This study examined preservice activities that could maximize growth in technical expertise, teaching artistry, and reflective thinking in beginning teachers. The study was part of a broader project involving 42 elementary school teachers. The 42 participants represented three very different undergraduate academic institutions and a variety of public school teaching assignments. Each participant completed an interview during the final month of his/her first year of teaching. Interviews highlighted issues of effective teaching, personal efficacy, and preservice and inservice professional development. This paper focuses on preservice activities mentioned by the novice teachers that related to their own professional development. Specifically, participants suggested six preservice activities which, for them, significantly related to growth in effective teaching. The activities provided opportunities to observe, practice, and refine reflective thinking, creative thinking, and/or an internal locus of control, all characteristics of their ideal effective practitioner. The participants maintained that six factors would enhance the education of effective practitioners: (1) clinical field experiences during foundations and methods courses, (2) microteaching lessons, (3) video analyses of student teaching performance, (4) weekly seminars for preservice teachers during full-time student teaching, (5) reflective journals, and (6) professor-modeled reflective thinking. (Contains 49 references.) (SM)
Educating the Effective Practitioner:

Improving the Preservice Curriculum

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Abstract
The purpose of this study was to examine preservice activities which may maximize growth in technical expertise, teaching artistry, and reflective thinking in beginning teachers. This study was part of a broader project involving 42 elementary school teachers. These 42 participants represented three very different undergraduate academic institutions as well as a variety of public school teaching assignments. Each participant was interviewed during the final month of his/her first of teaching, and interviews highlighted issues of effective teaching, personal efficacy, and preservice and inservice professional development. This particular paper focused on preservice activities mentioned by these novice teachers, preservice activities related to their own professional development. Specifically, participants suggested six preservice activities which, for them, were significantly (p < .0005) related to growth in effective teaching. These activities provided opportunities to observe, practice, and refine reflective thinking, creative thinking, and/or an internal locus of control, all characteristics of their ideal effective practitioner. These first year veterans maintained (a) clinical field experiences during foundations and methods courses, (b) microteaching lessons, (c) video analyses of student teaching performances, (d) weekly seminars for preservice teachers during full-time student teaching, (e) reflective journals, and (f) professor-modeled reflective thinking would enhance the education of the effective practitioner. Hopefully,
such information will assist teacher educators in implementing the principles of effective teaching and reflective practice in their preservice curricula.
Despite seeming similarities and differences, teacher education programs have traditionally shared a common goal—that of preparing effective practitioners. In preparing these effective practitioners, teacher educators typically have focused on the development of particular, verifiable teaching skills, skills which had been empirically related to increased student achievement (Moore, 1988; Richardson, 1990).

However, during the past three decades, demographic changes have altered the profiles of countless families, the educational needs of their children, and the school and community environments (Ogle, 1991). Equipped with repertoires of specific teaching skills, many teachers have been unprepared to adapt their instructional behaviors and materials to meet the challenges of today’s diverse student populations (Elkind, 1995; Hyun & Marshall, 1996). Low student achievement and pervasive teacher frustration are logical consequences of this incongruity between teacher and context.

Teacher education programs simply cannot address every student and every situation a prospective teacher will encounter. Rather, they must provide preservice teachers with a general knowledge base of effective teaching principles and practices and a strategy for adapting these principles and practices. For many teacher educators, John Dewey’s model of reflective practice is
that strategy of adaptation (Hillkirk & Dupuis, 1989; Smith, 1994; Zeichner & Liston, 1996).

Reflective practice is a disciplined inquiry into the contexts, goals, motives, methods, materials, and consequences of educational practice. It enables practitioners to thoughtfully examine conditions and attitudes which may impede or enhance student achievement. Reflective teachers

(a) respond to the unique educational and emotional needs of individual students;
(b) question personal aims and actions;
(c) constantly review instructional goals, methods, and materials;
(d) augment technical expertise with personal insights and artistry;
(e) consider the consequences of any proposed plan, the short-term and long-term effects of suggested behaviors;
(f) regularly discuss educational problems, situations, and issues with colleagues;
(g) generate new knowledge about teaching and learning; and

The paradigm of reflective practice is hardly a new one. In his seminal work, How We Think, first published in 1909, John Dewey explained the concepts of reflective thinking and teaching.
Reflective thinking, Dewey wrote, emphasizes the consequences of ideas and implies future physical action. It is not merely an exercise in theoretical manipulation or intellectual entertainment (Dewey, 1909/1933). Using methods of rational, systematic inquiry, the reflective person is able to confront and solve a variety of personal and professional obstacles; to be a proactive force in his/her environment.

