interpretive and reflective processes, Roth (1989) notes that "Reflection must have a substantive basis" (p. 33). The second set of processes involve describing and interpreting the meanings of teaching experiences within specific contexts. The third process involves students in critically reflecting on meanings and outcomes of the strategies as a way of developing and improving their teaching practices. Many times colleagues and students become part of these processes.

The double-headed arrows indicate the constant interchanges that take place between the technical, interpretive, and the critical processes of teaching, and that the processes would not appear to be complete if any of the three were missing. This goes a step beyond the work of Sparks-Langer, Simmons, Pasch, Colton, and Sparko (1990), whose framework devoted to the same questions was linear in nature. Rather than appearing as dichotomous relationships, the processes illustrated here are meant to appear as a series of cyclical relationships which create a spiralling, regenerative form of inquiry about teaching. The spiral could originate with processes from any of the three traditions.

**Design of the Study and Sample**

Data gathering for the purposes of evaluation took place throughout the preparation for internship course, however, in this paper the only findings to be discussed will be those from data collected through surveys and interviews at the conclusion of the students' internship experiences. The original sample group in this study was a group of 30 (B. Ed post-degree) education students preparing for their sixteen-week internships in elementary classrooms. While no demographic data was specifically collected, it is noted that 23 of the 30 students were women, and that each of the 30 had completed a degree or an honors degree in either liberal arts or sciences prior to entering the College of Education. The average age for the group was approximately 30 years. When the researcher began the
data collection for this evaluation study, only 23 of the original 30 did their internships at locations where they were available to be contacted and to respond to surveys and interviews. At the conclusion of the pre-service teacher interviews, the researcher interviewed two faculty supervisors who had supervised the field placements of several of the students.

**Methodology and data analysis.** Twenty-three of the original 30 participants responded to a survey, developed from the course objectives, about their preparation for their internship experiences. Five of the questions on the surveys were responded to using a four-point Likert scale on which '4' was linked with the phrase 'very adequate', '3' with the phrase 'adequate', '2' with the phrase 'inadequate', and '1' with the phrase 'very inadequate'. The five survey items responded to using the Likert scale were phrased as questions such as "How adequate were the activities related to lesson planning in Edcur 302 in assisting you with planning lessons during your internship?" Following each of the five questions were blank spaces accompanied by the statement: Please comment on your responses. The next question was also open-ended and was phrased as: What additional sources were valuable in assisting you with . . . . ? The last question was phrased as: What other strategies might have been useful in acquiring information about . . . . ?

The final portion of the surveys invited the students to take part in a short interview to elaborate on their questionnaire responses to which 16 of the 23 replied in the affirmative. The interview questions were prepared from examining the responses given by students on the surveys. The interview questions for the faculty supervisors were developed following the initial analysis of the student interview data.

Data analysis involved tabulating the scores from the five Likert scale items to determine the mean and standard deviation for each. Comments about each question and the answers to questions about strategies and sources were recorded on charts in order to facilitate analysis for common themes and ideas.

Telephone interviews were arranged with the 16 participants who requested them. These interviews ranged in length from 10 to 60 minutes, and were tape-recorded on audio recordings to facilitate transcription and analysis. The transcripts of these interviews were analyzed for common themes and ideas which provided further insights into the survey responses.

**Summary of the Findings**

Overall, students reported having very interesting, fulfilling and successful internships. All of the students reported that their experiences in the preparation for
internship course had been useful to them in preparing for and teaching during their internship experiences. Two students encountered difficulty in their experiences. One of the two was asked to leave her placement after completing one-half of the time. The second did finally complete her internship successfully. Both of the students who encountered difficulty struggled with issues related to the specific contexts in which they were placed.

The means and standard deviations from the five questions on lesson planning, unit planning, questioning and responding, classroom management, and models of instruction are found in Table 1. Students indicated that the work they had done on lesson and unit planning in the integration class and the other education curriculum courses was sufficient for them to undertake planning tasks from the beginning of their field placements. One student noted "I entered the internship with a good strong basis in terms of planning". A second student indicated that "Making actual lesson plans and unit plans in class was very helpful". One of the two students who viewed unit planning activities as inadequate preparation for field experiences suggested that the unit plans made during classes were much too detailed to be useful in actual classroom situations. The second student who viewed planning activities as inadequate stated "Units have to be planned for specific groups in order to know what content and techniques are likely to be effective".

Students also indicated that activities related to questioning and responding had prepared them well for the classroom. They perceived their experiences as having been advanced by their faculty teacher's modelling, opportunities to practice during micro-teaching sessions, through audio and video-taping their micro-teaching and classroom teaching sessions with children. Each of the students commented that they would have liked more opportunities to practice questioning strategies with children prior to beginning their field placements.

