After Twelve Years of Teaching the College-Teaching Course

Michael B. Paulsen

University of New Orleans

This essay provides a detailed presentation of the perspectives, approaches, activities, materials, and evaluative information that characterize and distinguish a formal, credit-earning, semester-long graduate course in college teaching. This report is based on the author's experiences and reflections drawn from, and expressed after, 12 years of teaching the college-teaching course. Based on an intensive study of advances in theory and research related to teaching, learning, learners, and diversity; students engage in 1) actual teaching, in which they integrate learning theory and other pedagogical knowledge with the content knowledge of their own subject-matter areas; 2) extensive theory and research informed observation and analysis of the teaching of others; 3) the giving and receiving of detailed, theory and research informed feedback about the teaching and learning that they have practiced and observed; and 4) the creation of pedagogical content knowledge essential to advancement of the scholarship of teaching.

INTRODUCTION

Programs for the pre-professional preparation of future faculty during graduate school extend from substantial curricular reform efforts, such as the Doctor of Arts degree (Glazer, 1993), on the one hand, to the traditional teaching assistant experience in a largely research focused graduate program, on the other. Most current efforts lie somewhere in between these extremes. For example, extensive and structured teaching assistant training programs chart a path to various forms of certification for teaching at universities such as Colorado, Illinois, and Syracuse (Border, 1993; Lambert, 1993), concentrations of courses in college teaching are available to graduate students at institutions such as Florida State

University (Schuster, 1993), and courses in college teaching are required of all new faculty at some institutions such as Miami-Dade Community College (Jenrette & Napoli, 1994).

Although formal, credit-earning, semester-long graduate courses in college teaching have not played a central or dominant role in the preparation of future faculty across the nation, such course offerings have increased and some of the more recent models of courses in college teaching have emphasized not only the promotion of excellence in teaching but also the development of scholars of teaching (Kreber, 1999a). At many colleges and universities, one course in college teaching constitutes the first, and sometimes the only, substantial investment in the enhancement of teaching and learning. Therefore, the sharing of, experimentation with, and analysis of, our experiences with such courses are especially important.

The purpose of this essay is to describe and present the perspectives, approaches, activities, materials, and evaluative information that characterize and distinguish a formal, credit-earning, semester-long graduate course in college teaching. This report is based on my experiences and reflections drawn from, and expressed after, 12 years of teaching the college-teaching course.

A FULL-SEMESTER, CREDIT-EARNING GRADUATE COURSE ON COLLEGE TEACHING

For the past 12 years, one to three times per year, I have had the opportunity to teach a full-semester, credit-earning graduate course on teaching and learning in the college classroom. I have developed and taught the course at three large, public, doctorate-granting universities. Students in the course have come from the ranks of graduate students, faculty, and administrators at two-year and four-year colleges, universities and professional schools, and from every conceivable disciplinary or subject-matter background. The disciplinary or professional backgrounds of the students have included the arts, humanities, social sciences, math and natural sciences, business, engineering, computer science, architecture, agriculture, medicine, dentistry, law, ministry, nursing, education, counseling, social work, public administration, military science, and more. While some students have little or no college teaching experience, others have 25 or more years of such experience. Although the course has been presented in a variety of delivery formats, the most common is meeting one evening a week for three hours throughout a 16-week semester. This course is de-

signed to help prepare future college professors (graduate students in any discipline) for their roles as teachers, and to help current two-year and four-year college instructors (faculty in any discipline) to continue to increase their effectiveness as teachers.

DISTINCTIVE FEATURES OF THE COURSE

The course has a number of distinctive features that, in combination, have served to make the course unusual in its approach, and according to evaluation data, very effective as well. The following sections describe these features in detail.

The Interaction of Theory and Practice

One of the predominant themes of the course is that all activities, inside and outside the classroom, are designed to provide opportunities for the students to relate existing theory and research on learning and teaching to effective practice in realistic, context- and content-specific settings. For example, each student engages in 1) actual teaching, in which they draw upon the content knowledge of their own subject-matter area; 2) extensive theory and research informed observation of the teaching of others; and 3) the giving and receiving of extensive, theory and research informed feedback about the teaching and learning that they have practiced and observed.

Solid Grounding in Learning Theory and Research

The first quarter of the semester is devoted to the intensive study of advances in theory and research related to teaching, learning, learners, and diversity. In preparation for in-class group activities, students complete an extensive set of reading assignments from Feldman and Paulsen's (1998) book, *Teaching and Learning in the College Classroom*. These readings cover the following topics: 1) behavioral and humanistic theories of learning; 2) advances in research about social and cognitive perspectives on learning; 3) theories of adult learning and development; 4) learning style research; 5) intellectual, psychosocial, moral, epistemological, racial-identity and other theories of student development relevant to learning; 6) gender differences in learning and development; 7) learning in the multicultural classroom; 8) research on teacher behaviors that are particularly effective in terms of their correlations with students' achievement or learning in college; 9) models of traditional approaches to college teaching, and 10) theory and research related to a variety of

emerging models of college teaching, such as feminist pedagogy, critical pedagogy, and critically reflective teaching.