In nurturing and sustaining habits of reflective thought, Dewey advocated the cultivation of three attitudes: openmindedness, whole-heartedness, and intellectual responsibility. "Openmindedness" (Dewey, 1909/1933, p. 30), the first of these desired attitudes, implies an intellectual receptiveness, a willingness to dispassionately consider multiple and novel ideas. Such openmindedness is accompanied by a sense of convergent attention or "whole-heartedness" (Dewey, 1909/1933, p. 31). All of the individual's mental, emotional, and physical resources are committed to the resolution of the problem. Ultimately, though, these admirable qualities of openmindedness and whole-heartedness are dangerous if not tempered by notions of "intellectual responsibility" (Dewey, 1909/1933, p. 32). Intellectual responsibility insists the reflective thinker consider the consequences of any proposed plan, the short-term and long-term effects of suggested behaviors.

Donald Schon, among others, has corroborated and expanded Dewey's observations on reflective thinking in his books, The Reflective Practitioner and Educating the Reflective Practitioner.
(Schon, 1983, 1987). The truly effective, reflective practitioner, Schon argues, must augment technical expertise with personal insights and artistry (Schon, 1983, 1987). All situations are unique problems the practitioner must face. Solutions to these problems often lie outside the realm of existing professional knowledge; thus, the necessity for problem solving artistry or reflective practice.

The importance of this study lies in its attempts to

(a) extend current knowledge about effective teaching and reflective thinking;

(b) affirm and utilize the valuable experiential knowledge of classroom teachers, particularly the fresh insights of first year veterans; and

(c) promote effective teaching and reflective thinking strategies in programs of teacher education.

Purpose

The main purpose of this particular study was to examine preservice activities which may maximize growth in technical expertise, and teaching artistry, and reflective thinking in beginning teachers. Three broad questions guided the interviews and subsequent questionnaires.

1. Based on your first year of teaching, what do you think are the characteristics of an effective teacher?

2. How important is it for an effective teacher to demonstrate these characteristics?
3. Which preservice activities would you suggest to assist beginning teachers in becoming more effective in the classroom?

A companion study focused on the first two research questions, and results substantiated a strong, positive relationship between effective teaching and reflective thinking (Norton, 1997). Specifically, comments from participant interviews and results from one-way classification Chi Square tests ($p < .05$) indicated several personality characteristics to be significantly related to effective teaching. For these novice teachers, the effective practitioner was a caring, committed, highly creative, proficient reflective thinker with a strong internal locus of control. Furthermore, these characteristics were not isolated traits; they were, in Jessica's words, "definitely related."

The third research question, focusing on improving the preservice curriculum, was a logical progression in this discussion of effective teaching and reflective thinking. Which preservice activities would assist beginning teachers in becoming more effective in the classroom? Or, more to the point of this study, which preservice activities would provide opportunities to observe, practice, and refine reflective thinking, creative thinking, and/or an internal locus of control, all characteristics of the participants' ideal effective practitioner?
Extensive previous research has documented countless instructional behaviors of the traditional effective teacher and appropriate strategies for developing these behaviors. (See Brophy & Good, 1985 and Porter & Brophy, 1988 for an excellent synthesis of this considerable body of knowledge.) Fewer and much smaller studies have focused on developing reflective thinking, creative thinking, and/or an internal locus of control -- characteristics of the ideal effective teacher described in this study. Studies have suggested

(a) action research;
(b) dialogue journals;
(c) post-observation conferences;
(d) video analyses;
(e) weekly, university-based seminars;
(f) microteaching; and
(g) extensive field experiences prior to student teaching may facilitate growth in reflective thinking, creative thinking, and/or an internal locus of control (Cruickshank & Metcalf, 1993; Freiberg & Waxman, 1990; Guillaume & Rudney, 1993; Hoover, 1994; Leahy & Corcoran, 1996; Schelske & Deno, 1994). It was anticipated data from this research question would corroborate and extend existing information on effective teaching, particularly as it relates to reflective thinking, creative thinking, and/or an internal locus of control.
Method

The sample used in this study consisted of 42 first year elementary school teachers. These participants represented three very different undergraduate academic institutions as well as a variety of public school teaching assignments.