Students indicated that the activities they did using various instructional models were adequate to help them begin teaching in their internships. Commenting on learning about varying models of instruction, one student stated "[The faculty teacher] came in and demonstrated these in our class without telling us. This made us actually experience them". He also added that "Our practicing these models in class is what actually stays in my mind. Those video labs we had really helped". A second student indicated that "This area of [the class] was most valuable for me". Two students did not believe that they were prepared to use any but directed teaching strategies at the beginning of their field placement. One student indicated "I felt safe with direct instruction, and there seemed to be no need for me to take risks and try something else". The second stated "I do not like to pigeon hole methods. There is a great deal of overlap which is not talked about in the classes".
Students' comments on the additional sources and strategies for acquiring more knowledge about the five main program areas are summarized in Table 2. Students indicated that they learned about direct and other instructional strategies in their other curriculum courses as well. They stressed that the modelling of various strategies, during their classes, by faculty teachers gave them the opportunity to experience the strategies from the viewpoint of learners. One of the students commented "That experiential tactic really drove home". Another student commented that, after experiencing the strategies as a learner, he appreciated having the opportunity to practice them himself. He commented "I remember the strategies because I can think back now in my mind, I can see what we did and I remember doing it". He concluded that "I just think it's important to take more time with each strategy and experience it rather than just hear about it". An additional suggestion was that student teachers have the opportunity to have more short term classroom placements to practice the use of different strategies prior to the beginning of their field placements. Another student suggested "Maybe invite some teachers in to do some demonstrations or send some students out to observe certain teachers as they're doing certain things".

Classroom management was the one area in which students felt inadequately prepared. One student indicated that "This area was based too much on theory and not enough practical applications were given". A second noted that "There simply was not enough time given to this important subject. Everything was too simplistic". Those who felt adequately prepared indicated that they would have appreciated even more opportunities for discussion and working at case studies. One student commented that she wanted to "Talk with teachers and find out what works for them". A second suggested "Get teachers to give presentations on 'tricks' they use in their classrooms". One thought shared by all of the students was that classroom management strategies were best learned and practiced in classroom situations with students.

One of the objectives of the course was to encourage students, through the use of reflective discussion, to develop their own reflective practices. Students told of a variety of experiences which they believed to be part of becoming more reflective about their own teaching practices. Others did not seem to identify reflective processes beyond the discussions which took place in the integration classes. The area of classroom management was the one with which the students began to link the process of reflection about their teaching experiences. One student indicated that, when faced with a difficult classroom dilemma related to management, she would reflect by "Asking myself how I would like to be treated". Another student, commenting on the use of reflective classroom discussions noted "I believe that the discussions we had were a good start". Commenting on her
attempts at reflection during her field placement, the same student indicated "I recorded some of the ideas so I could see how it changed over time". Commenting further on the helpful nature of the process, she stated:

"Maybe I didn't reflect in detail as much as I should have but I think it's important to reflect. When we had our conferences with my teacher I always reflected on what I did, and always wanted to make sure that next time I'd work on making it better, improving myself. I always tried learning from my mistakes. I think that's the idea of the reflective practitioner - partly."

This student and two others also commented that they missed having reflective discussions, like those facilitated during the course, with other students during their internships. They suggested that such discussions "Help you to see if you have common problems and then you can discuss and see how the others have dealt with them and you could shed some light on some problems, too. You could tell that other people are going through the same kind of thing". Another student indicated "Very definitely you need that reflective part because otherwise you don't know whether you're way off on a tangent. You also need that kind of encouragement or that reassurance, reinforcement".

Different students perceived themselves as using reflective processes to varying degrees. One student said of his reflective process "It's just an ongoing thing. I don't consciously do it. I'm always wondering what's going to be best for these kids". Another student described her experiences:

"I think I'm pretty reflective anyway. That came fairly easy. When I talked to my teacher, often I'd initiate a lot of discussion about what I'd just done because I wanted to sort of clarify things in my own mind and know what I could have done."

A third student noted that she reflected differently with different people in her working environment. She indicated that often, her own reflection led her to other questions and things she would wish to explore further. Her first priority, however, was "reflecting with the teacher because we were both there and we both knew exactly what was going on, knew the children and the types of responses they would give". This student also indicated that she did a great deal of valuable reflection with her college supervisor because he had a fuller understanding of the total field experience program and the Ministry program initiatives than her cooperating teacher.