A wide variety of in-class group activities provide the students with a range of opportunities to develop their own individualized and meaningful connections between these diverse theoretical perspectives and their applications to teaching practice in personally relevant settings. The students construct their own meanings regarding these theories through peer teaching and collaborative learning activities (Bosworth & Hamilton, 1994). These activities encourage students to analyze and design various features of effective learning environments and articulate effective teacher behaviors and learning activities for learners who are diverse in ways that are explicable in terms of one or more of the theoretical perspectives identified in the readings. The most important feature of all of these assignments and activities is that they result in all of the students being well informed about existing theories about learning, learners, and diversity, in preparation for the remainder of the course that is highly clinical in nature.

Taking Risks, but Feeling Safe

The great majority of classroom time in the course is dedicated to a clinical application of the research and theories of teaching and learning identified in the previous section to actual teaching practice. This occurs through the conduct and observation of teaching, the giving and receiving of detailed feedback about the observed teaching, and the thorough analysis of such teaching. In the clinical part of the course, students are asked to take risks; many of the activities in which students are engaged can be self-revealing. This means that it is absolutely essential that the classroom environment for the college teaching course is one in which students can feel safe when taking such risks.

A variety of classroom activities contribute to the creation of a safe environment for the students. As examples, I will describe two of the techniques that I have found to be very effective in helping the students in the college teaching class feel safe and comfortable with me and with each other. During the first class meeting, I ask each student to prepare a five-minute lesson to be presented in the following class meeting, usually on a nonacademic subject like a hobby or other favorite activity of the student. I ask each student to design a lesson that will address all eight phases of Gagne's (1974) model of the teaching-learning process—motivation, apprehension, acquisition, retention, recall, generalization, performance, feedback—and will be fun to teach and fun for classmates to learn. During the next class, students are assigned to het-

erogeneous groups of five. Each member of a group explains, with some demonstration, to the other members of their group, how his or her lesson will address each of the eight phases of Gagne's teaching-learning model. As each explains the lesson, the other group members experiment for the first time with the process of giving reinforcing and constructive feedback—an important precursor of things that will be important throughout the rest of the course. The students are well aware, of course, that every member's lesson will be critiqued by the others in the group; therefore, the students quickly become effective at establishing a group norm of expressing all feedback in a constructive manner. After all members have had their turns, each group elects one person to teach their lesson before the whole class, based on the criteria of how well the lesson addresses the eight phases and how fun it would be to teach and learn.

Next, I ask the other four members of each elected "teacher's" group to prepare to role-play the parts of students in their teacher's class. I explain that the teachers have a trick up their sleeve for this exercise, because they remain with their groups and prepare their groupmates to be very good students in their class! In other words, they coach their students on when and how to respond during their lesson. This reduces the perceived risk of teaching a lesson in front of their peers, and also encourages the group members to work together in a mutually supportive manner in preparing for the lesson. After preparation, each group, in turn, moves to the front of the room and constructs a little "fishbowl"—the first of many to follow in the course—of one person role playing the part of teacher and four others role playing the parts of students in their teacher's class. During the lesson, the members of all other groups carefully observe and all student-teacher interactions and record them on an observation and feedback sheet that arranges information according to each of the eight phases of the learning model being applied in the lesson. At the end of each lesson, the observers share their feedback on how the lesson addressed the eight phases of the model. Because all students know that their group will be next to be up there in front of the class—and that everyone will be playing various self-revealing roles in the fishbowl in front of the class throughout the semester—the growing classroom and group norm of always reporting observations and offering feedback in a constructive manner becomes more firmly reinforced and established. In these—and many other ways—the students and I work together to create a learning environment from the beginning of the semester that will help students feel safe enough to be willing to take the self-revealing risks associated with the clinical phases of the course.

Another activity designed to create a safe learning environment is one that the students and I have come to call "Putting the Teacher on the Hot Seat." The purpose of this activity is to get students to really trust me. To accomplish this, it is essential that I place myself in a very vulnerable and self-revealing position. Our in-class study of learning theory and research is accomplished with small groups engaged in collaborative learning. Once the groups understand their tasks and the goals of the activities and are interactively engaged, I alternate between visiting and not visiting the groups. However, as Brookfield (1995) explains in his "fly on the wall" example, the dynamics of power and implicit assumptions in the classroom are likely to influence the meanings that students assign to the teacher's group visiting behavior. To begin the activity, I sit in the one red "hot seat" facing the students who take their seats in an arc of chairs. I ask the students to think about the various group activities in which they have been engaged, and to recall that sometimes I visited or joined their group, while other times I did not visit their group. Next, I ask the students to tell me exactly what they really thought or how they felt when I did or did not visit their group during an activity. Students' first comments are usually very positive, such as "I always like it when you come by and visit our group, because you help clarify the ideas and concepts we are discussing." But soon, the comments become noticeably deeper and mixed in their substance and tone. Examples are "Sometimes when you visit, we are really on a 'roll' and your visit kind of interrupts that," or "When you visit our group, I feel uncomfortable and sometimes even stop participating, because I feel like you're evaluating me," or "When you are nearby, but don't visit our group, we wonder what you're thinking, whether we're doing the assignment 'right,' and whether you're disappointed in what we're doing."

