Preparing Preservice Teachers for Collaboration

By Hallie Kay Yopp & Andrea M. Guillaume

A solid research base supports the use of cooperative learning to help learners of all ages to work toward common goals, and teacher educators instruct credential students about the importance of cooperative learning and strategies for its classroom use. But a number of years ago, Robert Slavin suggested that it was time to move beyond the cooperative classroom to the cooperative school in which "students, teachers, and administrators can work cooperatively to make the school a better place for working and learning" (Slavin, 1987, p. 12; see also Stevens & Slavin, 1995). Among the components of a cooperative school are cooperative learning in the classroom, cooperative planning, and peer coaching (Slavin, 1987). In such schools, teachers work together for the purpose of mutual professional development (Heller, 1989), and they see each other as resources for professional growth (Smith, 1987). Indeed, many of the current calls for reform hinge upon building successful professional collaborations for the improvement of teaching and learning (Ball, 1996; Darling-Hammond, 1994; Friend & Cook, 1990; Sykes, 1996).

Professional collaboration has considerable pay-

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offs. Bruce Joyce and Beverly Showers (1995) assert that: "Teachers learn from each other in the process of planning instruction, developing the materials to support it, watching each other work with students, and thinking together about the impact of their behavior on the learning of their students" (p. 125), and they argue that teacher training and peer coaching are inseparable elements of school improvement. Another outcome of professional collaboration is seen in a study conducted to determine the strategies used by experienced suburban teachers that resulted in "sustained exemplary performance"—it identifies the building of peer support systems among professionals as one of several critical strategies (Campbell, 1990-91). Moreover, Judith Warren Little's (1982) ethnographic work suggests that successful schools can be distinguished from unsuccessful schools in part by the extent to which teachers engage in collegial behavior. Critical are the extent to which teachers engage in "frequent, continuous, and increasingly concrete and precise talk about teaching practice" and the extent to which teachers instruct others in the practice of teaching (p. 331). Considering teachers the most available source of expertise for one another, Keith A. Acheson and Meredith D. Gall (1987) maintain that working with peers is linked to teachers' personal growth, sense of collegiality, and improved instructional practice.

Because of the potential benefits of professional collaboration, it is important to ask ourselves as teacher educators: How well are we preparing future teachers to work collaboratively as members of a profession? What kinds of opportunities for collaboration are credential students given? They may work on joint coursework assignments; they may teach and critique mini-lessons in front of one another at the university. But how often are they given the opportunity to observe and work with one another in real classroom settings and to reflect on those shared experiences?

Although teacher preparation programs around the world include a field experience component as a critical element, little is found in the literature about techniques used to encourage collaboration in the field experience (Friend & Cook, 1990). One of the few models found engages credential students in collaboration by having students videotape one another as they conduct lessons with children in the schools. Together, credential students view and respond to the tapes in writing and through discussion (Armbruster, Anderson, & Mall, 1991).

Models such as this one use collaboration in a way that addresses another widely held goal for teacher learning: development of teachers' reflective capacities (Ball, 1996; Stallings & Kowalski, 1990). Structuring the professional setting to include opportunities for collaboration can increase the likelihood that educators engage in reflective practice (Ginsberg & Clift, 1990; Rudney & Guillaume, 1989-90). How can teacher educators structure teacher preparation experiences so that credential students have the opportunity to work together to explore teaching practices and to reflect upon their work?
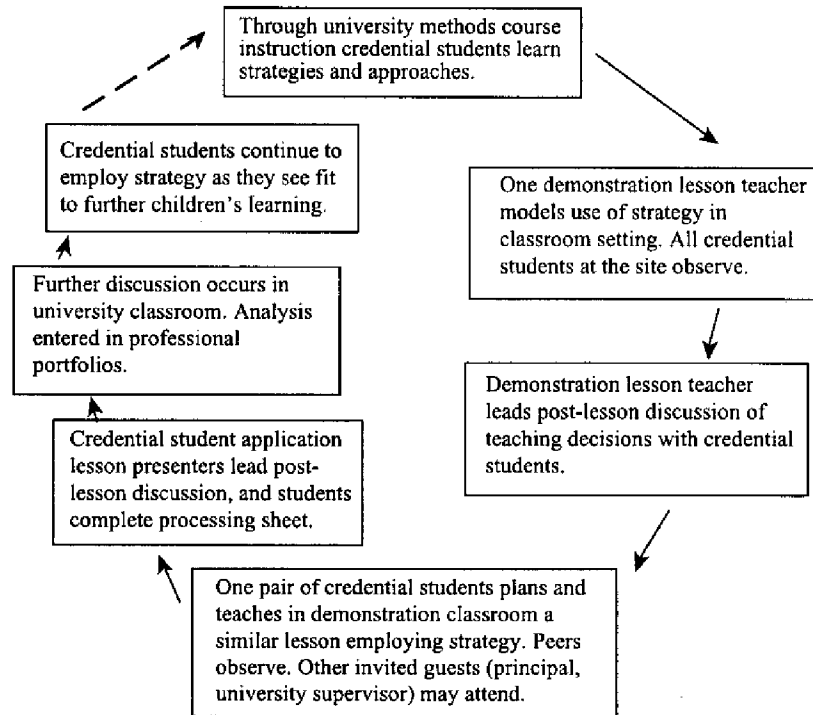
At California State University, Fullerton we have developed a credentialing model to encourage collaboration among credential students and site teachers and

