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ABSTRACT

This paper reports on the influence of a graduate course, "Methods for Masters," designed to broaden the pedagogical repertoires of cooperating teachers by providing experience in six instructional models (cooperative learning, concept attainment, group investigation, learning contracts, simulations, and synectics). The course used principles of adult learning. During each of two consecutive summer sessions a cadre of experienced teachers enrolled in the course. These teachers reported the three main benefits of this course as having the opportunity to present to peers lessons using the six models, seeing others present model lessons in various content fields, and receiving feedback from professors and peers. Through interviews and journal entries, participants responded to their personal paradigm shifts, and they anticipated use of the models in classrooms, in working with student teachers, and as vehicles for reaching diverse learners. Utilization of the strategies learned in the course engendered greater collaboration between university supervisors, cooperating teachers, and student teachers. Cooperating teachers learned to assist new teachers in experimenting with, refining, and incorporating a wider range of teaching methodologies to reach more diverse learners in the educational process. The distinction between this course and others found in a review of literature was the inclusion of the element of practice with collegial feedback and the long-term impact of the course as suggested by longitudinal data. (Contains 23 references.) (LL)

New Models for Reaching Diverse Learners

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Abstract

This study reports the influence of a graduate course designed to broaden the pedagogical repertoires of cooperating teachers by providing experience in six instructional models (cooperative learning, concept attainment, group investigation, learning contracts, simulations, and synectics). This course was specially designed to employ the principles of adult learning (Glassberg, 1979; Knowles, 1970), learning styles (Dunn & Dunn, 1978; McCarthy, 1986, 1990) and the natural cycle of learning (Kolb, 1985; McCarthy, 1986). Teachers reported the three main benefits of this course as a) having the opportunity to present to peers lessons using the six models, b) seeing others present model lessons in various content fields, and c) receiving feedback for instructional feedback from professors and peers. Teachers also recognized that the use of these alternate teaching strategies enabled them to meet the needs of more diverse learners.

During each of two consecutive summer sessions, a cadre of experienced teachers enrolled in the course "Methods for Masters" where they learned the process and application of six models of instruction. Following the natural cycle of learning (Kolb, 1985; McCarthy, 1986, 1990), they designed lessons in their own content areas using each instructional model, received feedback on their plans, practiced the implementation of their lessons, received extensive peer and expert feedback on the delivery of their lessons in simulated classroom settings, and reflected on their learning in daily response logs. Through interviews and journal entries, participants responded to their personal paradigm shifts, and their anticipated use of the models (a) in their classrooms, (b) in working with student teachers, and (c) as vehicles for reaching diverse learners.

Utilization of the strategies learned in Methods for Masters also engendered greater collaboration between university supervisors, cooperating teachers, and student teachers. By involving teachers in programs that promote new, research-based teaching strategies, and by inviting them to examine their own developmental processes of learning new methods, cooperating teachers attained the skills for offering more supportive and constructive feedback. Cooperating teachers learned how to assist new teachers in experimenting with, refining, and incorporating a wider range of teaching methodologies to reach more diverse learners in the educational process. Collaboration of those involved--the university supervisor, cooperating teacher, and student teacher--enhanced opportunities to reach diverse learners. The distinction between this course and others found in a review of literature was the inclusion of the element of practice with collegial feedback and long-term impact of the course as suggested by longitudinal data.

New Models for Reaching Diverse Learners

Traditionally, there have been few opportunities for veteran teachers to learn and practice new teaching strategies that are espoused in teacher education programs. Occasional in-service presentations and workshops may entice productive teachers to risk experimenting with an unfamiliar methodology, but seldom do those teachers receive the benefit of formative feedback while perfecting that pedagogical innovation. Too often, the rousing enthusiasm generated at a conference fades into fleeting memory and may even result in frustration if that innovation was difficult to employ in one's own classroom. Methods courses which focus on perfecting implementation of strategies are more often housed in the undergraduate curriculum, and generally are scheduled during daytime hours when few practicing teachers can attend. These methods courses, as historically offered, may not serve the needs of classroom teachers interested in regenerating their daily craft. There are few alternatives to courses based in a lecture, theoretical discussion, group report, or resource text format. Although no doubt beneficial to the overall professional development of teachers, traditional course designs fail to take into account the day to day dynamics of individual classrooms and seldom go beyond the description of pedagogical models to provide actual trial and error practice of new strategies. Few graduate courses are systematically designed as instructional processes involving the complete experiential learning cycle as described by Kolb (1985) and McCarthy (1986, 1990).