Examples of my responses are "I didn't know you felt that way" and "Why did you feel that way?" Then I tell them what I think my reasons for visiting or not visiting groups are and we discuss how my espoused motives differ from their perceptions. Next, I point out that what I think my purposes are may not be the real truth, so, "Please ask me questions that will help me to discover what my hidden assumptions really are." With the students committed to probing and me to frank introspection, results have revealed that sometimes I visit one group over another because I feel guilty that I gave them the toughest assignment or I assume they can't do the task without my help, or even that I want to show off my expertise on a group's topic. The crucial outcomes of this activity are the construction of a safe environment in which the students and I have

already taken personal risks and have responded with complete support for one another. By the time we have completed all aspects (including debriefing) of the activity, the students' capacities to trust me have deepened remarkably. The result is an unusually strong foundation for the cultivation and expression of understanding and support between the students and me, and among the students, for the rest of the course. Of course, I do not encourage the students to try anything like this in their own classrooms; this activity is only intended to build a strong foundation for trust in the college teaching course. Instead, I encourage my students to obtain feedback from students about learning activities in their own classrooms, using straightforward classroom assessment techniques like the "one-minute paper" (Angelo & Cross, 1993).

The clinical part of the course accounts for about two-thirds of our time in the classroom, it is the most distinguishing and dominant feature of the course, and it creates most of the self-revealing aspects of class participation. The following section describes this feature of the class in detail.

THE CLINIC IN THE COURSE

The teaching-learning clinic is the dominant feature of the course and provides opportunities for students to apply extant research and theories about teaching and learning to the actual practice of teaching and learning. Students gain valuable experience in observation and analysis as well as giving and receiving detailed feedback about the observed teaching and learning. The following sections describe the primary features of the clinic in the course.

Theoretical Grounding: Motivational, Cognitive, and Social Theories

For use in the extensive clinical portion of the course, I use a three-dimensional theoretical framework that has proven to be informative, accessible, and productive for students as they actively engage in the observation and analysis of a wide range of teaching and learning behaviors. The framework is solidly grounded in recent advances in cognitive, social, and educational psychology. Research has consistently demonstrated that students' motivational orientations; use of cognitive, metacognitive, and other self-regulated learning strategies; the social environment of the classroom; and teaching behaviors that are moderately to highly correlated with student achievement contribute significantly to student

learning in college (Feldman, 1998; Paulsen & Gentry, 1995; Pintrich, 1989; Vahala & Winston, 1994). In class, we examine the many ways in which research and theories about learning, learners, diversity, and effective teacher behaviors are clearly and meaningfully connected to one or more of the research-based, theoretical components—motivational, cognitive, and social—of the three-dimensional model we use to guide our observation and analysis of teaching-learning. The students observe, analyze, and give one another feedback on their use of motivational, cognitive, and social strategies of teaching, as well as on the effectiveness of their teaching skills in the areas of elocution, questioning, responding, discussion leading, and learning style differentiated teaching. Furthermore, they relate teaching skills to their impact on students' motivation, cognition, and perceptions of the social environment of the classroom.

Teaching Strategies: Observation and Analysis

In class, I use the social-cognitive expectancy-value theory of achievement motivation to integrate the various perspectives on student motivation to learn (Pintrich & Schunk, 1996). The practical implications of this framework are that teachers must design learning environments that help students to find affirmative and productive answers to the value question of "Why should I learn this or engage in this activity?" and the expectancy question of "Can I perform this task effectively with a reasonable amount of effort?" (Paulsen & Gentry, 1995; Pintrich, 1989; Pintrich & Schunk, 1996). Then I use Keller's familiar—attention, relevance, confidence, and satisfaction—model (ARCS) to operationalize the underlying theoretical perspectives in the actual analysis of teaching-learning behavior (Keller, 1983). Those students assigned to view the lesson from the perspective of motivational approaches to teaching use a set of 28 specific strategies arranged into the four ARCS categories on an observational checklist that is presented in Table 10.1.

In order to meaningfully organize and present the various categories of learning strategies for application in class, I use the categories of cognitive strategies—rehearsal, organization, and elaboration—articulated by Weinstein and Mayer (1986), in combination with Pintrich's (1989) taxonomy of learning strategies that includes three categories of cognitive and three subcategories of metacognitive strategies. The implications for effective teaching, based on the research underlying this framework, are that teachers must design learning environments that help students discover affirmative and productive answers to the question of "How can I perform this task effectively with a reasonable amount of effort?"

TABLE 10.1
Motivation Strategies

ATTENTION

- _____ 1) Use novelty: anecdotes, demonstrations, questions, metaphors, controversies.
- _____ 2) Inject personal, emotional element into intellectual material.
- _____ 3) Expand on familiar material with doses of the unfamiliar and unexpected.
- _____ 4) Pose a problem or issue, and ask students for ideas about how to resolve it.
- _____ 5) Use analogies to make the strange familiar and the familiar strange.
- _____ 6) Project intensity and enthusiasm.
- _____ 7) Induce dissonance or cognitive conflict.

RELEVANCE

- _____ 1) Use examples based on current student interests.
- _____ 2) Use examples of how content will help students in courses and career.
- _____ 3) Explain why course is offered or required.
- _____ 4) Use personal experiences or case studies to demonstrate relevance.
- _____ 5) Explain why the content is important to you.
- _____ 6) Call attention to the instrumental values of academic activities.