Each participant was interviewed during the final month of his/her first year of teaching. Interviews highlighted issues of effective teaching, personal efficacy, and professional development. Finally, subjects were asked to complete follow-up questionnaires clarifying these important issues.

Results

Comments from participant interviews and results from one-way classification Chi Square tests ($p < .0005$) indicated several preservice activities which, for these beginning teachers, were significantly related to growth in effective teaching. These activities provided opportunities to observe, practice, and refine reflective thinking, creative thinking, and/or an internal locus of control, all characteristics of their ideal effective practitioner.

Specifically, these first year veterans maintained (a) clinical field experiences during foundations and methods courses, (b) microteaching lessons, (c) video analyses of student teaching performances, (d) weekly seminars for preservice teachers during full-time student teaching, (e) reflective journals, and (f) professor-modeled reflective thinking would enhance the education of the effective practitioner.
Discussion

In the following sections, data from the study will be expanded and clarified using selected comments from participant interviews and results from one-way classification Chi Square tests. Specifically, each of the six preservice activities identified as being significantly related to teaching effectiveness will be discussed.

Additional Part-Time Field Experiences

Each academic institution provided at least one part-time field experience before the actual full-time semester/quarter of student teaching. Nonetheless, all of these former preservice teachers, even those who had worked extensively as substitute teachers, stressed the necessity for additional part-time field experiences. Essentially, they advocated part-time field components in at least one of the initial foundations courses and in every methods course.

The first part-time field experience was, for many participants, an opportunity for serious reflection; a time to evaluate their commitment to education and suitability for classroom teaching.

I think everybody, to some degree, bases their expectations about being a teacher on their own experiences as a student. But, just because you were a good student doesn’t necessarily mean you’ll be a good teacher. I knew I needed a reality check early in the program [teacher education program]. I needed to get
involved in an elementary classroom before going any farther with the education degree. What if I had discovered I couldn’t handle being a teacher? And, what if I didn’t discover that until student teaching? Talk about a total waste of time and energy. . . everybody would have lost out in that situation. . . me, you, the other professors, my cooperating teacher, the kids, my parents. . . everybody. (Abigail)

Additionally, many participants viewed these part-time field components as necessary prerequisites to a successful semester/quarter of student teaching and, ultimately, first year of teaching. For example, Mandy graduated from the academic institution providing the most extensive program of part-time field experiences. Yet, in her opinion,

You can never have too many opportunities to be with the kids [during the teacher education program]. Every time you gain more knowledge and confidence. . . in knowing the school routine, in curriculum and instruction, in relating to the students. Some, no, most of your ideas about teaching really change once you actually get out there with the students!

Recent research on preservice teachers’ changing pedagogical concerns and information corroborates many of Mandy’s observations. In one study, preservice teachers, interviewed four times during their senior years, did experience significant changes, not only in their growing professional knowledge, but in
the definitions and organization of key concepts in that knowledge base (Jones & Vesilind, 1996). These changes, the authors discovered, were directly attributable to student teaching experiences. Student teaching facilitated and hastened tremendous growth in theoretical and practical professional knowledge. Logically, part-time student teaching experiences would also promote extensive pedagogical restructuring, and the necessity for additional part-time field components becomes even more apparent and imperative.

Finally, early field experiences can also

(a) provide an appropriate forum for linking theory and practice,
(b) increase multicultural sensitivity in future teachers, and
(c) prepare them to meet the special needs of exceptional children (Barry, 1996; Lesar, 1996; Stahler, 1996).

Microteaching Lessons

As previously noted, all of the participants agreed the combined field component/methods course was the perfect forum for developing and refining technical expertise, teaching artistry, and reflective thinking. Additionally, a significant 81% ($\chi^2 = 16.095$, df = 1, $p < .0005$) of these beginning teachers mentioned microteaching as an activity which would promote effective teaching and reflective thinking. These microteaching lessons were often a vital, on-going part of the field experience/methods course combination. For example, Miranda, a
new mother for whom the field components had been scheduling nightmares, finally admitted,

It's particularly important to be in a classroom during the methods courses. That was really helpful to me. . . to design a lesson in class at the university. . . get input from my peers, professor, and cooperating teacher. . . and then go to the elementary school and actually teach that lesson. Then, the cycle begins again. Your cooperating teacher, peers, and professor all help you evaluate the lesson. "Was it a success? Did it bomb? Why? What are some other ways I could have presented the material. . . say, if I didn't have the National Geographic video in my next school?" With all of those part-time experiences under my belt, I really felt good going into student teaching. . . and, I feel I had a great student teaching experience because of all of those little trips to the elementary schools in my methods classes!