In cases where educators also serve as cooperating teachers for clinical experiences, the additional responsibility of providing rich field experiences is added. The effectiveness of teacher preparation programs is largely dependent upon the quality of the capstone experience, student teaching. When the cooperating and student teacher have a good working relationship, student teaching is greatly facilitated. Karmos and Jacko (1977) found that the cooperating teacher is viewed by student teachers as significantly more influential than the university supervisor. Lofquist (1986) agrees that " the cooperating teacher is probably the most influential instructor in the entire undergraduate preparation of teachers" (p. 181). A cooperating teacher may increase his/her effectiveness with a thorough knowledge of the information that is taught in teacher education programs. Guyton (1989) confirms the importance of "a shared frame of reference about the knowledge base among cooperating teacher, college supervisor, and student teacher" (p. 56). Moreover, strategies that exemplify concepts taught in the teacher education program should be modeled by the cooperating teacher (Thies-Sprinthall, 1986). Observing cooperating teachers employ appropriate strategies enables student teachers to emulate that strategy in their classrooms (Cherland, 1989; Hauwiller, Abel, Ausel & Sparapani, 1988).

Several universities have designed successful workshops or courses that inform cooperating teachers of the results of educational research, and about innovative teaching models and supervising practices (Abel, Ausel, Hauwiller, & Sparapani, 1986; Driscoll & Stevens, 1985; Morehead & Walters, 1987; Thies-Sprinthall, 1984, 1986). Each of these programs attempts to "have cooperating teachers understand how the student teaching experience should be a culmination of the knowledge and skills learned during their years spent in the teacher education program" (Abel et al., 1986, p. 2). In addition, there is opportunity for the cooperating teacher to enrich the teacher education program by offering practical feedback about strategies taught in methods classes. As a result, the relationship between university and school settings is strengthened, thus enhancing the student teaching experience (Morehead & Waters, 1987).

Teacher response to such courses has been favorable (Abel, 1986; Driscoll & Stevens, 1985; Morehead & Waters, 1987; Thies-Sprinthall, 1986). Driscoll (1986) reports that "when experienced teachers were presented with current research on effective instruction, they described the influence of the research information as promoting increased awareness of their teaching and a new way to think about their instructional behaviors" (p. 1).

This paper describes a graduate course, "Methods for Masters", designed to bridge the gap of theory and practice by providing veteran teachers the opportunity to learn and actually practice new methods being taught to teacher education candidates. These new "tricks of the trade" enabled experienced teachers to broaden their pedagogical repertoires and thus invigorate their teaching. This course, designed by two university student teaching supervisors, was able to fill the void voiced by the classroom teachers with whom they worked by addressing the following teacher concerns: (a) How can I learn what my field experience students are learning? (b) Where can I practice these new teaching skills and get feedback for improvement? (c) How can I gain confidence in those new teaching methods and learn how to provide meaningful feedback to my field experience students who are just learning to teach? (d) How can I tailor the course work to my unique classroom situation in my particular school district so that it will be practical and meaningful to me at this stage in my development?

Methods for Masters was designed from a theoretical base which merged adult learning principles, experiential learning theory, cognitive and affective learning style theory, and practice. The course employed three principles of effective teaching:

1. Participants were treated as adult learners, whose characteristics and needs differ from traditional learners. The need for immediate application of theory and relevance to one's own unique situation were recognized (Glassberg, 1979; Knowles, 1970).

2. Daily learning activities involved participants in the complete experiential learning cycle (Kolb, 1985; McCarthy, 1986; Murrell and Claxton, 1987).

3. Demonstration of each model incorporated every learning modality: Visual, auditory, tactile and kinesthetic (Dunn & Dunn, 1978).