to promote reflection on teaching and learning (see Yopp, Guillaume, & Savage, 1993-94 for a description). Through this model, we attempt to shift teachers' expectations—those of our credential students and those of the site teachers with whom they work as well—so that collaboration and deliberative action are the norm and not the exception. This article describes one aspect of this collaborative model, the demonstration-application lesson cycle. It is presented here as a promising practice for teacher education.

The Demonstration-Application Lesson Cycle

The demonstration-application lesson cycle incorporates two of Slavin's (1987) components of a cooperative school: cooperative planning and peer coaching. Through this cycle (depicted in Figure 1), credential students work with their peers, university faculty, and school site teachers to acquire and practice instructional strategies and to improve their teaching through collaboration.

Figure 1
Demonstration-Application Lesson Cycle

Through university methods course instruction credential students learn strategies and approaches.

Credential students continue to employ strategy as they see fit to further children's learning.

One demonstration lesson teacher models use of strategy in classroom setting. All credential students at the site observe.

Further discussion occurs in university classroom. Analysis entered in professional portfolios.

Demonstration lesson teacher leads post-lesson discussion of teaching decisions with credential students.

Credential student application lesson presenters lead post-lesson discussion, and students complete processing sheet.

One pair of credential students plans and teaches in demonstration classroom a similar lesson employing strategy. Peers observe. Other invited guests (principal, university supervisor) may attend.

The existing program at California State University, Fullerton organizes Multiple Subject (elementary) credential students into cohorts, or "blocks." Each block is composed of about 25 students who take all their methods courses together under the leadership of an instructional team of university faculty members that remains with the students throughout their preparation year. This structure allows students to work closely with one another and with the faculty.

The program is organized so that during the first semester of a two-semester program students complete ten weeks of coursework while also engaging in about nine hours of field work per week at a school site. Subsequent to the ten weeks of courses and fieldwork, students participate in full-time student teaching for five weeks. During the second semester, students take methods courses full time for seven weeks and engage in another student teaching assignment for eight weeks.

Prior to the onset of each semester the team of professors meets to discuss and coordinate methods course content. Once instruction begins, credential students view their professors' collaboration in action by learning concepts in one course and seeing them applied in another. For instance, the Educational Foundations instructor may introduce an instructional strategy such as discovery learning one week, and later that week the Language Arts methods instructor may use a discovery approach to guide students in understanding a reading/language arts concept.

Once the methods course topics are identified and scheduled, the university works with the participating elementary schools (with which we have longstanding relationships) to develop demonstration lesson topics that will support coursework content. These lessons are conducted voluntarily by school site teachers recognized for particular strengths. The lessons are demonstrated in the teachers' own classrooms and with their own students. For instance, following the discussion of emergent literacy at the university, the credential students observe a teacher at the school site demonstrate an emergent literacy lesson with young pupils in a classroom setting. Credential students see what emergent literacy looks like in an authentic setting, and the perceived gap between theory (the university) and practice (the schools) is bridged. After the lesson, the demonstration teacher discusses with the credential students the lesson—both in terms of the reasons for conducting that particular lesson with the children and in terms of the "on the spot" decisions that were made during the actual lesson.