Realistically, not all academic institutions can offer an extensive field component with each methods course. Nonetheless, as Miranda's comments revealed, opportunities for lesson preparation, presentation, and evaluation may still be incorporated into methods courses using a form of microteaching. How can microteaching lessons or modules develop reflective thinking and effective teaching? According to Dewey, "good habits of thought (whose use leads to one's becoming a thoughtful
student of teaching) are best engendered by providing situations that initiate and promote reflection" (Dewey, 1916/1944, p. 7). Obviously, clinical field experiences provide real "situations that initiate and provoke reflection" (Dewey, 1916/1944, p. 7), but, in their absence, microteaching lessons or modules offer simulated teaching scenarios. In this study, field experience and microteaching worked together to provide Dewey's "situations that initiate and promote reflection" (Dewey, 1916/1944, p. 7).

In their purest form, microteaching episodes, popularized by Dr. Donald Cruickshank of Ohio State University, are brief lessons which can be prepared, taught, and critiqued during a single class period. Each module highlights a different teaching skill and contains all necessary content information and stated objectives. After a brief preparation period, a preservice teacher conducts a particular lesson with his/her colleagues in the university class and then participates in the collective reflective critique which follows. In this collegial atmosphere, positive, effective teaching behaviors are identified and reinforced; negative, ineffective behaviors are targeted for elimination; and alternative instructional strategies are discussed (Cruickshank & Metcalf, 1993).

Essentially, microteaching lessons provide preservice teachers with additional opportunities to develop and refine habits of teaching expertise and reflective practice (Everhart & Turner, 1996). Such increased opportunities, Cruickshank maintains, should assist preservice teachers in becoming "self-
monitoring, reflective, adaptive, experimenters, action researchers, problem-solvers, hypothesis makers, and clinical inquirers" (Cruickshank, 1987, p. 17), the ultimate effective, reflective practitioners.

**Videotape Analyses**

Advancing technology has offered teacher educators yet another means of fusing theoretical and practical issues of educational practice in their teacher education programs; namely, the videotape recorder and player. Viewing one's own teaching performance (or that of a colleague) on videotape often hastens this fusion of theory and practice as one immediately witnesses "theoretical information [coming] to life as a result of its contextualization" (Anderson, Armbruster, & Roe, 1989, p. i). Professional development often skyrockets following videotape self-analysis.

Even though videotape self-analysis is a convenient and effective means of promoting professional development, how do preservice teachers actually feel about its use? Research indicated prospective educators overwhelmingly viewed this reflective exercise as extremely helpful and positive (Rogers & Tucker, 1993; White, 1987). Most preservice teachers were initially apprehensive at the thought of being videotaped, but, at the end of the semester/quarter, reported the activity as "the most helpful and important [one] of the class [student teaching seminar]" (Venitsky, 1982, p. 2). Results from this study confirmed these previous findings. All of the participants found
the videotape self-analysis to be instrumental in assessing the effectiveness of selected teaching behaviors and developing proficiency in reflective thinking. Furthermore, viewing and critiquing the videotape in a group setting was, for many of these former preservice teachers, another important vehicle for professional growth. In this study and others, reflective thinking, peer coaching and support, and instructional expertise typically increased as a result of group discussions of the videotapes (Chance & Krajewski, 1988).

In summary, videotape analyses
(a) offers an objective record of a classroom experience,
(b) enables the preservice teacher to view with detachment his/her teaching performance,
(c) provides opportunities through which individual and/or interactive reflection may develop, and
(d) promotes the student teachers' use of other kinds of technology in their classrooms (Freiberg & Waxman, 1990; Jensen, 1994; McEwan, 1996; Pailliotet, 1995).