This paper also describes the attitudinal and instructional changes experienced by classroom teachers who received instruction in six models of teaching. Journal entries and interviews revealed teachers' reactions to the following research areas: (a) strengths and/or weaknesses of the course, (b) application of the models of instruction to the classroom, (c) impact of course content on subsequent work with student teachers, (d) effect of course content on teachers' ability to accommodate diverse learners, and (e) professional and personal growth.

Method

Subjects

Subjects for this study were seven teachers who registered for the course Methods for Masters, a graduate-level course offered at a large midwestern university during the 1992 summer session. The group was comprised of five females and two males, ranging in age from the mid-thirties to the mid-fifties and having seven to 26 years of teaching experience. Five of the teachers taught in rural elementary and high schools. One of those teachers had begun a year-long sabbatical in order to attend graduate school. The two remaining teachers taught in university settings. One was a doctoral student who taught pre-service teachers, and the other taught business and professional speech communications at a university in a neighboring state. The communications teacher had no public school teaching experience and had never taken an educational methods course.

For a subsequent phase of this study, five teachers from the previous summer's course augmented the present sample of seven teachers. Each teacher in the combined group was interviewed to collect follow-up data concerning classroom implementation of the models and their long-term impact.

Description of the Course

Methods for Masters, conceptualized and team taught by two new professors who were university student teaching supervisors in the department of curriculum and instruction at a large midwestern university, was designed to address requests from cooperating teachers for a substantiative summer course which would address their need to perfect and augment their teaching skills. The two professors designed experiences which had a theoretical base couched in adult learning principles and a practical base focused on specific application to the

typical classroom situations of its participants. Six models of teaching were selected to be the focal points of the course: cooperative learning (Johnson & Johnson, 1991), concept attainment, group investigation, learning contracts, simulations, and synectics (Joyce & Weil, 1986).

In addition, extensive personal exploration of learning styles was facilitated. The Kolb Learning Styles Inventory (1985) was administered during the first afternoon of the course. Teachers learned not only about their personal learning styles, but also how to adapt their preferred teaching styles to accommodate the varied learning styles of their students.

The difference between other courses for cooperating teachers found within the literature and Methods for Masters was the course design, which was structured to incorporate the natural cycle of learning (Kolb, 1985, McCarthy, 1986). Participants were taken through the process of concrete experience, reflective observation, abstract conceptualization and active experimentation with each of the six pedagogical models. The actual practice of those model lessons designed for their own classrooms followed by immediate peer and instructor feedback focused on improvement in the delivery of the lesson is consistent with adult learning principles as defined by Knowles (1970) and Glassberg (1979). Class procedures were orchestrated to recognize adults' need for first hand, personal experiences with application of content.

For each of fifteen days, the class spanned six hours which mirrored typical daily school schedules with the "thinking" curriculum placed in the morning and the "activity" segment following in the afternoon. Morning sessions (8:30-11:30 a.m.) were comprised of lectures, development of lesson plans using the selected model, and instructor feedback on how to strengthen and refine individual plans. Afternoon sessions (12:30-3:30 p.m.) were devoted to the presentation of lessons using the appropriate model, feedback from peers and instructors on ways to improve effectiveness of the delivery, and self-analyses of instructional decisions made during the process of teaching each model.

Design and Procedures

Summer '92 Study. Journal entries, an inventory sheet, and exit interviews served as data sources used to examine teachers' beliefs about (a) the strengths and/or weaknesses of the course, (b) the applicability of the models for use in their classrooms, (c) their perceived impact of the course on their work with student teachers, (d) the influence of the course on their ability to accommodate diverse learners in their classrooms, and (e) their personal growth as a teacher. Daily journal entries were logged wherein each teacher reflected about his/her perceptions of growth during the course. The instructors made no attempt to influence the choice of topics for the journal. The inventory sheet was presented to teachers about midway through the course in order to investigate perceptions of growth during the course.

Participants wrote about frustrations, questions, goals, growth, and self-revelations. Two doctoral-level students conducted exit interviews using a protocol in a semi-structured format, exploring responses in further detail as needed.

Data from the journal entries, inventory sheets, and exit interviews were analyzed by coding responses into emerging patterns/themes related to each of the five areas of inquiry stated in the first paragraph of this section. The themes were organized into categories, and data segments were coded for categorization. The data were constantly compared across and within categories (Glaser & Strauss, 1967) for suitable placement. Once categories were refined and disconfirming evidence taken into consideration, conclusions were drawn.