A number of students commented on the use of journals as tools for reflection. One student commented that "You don't want to make them so laborious that it takes an hour or so to do after every discussion". This student indicated that he had kept his journal entries brief mostly keeping track of things that worked and things that did not. He further
contended that "You don't have to rehash things you've said already, so if you've already covered it you have a mental idea of what you have and haven't covered. Another student commented:

I'm a very reflective person anyway and so the journal for me was actually frustrating because I had already reflected myself, I would reflect with my teacher, with my husband, and with my dad, who is also a teacher. By the time I went to my journal, I had said it about 5 times already.

The student concluded "I don't think the journal should ever be excluded. It is where you do your reflection, your learning and it gives you kind of a springboard to where you're going to go next".

One student, who won an award for excellence in her internship, used her journal as a way of self-supervising throughout her placement. She indicated that when she wrote her first impressions about her lessons and experiences "My first reaction would be sort of a panic. I'd remember details that I flubbed on". She continued "Later on I'd have more of a reflective attitude, see where things were actually stronger than what I might have thought, and then to comment on those in the journal". This student concluded that she would make changes in her teaching based on ideas which grew from her work with her journal.

One student expressed extreme dissatisfaction with her entire teacher education program including the integration class. She contended that "There is no real connection between what is taught in university classes and what actually happens during the internship and beyond". She further contended that the only way in which one could learn to teach was by actually watching teachers and working with children in classrooms. She concluded that her program had consisted of "Artificial situations in an artificial environment", and that such situations were not "preparation for reality".

During an interview with an experienced college supervisor, the researcher queried the supervisor as to why he thought this student had perceived her university experiences so negatively. He commented:

I don't think that the people who would make comments like that have really come to the depth of what teaching is all about. They think they can watch a cooperating teacher or teachers in the school and then kind of imitate to a reasonable degree what they are doing. They'd be the kind of people who would tend to be just a bit superficial and maybe lack a bit of creativity on their own part.

The supervisor concluded that, in his experiences, the students who had been most successful in their internship experiences were those who had been interested in a wide variety of academic areas and who viewed teaching as more than merely technical skills.
Discussion and Implications for Practice

From the findings presented above, it appears that the majority of the students were able to plan lessons and units, structure and present lessons using directed and other instructional strategies, and use questioning and responding strategies with students at the beginning of their internship experiences. An examination of the findings (Table 1) and their additional comments indicate that students found the experiences related to these four areas to be practical and adaptable to a variety of classroom contexts. Similar to the findings and suggestions of Miklos and Greene (1987) and Fieman-Nemser (1990) the faculty teacher attempted to help the students deal with their 'practicality' concerns without becoming bogged down in the technical aspects of teaching. Although the faculty teacher did some modelling of instructional strategies for students, the reflective discussions which followed were designed to encourage students to analyze and think critically about what they had seen and experienced and to avoid merely imitating the strategies and becoming apprentices of teaching (Armaline & Hoover, 1988).

Classroom management was the one area with which students expressed dissatisfaction based on their experiences in the preparation for internship course. Eight of the 16 students interviewed did not perceive the theories, case studies, or discussions in which they took part to be adequate in preparing them for contending with classroom management at the beginning of their internship experiences. The eight students who struggled most with classroom management suggested that, as way of helping them integrate theory with practice, they needed many more opportunities for classroom observations which would include analyzing the management strategies used by teachers. It would appear that classroom management strategies are most effectively learned within specific classroom contexts involving 'real' students and actual situations.

When considering other sources from which these concepts could be learned, students had little to add beyond the suggestions of working with classroom teachers in specific classroom contexts. The faculty teacher worked with the students using the conceptual framework (Figure 1.) to create a context for learning which was significantly different from the contexts of other pedagogical courses in which students were involved. The context resembled a collaborative learning community in which students were involved in the roles of learners, teachers, and researchers. The context was based upon hands-on experiences, demonstrations, short presentations of theory, and much discussion reflecting on the teaching-learning experiences. The learning context created in the preparation course
provided a simulated environment in which much learning about teaching could and did occur.

The students did not make many additional suggestions for strategies to enhance their learning about teaching either. Instead, students requested an even greater number of the hands-on exercises which they had experienced in the preparation for internship course. Those experiences were designed to help students integrate and make sense of pedagogical theories which they learned in other courses as well as in the preparation course. This integration involved students in drawing together concepts from the three traditions noted on the epistemological map (Fieman-Nemser, 1990; Tom & Valli, 1990; van Maanen, 1977).