Weekly Seminars

Another staple of most teacher education programs is the university seminar, a seminar for preservice teachers currently engaged in full-time student teaching. Typically, this seminar is conducted by college supervisors and professors and meets once a week on the university campus. All of the participants of this study, regardless of their academic preparation, maintained these weekly seminars were vital to their clinical field experiences.
Why were the weekly seminars so important to these growing practitioners? According to Donna and other former preservice teachers, the seminar discussions substantially lessened feelings of professional and personal isolation, anxiety, and frustration. My school started a week earlier than most of the other schools. That meant I really had no one to talk to about what I was going through. I felt so alone! Oh, I know, you were there, Dr. Norton, and I really appreciated your phone calls and support... but it just wasn't the same. I needed to talk to someone who felt as dumb and scared as I was! The first seminar, when everybody got together and started talking... what a relief! It was like I was hearing myself talking! Everybody seemed to be thinking and feeling the same things.

That night my brother called, and I told him how great the seminar was. My situation and feelings weren't weird... everybody else was going through the same thing... I think we all felt relieved, refreshed, and encouraged when the seminar ended. My brother, who's a recovering alcoholic, laughed and said, "Donna, it sounds like you've found some sort of Teachers' AA [Alcoholics Anonymous]! That's exactly what we do in our meetings... listen, share, and support."
Essentially, the university/college envisioned these weekly seminars as forums for reflective discussion, discussions of daily educational practice as experienced by these student teachers. "Listen, share, and support" were obviously key elements in achieving this goal of reflective discussion. Participants agreed the "listening, sharing, and supporting" evidenced in the weekly seminars

(a) enhanced reflective thinking as they brainstormed ways to improve and/or streamline instruction, classroom management, and administrative responsibilities;
(b) increased their knowledge of effective teaching strategies;
(c) encouraged professional collegiality and sharing of ideas;
(d) eased tensions when teaching concerns changed during the semester/quarter; and
(e) encouraged "resonance" (Conle, 1996, p. 297) as they constructed practical knowledge by integrating past and present educational experiences (Jones & Vesilind, 1996).

Even though the affective and behavioral gains from the seminars appear tremendous, research suggests guidelines and structure can increase the effectiveness of these group meetings. For example, in one study by Hillkirk & Dupuis (1989), preservice teachers in structured, inquiry-oriented seminars with a concomitant emphasis on skill acquisition, were typically more
adept in critical analysis and self-discovery than their counterparts in less structured seminars. Journals from preservice teachers in the more structured weekly meetings contained a significant number of reflective insights into their own philosophies of teaching, the students, the school environments, and the clinical field experiences.

Additionally, 86% of participants in this study noted the importance of small group discussion in stimulating professional growth. These small group discussions were, for several preservice teachers, highlights of the weekly seminar. The groups were distinguished by teacher certification type, focused on issues and methodologies typical of their student populations, and appeared to promote a more intimate, subject-specific professional rapport. Indeed, previous research indicated preservice teachers participating in certification-specific preparation programs were significantly more successful in the classrooms than their generally-prepared cohorts (Stahler, 1996).

In summary, the weekly seminar is common to most university/college student teaching experiences. It appears to be a more valuable resource than many teacher educators realize. By promoting professional rapport, skill acquisition, and reflective inquiry, the university seminar provides an excellent medium for professional growth.

Dialogue Journals

An important, on-going assignment in one university’s student teaching seminar was reflective dialogue journal writing.
Participants were introduced to reflective thinking and dialogue journal writing in the first seminar as they learned of the works and philosophies of John Dewey and Donald Schon and engaged in various exercises to stimulate self-awareness. Using specific guidelines and topics which corresponded to the seminar discussions, the preservice teachers submitted weekly journals to their field supervisors. During the following week, field supervisors critiqued journal entries, offering probing comments and questions and clarification when necessary. Journals were then returned to the students at the beginning of the next seminar session.

All of the former preservice teachers from this university and 83% of the entire sample ($\chi^2 = 18.667$, df = 1, $p \leq .0005$) mentioned the dialogue journals as major catalysts in promoting and refining strategies of reflective thought and identifying effective teaching strategies. Explicit guidelines for writing reflective journals, journal topics complementing seminar discussions, and extensive and probing feedback from field supervisors were frequently cited as instrumental in making the reflective journals such powerful tools for professional growth. These observations corroborate previous research documenting the effectiveness of student writing in stimulating and refining reflective thought (Hatton & Smith, 1995; Hoover, 1994; Krol, 1996).