Follow-up Study. The follow-up study was conducted to ascertain if teachers used any of the models during subsequent instruction in their own classrooms. Seven months after the summer 1991 session of Methods for Masters, teachers gathered to share accounts of their experiences implementing the models.

In February, 1993, a doctoral student held telephone interviews with participants from both the 1991 and 1992 summer sessions. In two cases, teachers were observed implementing the models by Methods for Masters instructors. One of these teachers so effectively integrated the models and adaptations for learning styles into her teaching that her building principal has directed other teachers to observe her lessons which incorporate the models she learned in Methods for Masters.

Limitations of the Study

One limitation of the present research is the selection of the sample. Since the participants enrolled in Methods for Masters are self-selected, it is possible that these teachers display different traits from those who did not choose to take the course. For example, participants may have been more motivated than non-participants to improve their teaching skills and those of their student teachers. Research could be conducted wherein the Methods for Masters course is taught in inservice meetings.

Results

Summer 1992

Data sources revealed that Methods for Masters participants underwent profound personal and professional changes as a result of the course. In all cases, teachers felt more confident as a professional, committed to implement at least some of the models during the coming school year, more proficient in providing meaningful feedback to student teachers, and mindful that adjustments in teaching need to be made for different learning styles of students.

Strengths and/or weaknesses of course. Each of seven teachers cited as the most beneficial aspect of the course the opportunity to design and present lessons incorporating the models. The element of practice was found lacking in other graduate courses teachers had taken. As one teacher explained:

> [Presenting the models] was the best part of the class. It's going from theory to practice. It made the explanation of the material clearer to me. It also gave me a chance to see it [the models] in practice. We talked about this model yesterday and I think if we had just, for example, written the lesson plans, it would have been hard to envision exactly how they would have worked. (Ted, interview, p. 1)

Besides learning from teaching one's own plan, six of the seven teachers mentioned that they benefited from observing their colleagues apply the models to other content areas and grade levels. They reported that seeing others use the models while teaching gave them ideas for applying the models to their own content areas.

> At first, it's hard to look at your content and the textbook in front of you [that describes the models] and forget what you do throughout the year. Seeing others present their lessons ... things start to click. I have something of a similar nature [in her content] that I hadn't thought of. So, giving me an opportunity to present a lesson and giving it a trial run is good, but seeing everyone else ... I would sit during the presentations and take notes. It really gave me more examples. I have all kinds of notes. Other content that I had not anticipated will work with a particular model because I saw someone using it. (Brenda, interview, p. 2)

Teachers also enthusiastically endorsed the feedback from instructors and peers as another strength of Methods for Masters. Feedback, a core component of the course, was offered at each stage of the lesson planning and delivery process. Several of the morning sessions were conducted in workshop format, during which teachers could design their lesson plans and receive immediate feedback from their instructor and peers. One teacher commented:

> I really appreciate the workshop format of some of our mornings. The fact that I can work on my plan and have the instructor there for immediate feedback helps imn. nsely. By talking to her, I was able to thwart possible misconceptions that I had of the model. (Kim, journal, p. 4)

Feedback after lesson delivery was also specifically mentioned by all teachers as a benefit of the course. During the actual teaching of the lesson, the instructor and several classmates were assigned to observe the manner in which the teacher employed specific skills of teaching such as questioning strategies or clarity of instructions. Following the lesson,

classmates and the instructor provided the presenter with the results of their data collection. This was enlightening to participants. As a veteran high school teacher explained:

> I'm sure that the feedback aspect will help [with improving my teaching], because we've had to look at different things for each person. That made you aware of some things that you don't even really realize that you need to be looking at. (Carol, interview, p. 2)

One aspect of the peer feedback component, however, was cited as a drawback. As participants grew to know and trust one another, their feedback from peers became increasingly more supportive. This placed an undue burden on the instructor to provide constructive criticism that was formerly shared by all participants.