Next the credential students are asked to extend or refine their learning by conducting their own application lessons utilizing the discussed and demonstrated strategy. Thus, after the credential students have explored the notion of emergent literacy with their university professor, all the credential students at each respective site together observe a demonstration teacher at the site conduct a model emergent literacy lesson. Following the demonstration lesson, the students have the opportunity to discuss with the teacher planning and instructional decisions. Then a pair of credential students at each site volunteers to develop an emergent literacy lesson that will be conducted with children in the demonstration classroom as the

credential students' peers, site personnel, and other invited guests observe. Those credential students who choose to conduct the emergent literacy lesson may be doing fieldwork in upper-grade classrooms so conducting this application lesson in a primary classroom allows them the added benefit of immediate practice of an approach introduced in coursework. Without the demonstration-application lesson the opportunity for realistic practice would be delayed.

The demonstration-application lesson cycle is completed when credential students together in the field discuss their peers' lesson. We have our students use a processing form to help structure discussion. An example of an actual completed processing form is provided in Table 1.

Each observer is asked to make a comment in writing, and the processing sheet is circulated during the discussion. Because it is early in the training year, we encourage observers to be positive and specific as they respond primarily to the strengths of the lesson. The lesson presenters record their reactions to the lesson at the conclusion of the discussion. Credential students report that they often have lengthy conversations about teaching and learning during these sessions. It is not unusual for the discussion to last up to an hour. Thus, this model provides for much-needed dialog among educators and encourages thoughtful reflection on practice.

Completed processing sheets provide helpful information to university methods faculty who are able to examine credential students' developing notions of good teaching and who may find points for further class discussion.

Demonstration lessons and application lessons are conducted once a week for seven or eight of the ten weeks that credential students are engaged in fieldwork during the first semester. The topics we have selected for demonstration and application are presented in Table 2, though we revise this list each year in response to current research, the recommendations of professional organizations, and suggestions from teachers at school sites. For example, site teachers recently suggested a need for a phonics demonstration lesson given the current calls for addressing phonics in reading instruction. In addition to the presentation schedule, we include for both credential students and demonstration teachers a brief description of the topics. We also provide a set of observation indicators to guide demonstration teachers' development of the lessons and to focus our credential students' observations. For example, the observation indicators for a mathematics lesson using concrete materials include the following:

(1) Is the concept or principle clearly apparent? (It may not be apparent until near the end of the lesson if the teacher is using a discovery approach.)

(2) Are students interacting with the materials in such a way that their understanding of the chosen concept is enhanced?

(3) What evidence is there that the lesson is working toward the larger goal of increasing mathematical power? (Children should be seeking relationships, rea-

Table 1
Completed Processing Sheet

Application Lesson Processing Sheet

Demonstration Lesson Topic or Strategy: Critical Thinking

Lesson Observers: Following your small group discussion, please provide feedback to the presenters. Remain positive and remember that specific, behavior-oriented or outcome-oriented feedback is the most helpful. You may wish to consider: How did the presenters engage all students in learning? How did they manage the class so that the lesson progressed smoothly? How did they address the needs of diverse learners? What kinds of learning were evident at the lesson's close?

Observer Feedback

Kristi   Renee and Joyce did a great job with this lesson. They gave clear directions and repeated them at least three times. I liked how they asked the students to put their hands on their heads when they finished each step—this helped in assessment. Even though some students would say the answer to something without raising their hands, Renee and Joyce would call on someone whose hand was raised and acknowledge the correct answer from that student rather than from those who blurted out the answer first. Calling the black pen a "magic pen" was very good. The students understood the concept presented to them and responded well to both Joyce and Renee. Overall, a great lesson.

Aimee   I thought that this lesson was well thought out and clearly explained to the students. The students were encouraged to try their best by plenty of positive verbal feedback. Joyce and Renee allowed the children who needed more "wait time" to have it, and I was happy to see that the extra time was all they needed.

Mrs. M.   I was pleased to see such thorough grade-appropriate planning and an appropriate instroductory sequence. Materials were well organized and presented after anticipatory sets were completed. Renee had a nice soft voice and established listening and activity standards throughout the lesson. Each student was given his or her own manipulatives and became involved, with interest, in the lesson. Joyce provided helpful support in the second half of the lesson and reinforced prior learnings. Thanks for a very worthwhile lesson. Come again!

Lesson Presenters: Please respond to the application lesson experience: the lesson

Table 1 — Continued

itself and the small group discussion. What did you learn?