CONFIDENCE

- _____ 1) Sequence content from simpler to more complex.
- _____ 2) Help students connect success to personal effort and ability by providing opportunities for them to figure out examples or solutions on their own.
- _____ 3) Help students connect success to personal effort and ability using feedback such as "If you continue practicing this, you can really master it."
- _____ 4) Use goals and content organizers to help students see the main parts of new material and how they fit together.
- _____ 5) Check for student understanding and find out what and how they need something clarified before going on.
- _____ 6) Model and encourage effective use of how to learn (cognitive) strategies.
- _____ 7) Maintain appropriate levels of difficulty and challenge.
- _____ 8) Allow opportunities for students to make choices and decisions in learning.

SATISFACTION

- _____ 1) Use verbal praise and informative feedback more than formal evaluation.
 - _____ 2) Use positive feedback immediately following performance.
 - _____ 3) Use corrective feedback just before the next application.
 - _____ 4) Relate negative feedback clearly to performance and not the person.
 - _____ 5) Praise performance and effort.
 - _____ 6) Clarify performance expectations for each grade and adhere to them.
 - _____ 7) Teach student goal setting, self-appraisal, and self-reinforcement.
-

Note: Adapted from Brophy (1987), Cashin (1979), and Keller (1983).

(Pintrich, 1989). Students use a set of 28 specific strategies arranged into the categories of rehearsal, organization, elaboration, and three sets of metacognitive strategies on an observational checklist that is presented in Table 10.2. Finally, I organize and present the various social strategies of teaching, based on a variety of social theories of teaching and learning, for the class by adopting a condensed version of the categories of social strategies presented by Billson and Tiberius (1991). The research underlying this framework indicates that teachers should design learning environments that help students discover meaningful and productive answers to the question, "How can I learn this with others?" Students use a set of 26 specific strategies arranged into the categories of mutual respect, responsibility and commitment; communication and feedback; cooperation; and security and trust. The observational checklist that students use is presented in Table 10.3.

Teaching Skills: Observation and Analysis

Research on effective teaching behaviors has consistently shown that a teacher's presentation skills—especially in the areas of clarity and organization, but also in areas such as enthusiasm—are significantly related to student achievement (Feldman, 1998). This means that elocutionary skills are an important focus for the observation, analysis, and improvement of one's teaching. In each class, a small group of students observes the lesson from the perspective of elocutionary skills, watching carefully for indicators of effectiveness in both vocal and nonverbal modes of expression and communication. Students observing the lesson from the perspective of elocutionary skills use an observational checklist, presented in Table 10.4, to guide and record their observations. In class, we also examine a variety of ways in which different aspects of elocutionary skills may contribute to students' motivational orientations, use of cognitive strategies, and perceptions of the social environment of the classroom. This gives students practice in relating these teaching skills to the underlying theoretical framework for our analysis of the nature and effectiveness of the teaching and learning activities that characterize each individualized lesson taught in the class.

Similarly, research has consistently demonstrated that teacher behaviors that encourage questions and opinions of students and demonstrate concern with, sensitivity to, and helpfulness with respect to students' progress in class, are significantly related to students' achievement (Feldman, 1998). Therefore, the teacher's use of effective questioning, responding, and discussion-leading skills constitutes another important set

TABLE 10.2
Cognition Strategies

REHEARSAL	
_____ 1)	Repetition
_____ 2)	Recitation
_____ 3)	Verbatim note taking
_____ 4)	Shadowing—saying material aloud while writing or reading it
_____ 5)	Underlining text
_____ 6)	Copying notes
ELABORATION	
_____ 1)	Comparative organizer: shows similarities/differences between new material and existing knowledge
_____ 2)	Summarizing
_____ 3)	Paraphrasing
_____ 4)	Generative note taking: adding reflections to verbatim notes on how new material relates to existing knowledge, situations, or applications
_____ 5)	Questioning and explaining
_____ 6)	Analogies and imagery
_____ 7)	Mnemonic key words
ORGANIZATION	
_____ 1)	Expository organizer: presentation of a set of broad concepts to help students organize and relate main parts of forthcoming material
_____ 2)	Outlining
_____ 3)	Clustering and classifying
_____ 4)	Concept-mapping; presents key concepts in ovals and lines connecting the ovals with linking words on lines indicating relationships among concepts
_____ 5)	Diagramming or flowcharting
METACOGNITION	
<i>Planning</i>	
_____ 1)	Pre-study skimming to identify main points and general structure of material
_____ 2)	Setting learning goals to be achieved
_____ 3)	Generating questions to be answered during learning
<i>Monitoring</i>	
_____ 4)	Comprehension monitoring or self-testing
_____ 5)	Monitoring attention during study
_____ 6)	Adaptations during test-taking
<i>Regulating</i>	
_____ 7)	Reviewing unmastered material and self-correction
_____ 8)	Adjusting rate of studying or coverage of material according to difficulty
_____ 9)	Self-reinforcement
_____ 10)	Changing cognitive strategies to maximize meaningful learning

Note: Adapted from Lefrancois (1991) and Pintrich (1989).