> An interesting phenomenon: the feedback is getting more and more positive (less constructive criticism). I thought it might be exactly the opposite as we began to know one another better. I know we are improving, but, of course, we can always do better. I feel sorry for [the instructor] when she has to give "negative" feedback; she had more "company", it seemed, last week. (Kim, journal, p. 6-7)

Teachers found that watching themselves on videotape when they critiqued their own lessons was very revealing; several had never been videotaped before. Although all confessed that they were disconcerted by their own mannerisms and the way they sounded on tape, they were able to reflect on a higher level.

> Boy, you see yourself on videotape; that is really up close and personal. You look at your personality and think "Ohhh!" You start to understand what people have been saying. It actually jolted me back where I don't know if I actually was crazy about what I saw. Some things need improvement. (Larry, interview, p. 9)

Applicability of models for classroom use. In all cases, teachers emphatically stated that they could see applications for the models in their own classrooms.

> The ones I've learned, I know I'm going to use because I'm going to teach those units using these exact lesson plans that I've written. So there's no question, I'll use every one that I've written. (Ted, interview, p. 2)

Some teachers liked certain models better than others, and some teachers were hard to "convert" because of pre-existing thoughts about a model. There were some dramatic turnarounds, as evidenced by three journal entries written by the same teacher before and after teaching a lesson plan featuring cooperative learning:

> Program this morning-- cooperative learning. I feel an unwillingness to do cooperative learning, probably because I am most comfy working alone. It seems that

> the social aspect of cooperative learning is as important or maybe more so than the academic objectives. (Janice, journal, p. 2)

> Working on my lesson plan this p.m. Sometime during this work I changed from "doing an assignment" to realizing how this could really improve the lesson. It could solve one problem about keeping the whole class on task instead of only half. Also, maybe if they tell each other things, maybe they will remember them better than when I tell them things. (Janice, journal, p. 2)

> First lesson over [she taught her cooperative lesson]. Lisa [her friend who took Methods for Masters the previous summer] was right. It's fun now! I must admit I was surprised about how well the lesson worked! It was much more successful than I thought it could be. (Janice, journal, p. 2)

Work with student teachers. All but two teachers had student teachers in the past and/or were expecting student teachers in the future. These cooperating teachers predicted that Methods for Masters would enhance their ability to provide effective feedback to student teachers. As two of the teachers explained:

> I think I'll know more what to look for and what to expect after having been critiqued and giving feedback to others. I know how it feels now. You're on a podium; stand up there and perform. It's not a real easy thing to do. (Linda, interview, p. 4)

> I think my feedback will be a lot more precise. It's still subjective, but I think there's some organization behind it. I can see ways to give a student teacher negative feedback without making it seem so negative. (Ted, interview, p. 3)

Having augmented their own repertoire of instructional strategies was also seen as an asset to enhance their student teacher's experience. Teachers felt that they could be a better role model for their student teachers by being able to demonstrate alternative strategies and by giving student teachers more direction when they had difficulty designing lessons or implementing strategies. Several representative quotes follow:

> I feel that I can be a better model for the student teacher. I can give them more direction. (Brenda, interview, p.3)

> I think that [learning about different models] made me more aware of different things that I can look at in order to try and help the student teacher-- lesson planning and that sort of thing, different ways that they could approach a lesson. Sometimes they have problems with that. (Carol, interview, p. 7)

Awareness of diverse learners. The teachers confessed that they had not really thought in much detail about accommodating diverse learners while teaching.

> Sometimes I'm like the person who gets up and says, "O.K., this is the way it is. I've taught it and now you learn it." I don't make adjustments, in some cases, for some of those students who learn differently. (Carol, interview, p. 7)

> Not only do I learn through predominantly verbal instruction, I teach my students using this methodology. This course is helping me adjust that reality. (Larry, interview, p. 7)

All professed that identifying their own learning styles, witnessing classmates experiencing difficulty with a task due to right, left, or whole brain modalities, and discovering the influence learning styles can have on one's initial understanding was a revelation to them. Teachers began to systematically modify instruction to include multiple learning styles and to search for ways to accommodate needs of diverse learners.

> [I'm going to] address their different styles and not just make life a comfortable teaching mode. (Brenda, interview, p. 3)

The student who was a college instructor indicated that inclusion of a variety of instructional strategies was the paramount issue.