Interestingly, the dialogue journal and weekly seminar complement can reinforce each other in many ways. For example,
the dialogue journal is a forum for *written* discussion, while the seminar provides an arena for *verbal* interaction. Preservice teachers hesitant to voice their concerns in the weekly seminar may be able to readily share them in the confidential, risk-free dialogue journal. Additionally, reflective dialogue journals, similar to the weekly seminars,

(a) provide feedback to the student;
(b) reveal patterns of behavior in a person's life;
(c) integrate events, circumstances, and people into a coherent whole; and
(d) help crystalize an individual's thoughts (Francis, 1995; Krol, 1996; Progoff, 1975; Saltzman, 1981).

In summary, reflective dialogue journal writing is, for many preservice teachers, a promising stimulus for reflective self-analysis and can be a vital channel for expression and evolution. This form of journal writing enables the author to interpret the past, understand and integrate the present into existing thought, and predict the future with increased confidence.

**Professor-Modeled Reflective Thinking**

A significant 93% ($\chi^2 = 30.857, df = 1, p \leq .0005$) of the participants identified professor modeling of reflective thinking as an important way for preservice teachers to develop and refine this valuable problem-solving and self-monitoring strategy. As Rebekah pleaded,

> Walk me through the steps! Some of my professors constantly mentioned reflective thinking but never
really modeled it. In class I never knew when we were 'reflecting' or what! Finally, I got a professor who gave us steps to use in solving problems and checking yourself. And, she would walk us through those steps . . . showing how to work through a tough problem, evaluate your teaching, or think about the consequences of something you wanted to do with your class. That's what I needed -- someone showing me how to be a reflective thinker. [Note: The "steps" in the reflective thinking cycle Rebekah mentioned are from Pollard & Tann, 1987.]

Research suggested Rebekah's needs are not unique. In a 1990 study professors discussed and consistently modeled reflective thinking in the student teaching seminar (Grippin, 1990). For examples, they "[discussed] teaching strategies, goals and objectives, and contextual issues" related to the field experience (Grippin, 1990, p. 1). Furthermore, students were required to reflect on aspects of the field experiences, assigned readings, observations of veteran teachers, and their own teaching performances. Results indicated this emphasis, modeling, and practicing of reflective thinking were very important to the student teachers' professional growth (Grippin, 1990).

Summary

At the time of the interviews, these first year veterans were able to offer invaluable insights into teacher preparation
programs and inservice activities. Memories of their student teaching days and first years of public school teaching were still intact and quite vivid. They were able to objectively evaluate their teacher education curricula and suggest improvements directly related to current educational practice in many schools. Their concerns merit serious consideration.

Implications for Teacher Education

In this study and its companion study, participants described their ideal effective teacher and suggested six preservice activities which, for them, were significantly \( (p < .0005) \) related to growth in effective teaching. These activities provided opportunities to observe, practice, and refine reflective thinking, creative thinking, and/or an internal locus of control, all characteristics of their ideal effective practitioner.

However, findings from this study must be interpreted with three important realities in mind. First of all, the sample was composed of mostly white, middle-to-upper class females. Secondly, subjects graduated from three different academic institutions, institutions often advocating and implementing strikingly different perspectives, programs, and activities. Finally, participants had completed their first years of teaching in a variety of educational settings. Predominately white, suburban schools; urban, minority schools; mostly white, rural schools, and culturally diverse suburban schools were all represented in this study. For many teacher educators, these
realities will only enhance the credibility of the study’s findings. Others may view these same realities as limitations to the generalizability of the results to other preservice and/or teacher populations.

Regardless of their varied academic preparations and teaching assignments, these first year veterans agreed on several changes and/or additions to preservice teacher education. Additional part-time field experiences, microteaching lessons, video analyses of student teaching performances, weekly seminars for preservice teachers during full-time student teaching, reflective journals, and professor-modeled reflective thinking were consistently identified as essential components of a viable preservice curriculum. Ideally, these components and the actual student teaching experience would work in concert to facilitate the professional and personal growth of individual preservice teachers. Each of the six activities previously discussed provides a unique medium in which the prospective teacher may develop and refine specific content knowledge, pedagogical expertise, reflective thinking, creative thinking, and/or an internal locus of control. Hopefully, such information will assist teacher educators in implementing the principles of effective teaching and reflective practice in their preservice curricula.