TABLE 10.3
Social Strategies

MUTUAL RESPECT, RESPONSIBILITY, AND COMMITMENT	
_____ 1)	Learn more about your students.
_____ 2)	Help your students learn more about you.
_____ 3)	Observe students' nonverbal behaviors and become more aware of your own.
_____ 4)	Build a climate of egalitarianism, tolerance, and respect for diversity.
_____ 5)	Remember that your behavior is a model for student behavior.
_____ 6)	Create an environment in which teacher and students share responsibility and commitment to learning.
_____ 7)	Collect early and regular feedback from students regarding the effectiveness of your teaching and the course in general.
_____ 8)	Create opportunities for informal interaction.
COMMUNICATION AND FEEDBACK	
_____ 1)	Engage in regular interaction with students in the class.
_____ 2)	Encourage regular communication among students.
_____ 3)	Provide multiple, regular opportunities for students to receive constructive, informative feedback from both you and other students.
_____ 4)	Foster a diversity of ideas and perspectives.
_____ 5)	Bring each class to a meaningful and friendly closure.
_____ 6)	Check student understanding regularly, making more meaningful communication and feedback possible.
COOPERATION	
_____ 1)	Use peer learning: students teaching other students.
_____ 2)	Promote collaborative activities and teamwork.
_____ 3)	Use cooperative learning groups with positive interdependence, individual accountability, and heterogeneous work groups.
_____ 4)	Foster even participation levels.
_____ 5)	Work toward the exploration and resolution of conflicts by searching for commonalities and respecting diversity and differences of opinion.
SECURITY AND TRUST	
_____ 1)	Make it safe for both the students and you to take risks and be wrong.
_____ 2)	Help students explore differences and find commonalities on difficult or controversial issues.
_____ 3)	Create a climate in which less frequent participators feel comfortable expressing themselves.
_____ 4)	Ask and answer questions in an open, accepting, and constructive manner.
_____ 5)	Reduce any status differentials between you and your students.
_____ 6)	Take care to handle disruptive behaviors constructively.
_____ 7)	Be aware of the natural development of group or classroom norms and encourage the development of norms that promote effectiveness of motivation, cognition, and social teaching strategies.

Note: Adapted from Billson and Tiberius (1991).

TABLE 10.4
Elocutionary Skills

1. Vocal Expression	
-natural	-clarity
-volume	-silences
-pace	-respectful language
2. Nonverbal expression	
-facial expression	-eye contact
-posture	-movement
3. Enthusiasm	

Note: Adapted from Davis (1993), Diamond et al. (1983), and Lowman (1995).

of targets for the observation, analysis, and improvement of one's teaching. Students use an observational checklist, presented in Table 10.5, that includes sections on types of questions and the extent to which they promote interaction and discussion in the class (see, for example, Andrews, 1980), questioning and responding techniques, and discussion leader roles, to guide and record their observations. In class, we consistently strive to articulate the many ways in which questioning, responding and discussion-leading skills can affect students' motivation, cognition, and perceptions of the social environment of the classroom. Once again, students work to understand the importance of specific teaching skills by relating them to the underlying theoretical framework used for the clinical part of the course. As additional preparation for the observation and analysis of teaching skills, students complete reading assignments from books that offer valuable and practical suggestions regarding the essential teaching skills (for example Davis, 1993; Lowman, 1995; McKeachie, 1999).

One final perspective from which the students view each lesson taught is based on learning-style-differentiated teaching (LSDT) (Butler, 1987). Both teachers and students are diverse in their learning styles. And research has indicated that student achievement can be enhanced when teachers plan learning activities that are consistent with students' preferred learning styles (Claxton & Murrell, 1987). One way teachers can address the diversity of their students' learning styles is by incorporating a variety of learning activities which in combination are responsive to the needs of students with diverse learning styles. In preparation for their observation and assessment of a teacher's use of LSDT, students read about Kolb's learning style inventory (Kolb, 1998), complete the inventory

TABLE 10.5
Questioning, Responding, and Discussion-Leading Skills

TYPES OF QUESTIONS	
Divergent (open-ended) versus convergent (closed-ended)	
High-level (application, analysis, synthesis, evaluation) versus low-level (knowledge, comprehension, application)	
Structured (clearly focused) versus unstructured (vague)	
Consistent (single point, one type of thinking) versus inconsistent (subparts with contradictory expectations)	
QUESTIONING AND RESPONDING TECHNIQUES	
Question & Wait (3–5 seconds)	Reinforcement (appropriate to situation)
Probe (for justifications, assumptions, relationships)	Redirect (ask another for agreement elaboration)
Refocus (shift direction of thought)	Rephrase (reword, subdivide, give information)
DISCUSSION LEADER ROLES	
Initiator (plans and states initial problem, question, experience for discussion)	
Gatekeeper (encourages/evenly spreads participation, keeps group on track—both time and content)	
Giver/asker for reactions (promotes interpersonal response and interaction instead of just sequential recitation)	
Information and problem manager (provides/solicits more information as needed, manages problems)	
Clarifier, synthesizer, summarizer (at beginning, ending, and other times as needed)	
Recorder (or have student record discussion contributions and points made)	

Note: Adapted from Andrews (1980). *Effective classroom questioning*. University of Illinois at Urbana-Champaign, Office of Instructional Resources; and Hill (1977).

themselves, and then read Svinicki and Dixon's (1998) article that presents sets of learning activities that address each of the underlying dimensions of Kolb's four learning styles. Students use an observational chart, based on the various learning activities suggested by Svinicki and Dixon for each dimension—concrete experience, reflective observation, abstract conceptualization, and active experimentation—to guide and record their observations regarding LSdT.