Helping students develop reflective strategies for thinking critically about their teaching practices proved to be the most challenging area of the course framework to develop. Part of the reason for the difficulty may be that the preparation for internship course was the only one in which students were required to act - teach, and then reflect upon their actions - teaching. Similar to the those of Roth (1989), findings from this research strongly indicate that preparing students to undertake reflective practice is anything but standardized. The researcher noted that, similar to Zeichner and Liston (1987) and Wubbels and Korthagen (1990), reflective practice varied with the degrees to which each student had or was able to develop a reflective attitude. Such an attitude is related to students' abilities to observe, think critically, and solve problems related to their own teaching. Similar to Bolin's (1988; 1990) findings, 13 of the 16 of the students did not always find writing reflective journals a particularly useful exercise for reflecting on their teaching. The use of reflective discussions, facilitated by the faculty teacher, were thought by a number of students to be more useful for stimulating reflective practice because they offer more instant feedback and help students deal with their emotional and social needs in addition to their intellectual concerns around improving their teaching.

In addition to exploring the four questions which guided this research, the findings can also be used to consider the value of the conceptual framework for organizing similar courses in the future. The findings do provide some validation for the continued use of the basic structure of the conceptual framework as an organizer for the development of similar courses. Initially, knowledge related to planning, questioning and responding, and presenting and structuring of various teaching strategies were linked to the positivistic tradition because they were introduced as generalizations beyond specific contexts (Tom & Valli, 1990). Creating specific knowledge of classroom contexts through observation and dialogue grew from the interpretive portion of the framework. The integration of experiences related to these areas involved linking positivistic knowledge and interpretive
contexts through observation and dialogue. Informal peer coaching strategies emerged as students worked together during micro-teaching sessions. The interpretive observations were also the basis of the reflective discussions during which the interpretive and positivistic grew into the critical tradition.

Students also prepared journals of their observations and reflections of the classroom contexts which they experienced during their five day practicum. Much of the analysis and reflection of the journal material was also linked to the critical aspect. The linkages among the three epistemological traditions did appear to develop very much as they were intended when the conceptual framework was prepared for the course. While the positivistic and interpretive traditions appeared stronger in the findings that those from the critical tradition, it is evident that all three traditions need to be present to develop a holistic context for the study of teaching.

These findings also have implications for future practice. The integrated framework appears quite successful in meeting the needs of student teachers for knowledge and experiences related to planning, questioning and responding, and structuring and presenting lessons based on a variety of teaching strategies. However, a framework which is even more integrated and experience based appears to be necessary fully integrate each of these areas with those related to classroom management.

An slightly altered framework (Figure 2) would allow for even greater integration of each area of knowledge with a specific classroom context. One way of applying this framework is known as the professional development model (Zeichner, 1992). One way in which this model could be used would involve linking the professional development for all of the teachers in a school to the (Insert Figure 2 approximately here,) knowledge base and practicum needs of student teachers in a course such as the one being evaluated in this paper. The knowledge base for the course is given, simulataneouly, to pre-service and in-service teachers within school/classroom settings in the form of short workshops and seminars. The pre-service teachers then put theories into practice in school classrooms under the guidance of classroom teachers and university faculty advisers. Through the professional development model, the preparation for internship course would flow directly into the extended practicum experiences during which students would develop their practices of teaching more independently.

The professional development model is particularly useful for four reasons. Initially, such a plan sets in motion a school-university partnership in which both teachers and faculty members discuss and plan the ways in which current trends in curriculum and instruction can be developed in context to benefit in-service and pre-service teachers, as well as students in classrooms. Secondly, this developmental process will hopefully do
away with "haphazard and indiosyncratic student-teaching experiences" (Darling-Hammond & Goodwin, 1993) replacing them with context based scenarios in which both pre-service and in-service teachers can wrestle with and reflect on the substantive issues related to teaching. Thirdly, in-service as well as pre-service teachers can benefit from the availability of faculty expertise about curriculum and instruction. Fourthly, faculty teachers benefit from opportunities to conduct research in classrooms and schools, and from the opportunities to acquaint teachers with a variety of research methods by develop communities of collaborative researchers within given school contexts.

Conclusion

Described in this paper have been the findings from a study based on four questions which were used to help student teachers' evaluate their preparation for internship course. Through the findings, students have indicated that the learning context created for the preparation course was adequate to assist them in acquiring practical knowledge for planning, structuring and presenting lessons, and using questioning and responding techniques. The students also indicated that classroom management strategies, related to organization and discipline, would be best learned in specific classroom contexts with teachers and their pupils. Other than reiterating the use of sources and strategies which had been used, students suggested little outside the desire to increase their exposure to teachers and pupils in classroom contexts. Strategies for developing reflective practice appear to be the area of greatest challenge in preparing student teachers for classroom teaching. More teaching in actual classroom contexts and more use of facilitated reflective discussions have been suggested as more effective ways of preparing student teachers for long term classroom experiences.