> I guess the problem is how am I going to know who is right brain, or left brain, or who is in what quadrant of the Kolb? So I feel more likely that what I can do is through these models. The teaching modes are diverse enough that no matter what your learning style is you can find something that you can work with, that you can shine in. (Larry, interview, p. 11)

Personal growth as a teacher. Each participant chronicled some aspect of self-revelation while taking the course. Four of the seven teachers specifically mentioned that they were surprised to discover that they were more creative than they originally believed. Two quotes are included below:

> For some reason I always saw myself as not a very creative person but I found as I was doing these models that I could think of examples very fast. I could think of three or four specific ways to use a specific model. I guess I'm a little more creative than I thought. (Ted, interview, p. 5).

> When we started this course, and I was hearing about [the models], I thought "That sounds nice but I don't think I can create anything like that." But as I kind of worked my way into it, I could. It's just work, that's all. (Larry, interview, p. 6).

Teachers, who at first felt intimidated by the thought of creating lesson plans and being videotaped while teaching in front of peers were invigorated by their success, the idea of overcoming self-limitations.

> Most of the assignments sound interesting and yet intimidating at the same time. My first knee-jerk reaction was fear, but the more I learned about the activities the more I

realized that these projects would be valuable for my future teaching. (Larry, journal, p. 1)

I can adapt to new situations. (Janice, inventory)

I believe today is my most excited day. I can do it, and it will work! It makes me feel really good. (Linda, journal, p. 12)

Evidence of increased self-confidence pervaded some journal entries. One teacher was able to confirm what she had known only intuitively before:

I'm a good teacher. I mean, I kind of doubted it after I saw all these other teachers and their different ways of doing things. After some serious thinking, I thought: "My teaching skills are superior!" I did real well. (Linda, interview, p. 5)

Lastly, a teacher wrote a passage in her journal that described the overall effect of the course on her professional growth. This testimony mirrors the intended purposes of Methods for Masters:

Thinking about class again; it's almost over. (Never thought I'd say that a about class). Lisa [her friend who took Methods for Masters the previous summer] promised it would be the best class I ever had. She was right. The new models have been great, but the class is much more than learning six new teaching techniques. It has been learning to observe better. This will help when I have a student teacher. It's been learning more about learning styles, and hemispherity, and choice of words, and ... I could go on a long time. This class is more than a sum of its parts. Maybe the most important things I've learned have been about myself, and that would take another whole notebook to write. Summarizing- I guess you can teach an old dog new tricks!

Follow-Up

Participants in both the 1992 and 1993 Methods for Masters course exited with a commitment to implement the instructional models in their classrooms the following September. Longitudinal data reveals that teachers honored their commitment by integrating at least some of these strategies into their instructional practice.

Data were collected on two occasions. The first set of data was elicited from a gathering of teachers seven months after the 1991 course. The second set of data was collected by telephone interview from the combined sample of participants of both the 1991 and 1992 sessions during February, 1993. Teachers revealed that they had tried some of the models and continued to use them. Of the eleven teachers in the combined sample (the teacher who had begun the sabbatical was not consulted), two teachers had tried all of the models. Both of these teachers had been observed teaching several of the models by the instructors of Methods for Masters and had received feedback to further refine their presentation.

The models employed by the combined sample of teachers included: cooperative learning (11), group investigation (9), concept attainment (7), simulations (5), learning contracts (4), and synectics (2). Frequency of use was not addressed during data collection. Teachers reported successful use of models and continued commitment to make them part of their regular practice.

Discussion

This study suggests that classroom teachers, regardless of age, years of experience, grade level, or specialty area, can impact their own attitudes about teaching by learning new methods. Follow-up interviews indicate that interjecting new methodologies into their repertoires of daily teaching behaviors have resulted in teachers' long-term personal and professional growth. In addition, follow-up interviews and observations suggest that cooperating teachers felt they could provide more supportive feedback and more empathy with teacher education candidates who experiment with campus-taught methodologies in their field placements.