The Clinical Setting for Teaching, Observation, Analysis, and Feedback-Giving

The classroom layout for the teaching-learning clinic is a setting that is both spatially distinctive and, more importantly, analytically meaningful. There are several key features of the setting. Every student is assigned

a different role for each class. The categories of roles include a teacher, a student in the teacher's class, an observer of theory-and-research-based teaching strategies, and an observer of teaching skills. These categories of roles can be rearranged into three conceptually distinct aspects of the clinical setting, as illustrated in Figure 10.1. First, those playing the roles of teacher and student sit in the middle of the front of the room and constitute a "fishbowl" in which the activities of a realistic classroom take place. For each three-hour class period, two students are assigned the role of teacher, and are asked to prepare a 15- to 20-minute lesson plan; unlike the five-minute lesson taught earlier in the semester, this lesson must be based on the subject matter of each person's own area of academic specialization. Three individuals are assigned the role of students in the teacher's class, while a fourth student role is filled by those assuming the roles of teacher, who alternate between student and teacher roles between the two lessons. Making sure there are four individuals playing the student role is essential so that small group activities (i.e., two students per group) in a lesson can be meaningfully simulated. Under these conditions, the lessons, including interactions between teacher and students, and among students, are surprisingly, impressively, and usefully realistic. Second, several small groups of students are assigned the roles of observing the teaching-learning lesson before them in terms of the conceptual perspective of either motivational, cognitive, or social strategies; and as described above, each student uses an appropriate checklist to record their observations. Third, several small groups of students are assigned the roles of observing the teaching-learning lesson in terms of several sets of specific teaching skills—elocutionary, questioning and responding, discussion-leading, and learning-style-differentiated teaching.

After each lesson, each individual playing a student role writes a "Dear Teacher" letter to the person who just taught the lesson, providing the teacher with feedback, from the unique perspective of the student, about what it felt like to be a student in their class. At the close of the lesson, the observers complete the written recording of their feedback for the teacher and begin their meeting with others who observed the teaching from a similar theoretical perspective (e.g., cognitive strategies or discussion leading skills). After comparing and discussing observations, each observer-group identifies their most essential observations and divides the responsibility for presenting those observations to the entire class. Even though each observer and each observer group actually witnesses the very same lesson, what they actually observe and report varies greatly according to the theoretical or skills-based perspective from

FIGURE 10.1
The Classroom Layout for the Clinical Format of the Course

which each individual and group conducts its observation. As observers share their key observations with the whole class and present their feedback orally to the individual who taught the lesson, a very rich, textured, and multidimensional portrayal of the lesson emerges. These data, in turn, provides a detailed and comprehensive basis for an analytic study and discussion of the lesson by all participants in the class.

The observers' reference to what the teacher or students thought or how they felt is a cue to literally ask those who played the role of a student or the teacher to describe in their own words how they really did feel or what they really did think, from their unique perspectives in the lesson. Observers from a particular perspective initiate the discussion with their oral reports of key observations. However, those observing the lesson from alternative theoretical or skills-based perspectives, as well as those who experienced the lesson from the unique perspectives of the student and the teacher, become engaged together as respondents and analysts in the class' social construction of the practical meanings and importance of the teaching and learning behaviors just experienced. All participants join together in a careful consideration of how what they have observed and interpreted relates to existing theory and research on teaching and learning. Throughout the entire observation-sharing, feedback-giving, and analytical aspects of the discussion, the teacher remains in the front of the room, in the very same place as they were during the

lesson itself. This approach serves to encourage the observers to direct their observations as feedback to the teacher, which they learn to present in a very constructive tone because they know very well that they too will be, or already have been, in the teacher role. And each member of the class can readily empathize with how vulnerable one can feel when every aspect of the content, words, actions, facial expressions, and so forth that constitute the lesson, are carefully scrutinized by a room full of other people. This approach also helps each person, when they are the one in the teacher role, to become accustomed to being the center of such detailed and, in some ways quite personal, attention and scrutiny; and to realize that taking such risks, with our colleagues and our students, is what gives us opportunities to learn and grow as teachers. Finally, this clinical, interactive setting fosters the norm that indeed, teaching is “community property,” something that is, by its very nature, accessible, and appropriate for peer review (Hutchings & Shulman, 1999). And this is a view that clearly has important implications for the value placed on such faculty work in the teaching cultures of colleges and universities (Paulsen & Feldman, 1995) and how such value is manifested in related personnel decision-making processes (Diamond, 1993).

CREATING PEDAGOGICAL CONTENT KNOWLEDGE: A REFLECTIONS PAPER

The general principles of effective pedagogy, grounded in traditional educational research, constitute only one component of the knowledge base for effective teaching. The teaching-learning process, by its very nature, is content-specific. Therefore, another important component of the knowledge base for teaching emerges from a teacher’s reflection on the application of general pedagogical knowledge to the unique challenges of teaching in their own content area.

Making Connections: An Act of Creation

The result of such reflective practice—that is, examining the special nature of applying general principles to the teaching of specific content—is the creation of pedagogical content knowledge (PCK) (Shulman, 1987). Recently, researchers and other scholars of teaching have referred to these acts of creation as one of the features of the scholarship of teaching (Kreber, 1999b; Paulsen, 2000). Furthermore, because different teachers—even in the same content area—have unique personalities, learning and teaching styles, and beliefs and assumptions about the teaching-learning

process, the act of creating PCK must naturally be, to some extent, teacher-specific as well as content-specific. Based on this perspective, students are asked to think of their PCK as being unique to each of them as individual teachers who teach in a specialized content area.