Joyce   We enjoyed doing this lesson with the children because they were enthusiastic, eager to learn, and excited by the manipulatives. A great teachable moment occurred when some of the students placed one piece of colored cellophane on top of a different color and observed the result. With regard to the helpful suggestions, it is good to be reminded that we, as teachers, need to define certain terms and concepts if we are to succeed. For example, what do we mean by "good listeners"? What are our criteria?

Although the lesson went smoothly, tricks of the trade would be helpful. Placing the pens in a container for each table, or having one person at the table be responsible for the distribution and collection would have helped.

Overall, we were pleased with the outcome of the lesson.

Renee   I had a great time working in this class of first graders, and through this lesson I learned that careful planning is a key component in making lessons successful. The kids had a great time working with the manipulatives. They were very motivated by the colored cellophane shapes and "magic pens" that we brought for them to use. We did our best to anticipate potential outcomes and make each child feel successful in working with something new.

Through the discussions after the lesson I learned that there are more effective ways to distribute and collect materials that would maximize our use of time. Trying to remember all of the little steps is hard to do when you're focused on trying to make the lesson as interesting as possible. Helen [the university supervisor] had some great suggestions not only to extend the lesson but also to engage each of the children more effectively. I have made some notes in the margins of my lesson plan that will surely help to make the lesson more effective when taught a second time.

I was a bit concerned about the time it would take to do a lesson like this with the class as a whole. The demonstration lesson that this was based on was taught in small groups, so classroom management was something I was worried about. Joyce and I established standards of behavior and tried to remind them of those standards throughout the lesson. I was unaware that criteria for what a good listener was should have been discussed with the children. It wasn't a problem during the lesson, but we were redundant in using the phrase "good listeners" when we could have complimented the students on specific behaviors that are demonstrated by good listeners. As usual, the discussion after the lesson has helped a great deal to fine tune and make the lesson more effective.

Table 2
Demonstration-Application Lesson Topics

Week	Lesson
2	*Emergent Literacy.* The teacher engages emerging readers in activities that focus on meaning and on drawing the connections between spoken and written language. Sharing of big books and/or predictable books and language experience activities are examples.
3	*Teaching a Concept Using Concrete Materials.* In the area of math, the teacher guides students in using manipulative materials. The aim is to help students build concepts by interacting with concrete objects.
4	*Phonics Instruction.* The teacher directs early readers in activities that improve their ability to analyze and decode the printed word as they increase their understanding of the alphabetic principle. Children become better able to sense the regularities of the components of printed and spoken words and then apply their knowledge to meaningful contexts (i.e., text). A hands-on activity that engages all participants is most appropriate.
5	*Directed Lesson.* The teacher teaches to a behavioral objective through the use of direct instruction components like anticipatory set, input, guided practice, closure, and independent practice.
6	*Teaching Math with Technology.* Students work with mathematical topics with the assistance of current technological devices like calculators, computers, or video discs. A variety of lesson formats is acceptable, although moving beyond drill and practice provides helpful modeling for student teachers.
7	*Inductive/Inquiry/Critical Thinking Lesson.* The students are engaged in thinking about material in order to form their own conclusions. Special focus should be on the higher levels of Bloom's Taxonomy and on learning how to learn. Inquiry, critical thinking, or creativity lessons are appropriate and may be demonstrated in one of many subject areas.
8	*Content Area Reading.* Students are engaged in an activity that enhances their comprehension of information presented in a text. Strategies before, during, or reading, such as semantic mapping, vocabulary previews, and outlining are appropriate. A content area text is used. The point here is that children do need to learn to read expository material, so simply discarding the texts and replacing them with discussions and activities is inappropriate.

soning logically, and exploring their ideas verbally to understand the structure of mathematics).

All credential students observe every demonstration lesson at their site and participate in the post-lesson discussions. In addition, all credential students plan and teach at least two application lessons at the site with a partner. Credential students are encouraged to volunteer for those application lessons that would stretch their skills the most: a strategy they have never tried before, an age group with which they have little experience, or a subject matter about which they feel less confident.

Credential Students' Reactions

Kate Hawkey (1995) points out that little research has been conducted to examine the contribution that peers make in the practice-based elements of teacher education and argues that research in this area is needed. We surveyed the participants from two years of participating blocks after they had completed the first semester of the their program (n=91), asking them to evaluate the demonstration-application lesson cycle experience. They anonymously rated the value of the lesson cycle on a 1-5 scale (with 1 being "not at all valuable" and a rating of 5 being "highly valuable"). The mean rating on this 5-point scale was 4.3, the modal score was 5.0, and the median was 4. Table 3 provides the frequency distribution for each level of response to the prompt regarding the value of the lesson cycle.