The findings from this research provide some additional insights into the development of a framework for conceptualizing the integration of theories with practice. The framework used for the research has moved a step closer to more fully integrating the positivistic (technical), interpretive and critical aspects of teaching and teacher education. However, more research, using different learning contexts, will be required to move toward a more deliberate and successful analysis of the relationships between theoretical and practical knowledge and the ways in which each contributes to and informs the other. To further develop this research, it appears that a framework which is even more integrated, interactive, and includes more variables related to students' needs will be necessary.
The use of these findings to develop a more integrated framework will, hopefully, create a vision of teaching and teacher education based on grounded theories of learning, learners, and teaching in a variety of contexts. Teacher education, undertaken in this way, will move beyond the teaching of the technical to situations in which theory informs practice and practice develops theory. Darling-Hammond and Goodwin (1993) note that "Teacher education should enable novice teachers to experiment and question, to make connections, to become 'students of teaching'" (p. 47). Hopefully, findings from this and other research will extend the boundaries of teacher education and encourage the professional development of teachers from the earliest beginnings of their teaching careers.
References


Figure 1

Pre-Service Action Research Spiral For Self-Reflection On Teaching

- Plan
- Reflect
- Act
- Observe
- Student Needs
- Content
- Teaching Strategies
- Teaching Skills
Figure 1. A Framework for Integrating Theory and Practice Based on Three Epistemological Traditions
Figure 2

Revised Pre-Service Action Research Spiral For Self-Reflection On Teaching

Plan

Student Needs

Content

Teaching Strategies

Contexts

Observe

Reflect

Act
Figure 2. An Altered Framework for Integrating Theory and Practice Based on Three Epistemological Traditions
Table 1. Means and Standard Deviations of Students' Perceptions of their Preparedness for Teaching based on the Five Areas of Course Content

<table>
<thead>
<tr>
<th>Content Areas</th>
<th>Means</th>
<th>Standard Deviation</th>
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<tbody>
<tr>
<td>1. Lesson Planning</td>
<td>3.56</td>
<td>.63</td>
</tr>
<tr>
<td>2. Unit Planning</td>
<td>3.31</td>
<td>.70</td>
</tr>
<tr>
<td>3. Questioning &amp; Responding</td>
<td>3.50</td>
<td>.52</td>
</tr>
<tr>
<td>4. Classroom Management</td>
<td>2.63</td>
<td>.88</td>
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<tr>
<td>5. Strategies of Instruction</td>
<td>3.31</td>
<td>.70</td>
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Table 2. Additional Sources and Strategies for Acquiring more knowledge about the Five Main Program Areas

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<th>Additional Sources</th>
<th>Additional Strategies</th>
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<tbody>
<tr>
<td>1. Lesson Planning:</td>
<td>- Thinking about the specific needs of specific children</td>
</tr>
<tr>
<td>- Classroom teachers</td>
<td>- Working in groups to analyze lesson plans</td>
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<tr>
<td></td>
<td>- Sharing lesson plans with other classmates informally</td>
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<tr>
<td>2. Unit Planning:</td>
<td>- Involving Community resource people</td>
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<tr>
<td>- Other Curriculum classes</td>
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<tr>
<td>3. Questioning and Responding:</td>
<td>- More actual practice with students in classrooms</td>
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<tr>
<td></td>
<td>- More practice with students of varying ages</td>
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<tr>
<td></td>
<td>- More analysis of video-taped sequences</td>
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<tr>
<td></td>
<td>- More frequent use of audio-recordings and transcripts</td>
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<tr>
<td></td>
<td>- Analyzing video-taped sequences in groups</td>
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<tr>
<td>4. Classroom Management:</td>
<td>- More opportunities to analyze case studies</td>
</tr>
<tr>
<td>- Concepts learned in a parenting group</td>
<td>- A course in assertiveness training</td>
</tr>
<tr>
<td>- Previous experiences with children</td>
<td>- Simulation and role play</td>
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<tr>
<td></td>
<td>- Talking with teachers about their discipline strategies</td>
</tr>
<tr>
<td></td>
<td>- More actual classroom practice</td>
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<tr>
<td>5. Instructional Strategies:</td>
<td>- Videos illustrating different strategies</td>
</tr>
<tr>
<td>- Itinerat catalyst teachers</td>
<td>- More opportunities to try different strategies during labs</td>
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<td></td>
<td>- Using reflective journals to analyze teaching experiences with different instructional strategies.</td>
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<tr>
<td></td>
<td>- Learning about strategies to introduce 'change' to students in classrooms.</td>
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</tbody>
</table>