Learning Style Indications

According to Keefe and Ferrell (1990), Kolb treats learning style "as a cognitive style that manifests itself in the learning environment" (p. 58). Murrell and Claxton (1987) state:

> A course design that provides systematic activities in all four of these modes (concrete experience, reflective observations, abstract conceptualization, and active experimentation) will be sensitive to the students' learning styles while at the same time challenging them to develop competence in other ways of learning as well. Students are thus encouraged to master the information with which the course deals and to develop skills in processing and applying that information. They are therefore engaged in learning how to learn, a competence that is critically important for effective adult functioning (p.4).

Methods for Masters wedded theory to practice by following the natural learning cycle as described by Kolb (1985) by: demonstrating the use of the model through an activity which involved the learners (concrete experience); discussing the activity (reflective observation); building a conceptual scaffold through lecture, reading and theory (abstract conceptualization); assisting each learner in constructing a lesson plan using the model in the learners' own content area (practice through active experimentation with immediate feedback from the instructor); and activating the lesson in simulated classroom teaching situations (active experimentation and concrete experience). The complete learning cycle was consistently employed with each learner experiencing the demonstration, internalizing the

content, constructing their own lessons and verifying their own understanding through implementation of the lesson and evaluation through peer feedback.

Recommendations

The receptivity of a graduate course which inexorably weds theory and practice poses interesting questions for colleges of education (COE) with eyes on the challenge of the 21st century. If the quality of education is to be upgraded, COEs must take the leadership role. School districts must be able to rely on the expertise of faculty in regional colleges and universities to provide consistent quality continuing education for its experienced teachers with the goal of immediate and lasting changes in pedagogical behavior. Behavior changes will then rekindle the spirit and energize the classrooms of experienced teachers who experience the challenge of trying something new. One aspect of burnout may be arrested.

It is imperative that educators examine the structure of graduate courses designed for experienced teachers. How can a graduate course be designed to not only inform inservice teachers of pedagogical innovations but also to enhance long term effects? First, courses need to be injected with opportunities to practice and reflect on those practices. Too often information is simply dispensed with little, if any, application or reflection. Consequently, it is up to the individual to make the connection between theory and practice.

Second, graduate courses should provide inservice teachers with the invaluable opportunity to collaborate with colleagues and enhance their pedagogical repertoires. In order to meet the needs of these teachers, emphasis should be placed on application as well as theory. Research on adult learners' characteristics supports the fact that these students need to see applicability in what they are learning, not just theory. Therefore, teachers often ask for and need courses that apply to their own content area. This need can be massaged by asking the teachers to write and implement lesson plans in their own content area as opposed to a generic content area.

Third, including a component of peer feedback provides the opportunity for teachers to make instructional improvement that is not based on evaluation. The only evaluation most teachers receive takes place in the classroom when being formally assessed by an administrator or supervisor. Graduate courses can provide the chance for inservice teachers to give and receive feedback as well as learn to do peer coaching in nonevaluative ways. This provides an excellent model for inservice teachers because it gives them the opportunity to learn from one another rather than getting the feedback from an instructional supervisor.

Finally, existing graduate courses need to expand and accommodate the learning styles of all adult learners. Traditionally, courses are designed that target the analytic rather than the reflective learner. Therefore, it is important to keep in mind adult learning

principles when designing or refining a graduate course. There need to be opportunities for teachers who learn by reflection to have time to internalize before being asked to respond or comment in class. Also, graduate courses need to include more opportunities for learners who prefer concrete experimentation to interact with the content.

Conclusion

Educational restructuring needs to go beyond the walls of the K-12 school. There needs to be within the catalogue of each college of education a cadre of courses which is devoted to improving the skills of in-service teachers through direct practice and systematic feedback. These courses can serve several purposes by: (a) engendering teachers' confidence to utilize new strategies; (b) invigorating experienced teachers by their having incorporated new methodologies into their teaching; (c) promoting collegiality among cooperating teachers who as a result become more responsive to providing meaningful feedback to students in field experiences; (d) providing viable field placements where methods taught on campus are modeled and encouraged in classrooms; (e) developing empathy in cooperating teachers who, having been in recent student status, can more easily role-take and understand the anxieties of the university students under their tutelage; and (f) enhancing collaboration between public schools and universities in the mission of educating new teachers.