Table 3
Frequency Distribution of Survey Responses Regarding the Value
of the Demonstration-Application Lesson Cycle
(n = 91)

"Not at all valuable"				"Highly Valuable"
1	2	3	4	5
2%	4%	9%	33%	52%

In addition to obtaining credential students' ratings of components, we asked them to respond to six prompts about the demonstration-application lesson cycle. Prompts and summaries of the students' responses are given in Table 4. Overall, comments to the prompts were quite positive and indicate that the demonstration-application lesson experience is perceived as a worthwhile one for credential students.

Students' comments, such as the ones provided in Table 4, have also taught us lessons about potential pitfalls for the demonstration-application lesson cycle. Maintaining uniformly high quality demonstration lessons is an ongoing concern.

Table 4
Analysis of Credential Students' Anonymous Written Reponses
Regarding the Demonstration-Application Lesson Experience
(n=91)

Prompt	Percentages of Kinds of Responses	Themes in Reponses (bullets)/ Representative Responses (in quotes)
The demonstration-application lesson experience was beneficial/not beneficial (circle one) because...	93% "beneficial"	• appreciated the opportunity to view different teaching styles • helpful to see in practice concepts discussed at the university • appreciated working with and observing age groups other than their student teaching placement
	6% "not beneficial"	
The demonstration-application lesson experience did/did not contribute (circle one) to my professional growth in that...	93% "did contribute"	• valued peer feedback • appreciated working with peers • valued the opportunity to see concepts and strategies in action and to apply their new skills and knowledge • appreciated the broad exposure to a variety of teachers, teaching styles, classroom management styles, and grade levels • gained confidence in their teaching
	6% "did not contribute"	no comment
The demonstration-application lesson experience could be improved by...	40% no response or positive responses	"Everything was so positive, I wouldn't change a thing."
	60% recommended changes	• scheduling • more talk time with demonstration teachers • requests for university supervisor to attend all lessons • maintaining high quality of demonstration lessons

Table 4 — Continued

Prompt	Percentages of Kinds of Responses	Themes in Reponses (bullets)/ Representative Responses (in quotes)
The time investment required by the demonstration-application lesson experience is...	60% positive responses	"Time spent was well worth it!"
	30% neutral responses	"It usually took a couple of hours to get an application lesson ready."
	9% negative	"Time commitment was excessive."
The site teachers' reaction to the demonstration-application lesson experience seems to be...	63% positive responses	• positive • helpful • appreciative • cooperative
	15% mixed responses	• some teachers were positive; others treated the demonstration lessons as an obligation
	23% negative responses	• some teachers appeared apprehensive or hesitant to volunteer
Another thing I want you to know about the demon-stration-application lesson experience is that...	71% positive responses	• enthusiastic in praise • encouraged continued use of the cycle • found their peers supportive • found the exposure to many classrooms, routines, rules, and other dynamics very useful
	11% neutral reponses	• centered on suggestions for scheduling
	19% negative responses	"It was hectic to juggle schedules when you work with someone else."

Some students find the post-lesson discussions most helpful when led by either the demonstration teacher or by the university supervisor, which is difficult to accomplish for all lessons. Another concern is ensuring the smooth operation of the entire process. Scheduling the lessons and informing all parties of the schedule at each site continue to pose challenges for us. It also is important that the university faculty provide adequate support for the demonstration and application lessons in the college classroom by leading discussions regarding the lessons. Finally, three surveyed students remarked about the somewhat artificial nature of observing and then teaching just one lesson in an otherwise unfamiliar classroom. We can address this concern by allowing additional observational time for those individuals who feel it necessary. The overall reported benefit of the lesson cycle is, for us, worth the effort it takes to address each of these concerns.

During the inception year of the demonstration-application lesson cycle eight years ago, one cohort of credential students participated; in each of the seven subsequent years, two cohorts have participated yearly. When we first initiated this requirement as part of our program in 1990, we wondered whether students would find it threatening, whether they would be intimidated by having their peers observe them in real classroom settings. Written comments from the original group of credential students to experience this model after they participated in several demonstration-application lessons reveal otherwise.