Directions for Future Research

Results from this study indicated there are several preservice activities which may promote growth in reflective
thinking and, thus, impact effective teaching in beginning teachers. However, even though the paradigm of reflective practice may answer many professional needs and questions regarding effective teaching, it simultaneously raises concerns and issues for further consideration and research. This study alone identified three broad research questions, questions which must be answered if Schon’s effective, reflective practitioner is to become the norm rather than the exception in educational communities (Schon, 1983, 1987).

First of all, does increased reflection actually enhance classroom performance? Are reflective, thoughtful, analytical teachers more effective in promoting a student’s emotional, physical, moral, and cognitive growth than their unreflective, complacent, routine-bound colleagues? Preliminary studies into the relationship between reflective thinking and effective teaching have been promising. Several qualitative studies, including this one, have reported a strong, positive relationship between the two variables. In these studies, an effective teacher, one who maximized student achievement and promoted higher-level thinking skills in his/her classroom, was also a reflective, thoughtful practitioner (Norton, 1997; Onosko, 1992; Porter & Brophy, 1988). However, more research into the relationship between effective teaching and reflective thinking is certainly needed.

Secondly, once the association between reflective thinking and effective teaching has been empirically and qualitatively
verified, means of predicting reflective thought may then be explored. Are there certain program, personality, and/or cognitive variables that can predict the presence or absence of attitudes of reflective practice? Can a preservice teacher with an inclination towards reflective inquiry be identified by a particular personal and/or intellectual characteristic? Or, does the habit of reflective thinking emerge only with age and experience? Ideally, if initial predispositions towards reflective thinking in preservice teachers could be identified, then teacher educators could structure appropriate reflective activities for each group.

Finally, how is reflective practice identified in the classroom? Structured interviews, dialogue journal entries, and written philosophies of education, for examples, are frequently used to measure reflective thinking (Hillkirk, 1987). However, these avenues ultimately fail to target actual behaviors in the classroom that connote a reflective orientation. An observation tool, to be used by the evaluator or researcher during an actual classroom visit, would provide a more direct means of determining reflective practice. Jadallah (1984) and Lambert (1976), to name a few, have developed and pilot-tested such instruments, but more research is needed before these reflective teaching observation instruments gain widespread acceptance. Or, perhaps reflective practice is not a concept which may be empirically measured by an observation tool. In a recent study on reflective theory and practice, Jadallah (1996) appears to have abandoned attempts to
measure reflective teaching using an observation instrument. Rather, he used "analysis of six preservice teachers' lesson plans, reflective analysis papers, videotaped lesson, and interviews" (p. 73) to identify and understand participants' reflective thinking.

Finally, results from this particular study merit further investigation.

1. Is there a relationship between the effective teaching strategies identified by these first year veterans and their teacher education curricula?

2. Is there a relationship between the effective teaching strategies identified by these first year veterans and aspects of their public school settings?

3. Is there a relationship between the effective teaching strategies identified by these first year veterans and prior teaching experiences?

4. Is there a relationship between the effective teaching strategies identified by these first year veterans and their ages?

5. What are the most effective means of incorporating additional field components into the teacher education program?

6. How may the use of microteaching lessons be enhanced?

7. What are the most effective means of employing videotape analyses into the teacher education program?
8. How may the weekly student teaching seminar be structured and conducted to promote reflective thinking and effective teaching strategies?

9. What are essential components of provocative dialogue journal writing, writing which stimulates personal and professional growth?

These major research questions, though vital to a more complete understanding of reflective practice and effective teaching strategies, are, ultimately, catalysts for future study. In fact, effective educational practice demands the on-going reflective cycle of assessment, research, implementation, and evaluation. Why?

Clearly, everyone who has ever been engaged in teaching knows that it is a thinking process. Effective teaching requires constant evaluation of one's beliefs in light of one's classroom behaviors -- and constant evaluation of one's classroom behaviors in light of the student outcomes for which one is aiming. Good teachers never reach stasis; they are always striving to "do it" better. (Gough, 1996, p. 459)

As teacher educators, it is our responsibility and privilege to help them "do it" better.
References


Preservice Curriculum


Preservice Curriculum


Footnotes

All participant and place names were changed to assure the anonymity of each person and the confidentiality of the study.
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