With the proliferation of research on learning styles and on adult learning principles, graduate courses in colleges of education need to examine pedagogical strategies that mirror findings in the literature. Professors need to aggressively and consistently model theoretical practices for inservice teachers if those practitioners are to transfer those theories into their classrooms. Too often teachers believe what is preached by professors on campus happens only in ideal situations rarely encountered in practice. What makes courses like Methods for Masters desirable to inservice teachers is that the entire content of the course may be implemented in the public school classroom without additional funds.

In addition, the rationale for Methods for Masters relates closely to the call in many national reports for collaboration between schools and universities. The two institutions are mutually responsible for the quality of field experiences offered to neophytes in their teacher education programs. By involving cooperating teachers in programs which promote new, research-based teaching strategies and by inviting them to examine their own developmental processes of learning new methods, teachers gain a sensitivity to the diverse needs of field experience students and attain the skills to offer more supportive and constructive feedback to fledglings exploring their teaching styles. Veteran teachers not only invigorated their own teaching but also learned how to assist new teachers in experimenting with, refining, and

incorporating a wider range of teaching methodologies. All stakeholders--the classroom teacher, the public school, the teacher education candidate, the university, and the succeeding generations of students--share in the benefits.

References

Abel, F. J., Ausel, D., Hauwiller, J. G., & Sparapani, E. F. (1986, February). Enhancing the effectiveness of cooperating teachers. Paper presented at the annual meeting of the Association of Teacher Educators, Houston, TX.

Cherland, M. R. (1989). The teacher educator and the teacher: When theory and practice conflict. Journal of Reading, 32, 409-413.

Cleary, M. J. (1988). Thinking styles of supervisors and implications for student teaching. Teacher Educator, 24(1), 16-23.

Driscoll, A. (1986, April). The influence of research on effective instruction. Paper presented at the annual conference of the American Educational Research Association, San Francisco, CA.

Driscoll, A. & Stevens, D. (1985, April). Classroom teachers' response to the research on effective instruction. Paper presented at the annual conference of the American Educational Research Association, Chicago, IL.

Dunn, R. & Dunn, K. (1978). Teaching students through their individual learning styles: A practical approach. Englewood Cliffs, NJ: Prentice Hall.

Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine Publishing Company.

Glassberg, S. (1979) Development models of teacher development. Washington, D. C.: ERIC Clearinghouse on Teacher Education. (ERIC Document Reproduction Service No. ED 171 658).

Guyton, E. (1989). Guidelines for developing educational programs for cooperating teachers. Action in Teacher Education, 11(3), 54-57.

Hauwiller, J. G., Abel, F. J., Ausel, D., & Sparapani, E. F. (1988). Enhancing the effectiveness of cooperating teachers. Action in Teacher Education, 10(4), 42-46.

Johnson, D. W., & Johnson, R. T. (1991). Learning together and alone (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Joyce, B. & Weil, M. (1986). Models of teaching (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Karmos, A. H. & Jacko, C. M. (1977). The role of significant others during the student teaching experience. Journal of Teacher Education, 28(5), 51-55.

Keefe, J. W. & Ferrell, B.G. (1990). Developing a defensible learning style paradigm. Educational Leadership, 48(2), 57-61.

Knowles, M. S. (1970). The modern practice of adult education. New York: Association Press.

Kolb, D. A. (1985). Learning Style Inventory (2nd ed.). Boston: McBer & Co.

Lofquist, E. W. (1986). Insider's guide to supervising student teachers. The Clearing House, 60, 180-182.

McCarthy, B. (1986). The Hemispheric Mode Indicator. Barrington, IL: Excel, Inc.

McCarthy, B. (1990). Using the 4MAT system to bring learning styles to schools. Educational Leadership, 48(2), 31-37.

Morehead, M. A. & Waters, S. (1987). Enhancing collegiality: A model for training cooperating teachers. Teacher Educator, 23(2), 28-31.

Murrell, P. H. & Claxton, C. S. (1987). Experiential learning theory as a guide for effective teaching. Counselor Education and Supervision, 9, 4-14.

Thies-Sprinthall, L. (1984). Promoting the developmental growth of supervising teachers: Theory, research programs and implications. Journal of Teacher Education, 33(3), 53-59.

Thies-Sprinthall, L. (1986). A collaborative approach for mentor training: A working model. Journal of Teacher Education, 37(6), 13-20.