> "I found it very interesting to watch [a peer] teach. She seems to be a motivating and exceptional student teacher. I really found things in her style of teaching I could incorporate into my own style.... I also felt that watching her lesson helped me relax and think about specifics in my own teaching."

> "It was not intimidating at all, much easier than being watched by a supervisor or master teacher. I am considering having [my peers] write letters of recommendation for me and offering the same."

> "It's wonderful to get positive feedback from someone else who is basically in the same situation I am in...I gained an incredible amount of additional knowledge on how to be the best teacher I can possibly be.... The input and reinforcement from others is priceless."

> "It is always nice to get feedback from your peers, even if it isn't always positive, because it forces you to reflect upon your teaching. I think this inevitably leads to improvement."

> "The experience...strengthened the bond of friendship within our group and a sense of togetherness in our profession was cultivated. Watching my peers gave me new ideas and confirmed the fact that all of us are learners who have natural insecurities, but who also exhibit endless potential!"

> "I have been curious about the teaching styles of my peers, and so have enjoyed having input from others, but also have benefitted from seeing the teaching styles of others. I hope this process is available to me as I pursue my career."

"[A peer's] teaching abilities have given me new insight on my own potential as a teacher.... I hope that when I begin my teaching career, I will be in the company of fellow staff members that are supportive of this type of interaction."

As revealed in these comments, credential students enjoy the opportunity to learn from one another. They value the opportunity to see their peers engaging in teaching as well as the opportunity to discuss and grow from their peers' comments about their own teaching. Further, they indicate an interest in being a part of a profession that encourages mutual support. The demonstration-application lesson cycle builds in our credential students an expectation of collegiality. This expectation, as Kenneth Tye and Barbara Tye (1984) argue, is imperative for schools to improve and better serve children.

Additional Outcomes

In addition to our primary goal of helping credential students view teaching as a collegial profession and become thoughtful participants in learning communities, we believe other outcomes of this model have considerable merit. Not only do our credential students report that they learn about teaching, but the teachers at the school sites do as well. When a sample of teachers and administrators, personnel from training sites who attended a feedback meeting, was asked about their reactions to the demonstration-application lesson cycle, responses included that site personnel experience an increased sense of professionalism and a group commitment to helping prospective teachers. They report feeling stimulated and valued as models of excellence in the profession. They note that this lesson cycle encourages teachers to remain current as instructional leaders both because they help select the topics and because they polish their instructional skills in order to lead strong demonstration lessons. Further, site personnel tell us they enjoy mentoring new professionals and appreciate having a receptive audience as they discuss their thinking. Finally, they believe that participating credential students are receiving a broader education and that these credential students gain a better understanding of the total school community.

Another outcome is that the university helps support collaborative activities at the schools. Although calls for collaboration at schools sites abound, it is difficult for educators to find the time for shared efforts (Raywid, 1993). Through the demonstration-application lesson cycle the university helps to provide a vehicle for incorporating collaboration into existing programs. Expectations at the schools shift, and the mechanics of collaboration become more natural while the benefits of collaboration propel future efforts toward the improvement of teaching and learning through joint effort and reflection.

A final significant outcome is the closer link that is established between the university and the school, and closer linkages between these two institutions are advocated in current proposals for the redesign of teacher education (Goodlad,

1990; Million & Vare, 1997; Vare, 1994). Through their involvement in demonstration-application lesson cycle activities, site teachers and administrators become partners with university faculty in the education of prospective teachers. There is a sense of shared ownership over teacher education, and site teachers, site administrators, and university faculty become members of a more extensive collaborative community. These collaborative efforts provide a good example for our credential students as well as for the children in the schools. Thus, the demonstration-application lesson model not only responds to Slavin's call for cooperative schools, it moves collaboration beyond the level of the school to the broader professional community.

Conclusion

The demonstration-application lesson cycle provides a means for credential students to study together the theoretical and research bases for pedagogical approaches, witness the approaches demonstrated by expert practitioners in the field, practice them with a peer and observe fellow students practice them, and engage in thoughtful discussion throughout the process. Moreover, it provides a mechanism by which teachers in the schools can be involved in the sharing and construction of knowledge.

The interaction of teachers has been called the lifeblood of professional growth (see Heller, 1989). Thoughtful interaction with one's peers should be part of preservice teachers' preparation for the profession so that collaboration and reflection become habits. The demonstration-application lesson cycle is a useful model for encouraging collaboration and reflection for all of those involved in the preparation of teachers.

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