To promote the creation of PCK, students are encouraged to keep a journal of their reflections on the various ways in which the readings and classroom experiences throughout this course relate to and have practical and meaningful implications for the special challenges of teaching in their own fields. By the end of the course, students are asked to complete a paper based on a reflective and critical analysis of the relationships between the general principles and practices of effective teaching and the unique challenges of facilitating college student learning in their own teaching fields.

Experiential or Hypothetical Courses

Students choose one of two approaches to their PCK papers. If a student has had college teaching experience, their reflections and analyses can be experiential; otherwise, their reflections and analyses can be speculative. Students are very creative in their PCK papers. Those using the experiential approach sometimes actually engage in classroom research during the semester to help them create PCK. And those taking the speculative approach are equally creative. For example, in order to expand the range of PCK created, one student designed a course in African American Women's Literature that would be uniquely cross-listed in the English department, the Women's Studies Program, and the African American Studies Program. In this way, she was able to explore the special challenges of teaching the content to students who would come to the class from three very different sets of background and motivations or reasons for taking the course. My personal view is that the students' creation of PCK is one of the most valuable outcomes of the course. Indeed, some of the students' efforts would merit publication as pedagogical contributions to content-specific journals.

EVALUATION OF THE COURSE

Both quantitative (student ratings) and qualitative (written comments) evaluation data for this course are available for the most recent six years, those being the years I have taught this course at my current university. Because this course is cross-listed between my department and another, evaluation data are available based on two different official course evalu-

ation forms, one of them based on a 4-point Likert scale and the other on a 5-point scale. I have taught the course eight times in the past six years, during which time students' overall ratings of the course have averaged 3.9 on a 4-point scale and 4.8 on a 5-point scale. A number of persistent themes have appeared in students' written comments in their course evaluations. For example, students often identify the clinical portion of the course as especially worthwhile: "The setup of the class, [with] a high level of peer teaching and peer learning is the only way I would want to take a course such as this." Others appreciate the "careful intertwining of theory, practice and experience" and the "clinic format [that is] useful in translating theory into practice." Another theme is based on students' appreciation of the solid research-based theoretical foundation of the course; that is, they like the fact that the approach taken in this course makes it possible "to bring actual theory of teaching and learning into a clinical setting which is hands-on." Students also appreciate the feature of the course that "creates a very safe environment for students to work in the class" and the "trusting atmosphere of inclusively and opportunity for growth" that characterizes the classroom environment. Another persistent theme expressed by students is that the course "should be mandatory for every college teacher no matter what rank."

Students have also offered insightful suggestions for improvement. For example, some would like to see "longer teaching in clinics, perhaps limit[ing] discussion to 30 minutes and letting teaching be for 30 minutes," or "would recommend the use of videotapes to assist teaching. Have students video[tape] their lessons and then do a self-critique." These are potentially valuable enhancements. I support both ideas and have experimented with them over the years, but have always found that although additional assignments, such as videotaping, are clearly of great value to some students they push, for the majority them beyond the limits of what they are willing and able to accomplish within the confines of what is already an intensely demanding set of course requirements. Nevertheless, I strongly encourage ongoing experimentation with variations on what to include or exclude in a one-semester course.

PERSONAL REFLECTIONS: CHALLENGES THE STUDENTS AND I HAVE FACED

The complex role plays that constitute most of the clinical component of the course require a high level of commitment and dedication on the part of the students, especially in terms of attendance and tardiness.

Because classes are typically filled with busy faculty and graduate students, a certain amount of both tardiness and absenteeism has proven to be unavoidable. Therefore, I have found it necessary to have a minimum of two students assigned to each of the observer role categories. Then, when an absence or tardiness does occur, no one perspective for classroom observation is missed entirely. However, if one of those individuals assigned to play the role of student is tardy, the clinic cannot begin until that role is filled. Rather than ask another student to switch roles, I have elected to play the part of student myself in such instances so that the availability of a particular theoretical or skill-based perspective for classroom observation and analysis is not compromised. This has worked quite well. In fact, the students seem to have a good deal of fun watching me struggle—as I invariably do—in the role of student. In fact, I have often been labeled the problem student in the class, which all agree just makes the role-play even more realistic!

I am always amazed at how effectively most students seem to be able to somehow actively attend to quite a large number of motivational, cognitive, social, or skill-based teaching strategies when they observe a lesson. Nevertheless, it is rare that a student can meaningfully attend to all 28 motivational strategies or all 28 cognitive strategies at the same time. Because such an expectation is unrealistic, I typically encourage the two or three students assigned to a particular observational perspective, such as cognitive strategies, to divide up the subcategories in a fair and practical way. This has proven to be quite effective, and increases the observational coverage of the variety of strategies on the checklists.

For some who teach the college-teaching course, departmental requirements to submit a grade for each student based on a summative evaluation may appear problematic. I have faced this challenge over the years and have sometimes felt perplexed by it. Although I still have not resolved all the relevant issues to my own satisfaction, I have elected to do all I can to make summative evaluation a nonissue. I have let the faculty developer in me take charge in the area of evaluation. Students in the college-teaching course are diverse. Each is working on his or her own developmental issues. Some are struggling just to speak clearly and audibly, while others are enjoying the challenges of managing complex cooperative learning structures. For better or worse, I operate on the assumption that each day, each teacher—whether novice or experienced—begins anew their development, and each day a person can only address the challenges that lie immediately before them. I try to evaluate students' in-

class work based on evidence of their preparation for class, their active engagement and involvement in class, their efforts to improve as teachers and to support their peers in such efforts.

CONCLUSION

I hope that my presentation of the goals, theoretical foundations, learning activities, evaluative information, and materials developed and used in this course, will be useful to others who teach, or plan to teach, a full-semester, credit-earning graduate course on college teaching. Furthermore, I hope others will share with me, and other interested teachers and faculty developers, their own experiences and experiments with similar courses so that we all might learn more effective ways to design such courses. This is especially important, because at many colleges and universities, one course in college teaching constitutes the first, and sometimes the only, substantial investment in the enhancement of teaching and learning.

REFERENCES

- Andrews, J. D.W. (1980). The verbal structure of teacher questions: Its impact on class discussion. *POD Quarterly*, 2 (3&4), 129–163.
- Angelo, T., & Cross, K. P. (1993). *Classroom assessment techniques*. San Francisco, CA: Jossey-Bass.
- Billson, J., & Tiberius, R. (1991). Effective social arrangements for teaching and learning. In R. Menges & M. Svinicki (Eds.), *College teaching: From theory to practice*. (pp. 87–110). New Directions for Teaching and Learning, No. 45. San Francisco, CA: Jossey-Bass.
- Border, L. L. (1993). The graduate teacher certification program: Description and assessment after two years. In K. Lewis (Ed.), *The TA experience: Preparing for multiple roles* (pp. 113–121). Stillwater, OK: New Forums.
- Bosworth, K., & Hamilton, S. J. (Eds.). (1994). *Collaborative learning: Underlying processes and effective techniques*. New Directions for Teaching and Learning, No. 59. San Francisco, CA: Jossey-Bass.
- Brookfield, S. D. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.
- Brophy, J. (1987). Synthesis of research on strategies for motivating students to learn. *Educational Leadership*, 45 (2), 41–48.

- Butler, K. A. (1987). *Learning and teaching style: In theory and practice*. Columbia, CT: The Learner's Dimension.
- Cashin, W. (August, 1979). *Motivating students*. IDEA paper no. 1. Manhattan, KS: Kansas State University, Center for Faculty Evaluation and Development.
- Claxton, C. S., & Murrell, P. H. (1987). *Learning styles: Implications for improving education practices*. ASHE-ERIC Higher Education Report No. 4. Washington, DC: Association for the Study of Higher Education.
- Davis, B. G. (1993). *Tools for teaching*. San Francisco, CA: Jossey-Bass.
- Diamond, N., Sharp, G., & Ory, J. (1983). *Improving your lecturing*. Urbana, IL: Office of Instructional Resources, University of Illinois at Urbana-Champaign.
- Diamond, R. M. (1993). Changing priorities and the faculty reward system. In R. M. Diamond & B. E. Adam (Eds.), *Recognizing faculty work: Reward systems for the year 2000*. (pp. 5-12). New Directions for Higher Education, No. 81. San Francisco, CA: Jossey-Bass.
- Feldman, K. A. (1998). Identifying exemplary teachers and teaching: Evidence from student ratings. In K. Feldman & M. Paulsen (Eds.), *Teaching and learning in the college classroom*. (2nd ed., pp. 391-414). Needham Heights, MA: Simon & Schuster.
- Feldman, K. A., & Paulsen, M. B. (Eds.). (1998). *Teaching and learning in the college classroom*. (2nd ed.). Needham Heights, MA: Simon & Schuster.
- Gagne, R. M. (1974). *Essentials of learning for instruction*. Hinsdale, IL: Dryden.
- Glazer, J. S. (1993). *A teaching doctorate: The doctor of arts degree, then and now*. Washington, DC: American Association for Higher Education.
- Hill, W. F. (1977). *Learning through discussion*. Beverly Hills, CA: Sage Publications.
- Hutchings, P., & Shulman, L. S. (1999). The scholarship of teaching: New elaborations, new developments. *Change*, 31 (5), 11-15.
- Jenrette, M. S., & Napoli, V. (1994). *The teaching-learning enterprise*. Bolton, MA: Anker.
- Keller, J. (1983). Motivational design of instruction. In C. M. Reigeluth (Ed.), *Instructional design theories and models* (pp. 383-433). Hillsdale NJ: Lawrence Erlbaum.
- Kolb, D. W. (1998). Learning styles and disciplinary differences. In K. Feldman

- & M. Paulsen (Eds.), *Teaching and learning in the college classroom* (2nd ed.). (pp. 127–138). Needham Heights, MA: Simon & Schuster.
- Kreber, C. (1999a). A course-based approach to the development of teaching-scholarship; A case study. *Teaching in Higher Education*, 4 (3), 309–325.
- Kreber, C. (1999b). *Defining and implementing the scholarship of teaching: The results of a Delphi study*. Paper presented at the annual meeting of the Canadian Society for the Study of Higher Education (CSSHE), Sherbrooke, Quebec.
- Lambert, L. M. (1993). Beyond TA orientations: Reconceptualizing the Ph.D. degree in terms of preparation for teaching. In K. G. Lewis (Ed.), *The TA experience: Preparing for multiple roles*. (pp. 107–112). Stillwater, OK: New Forums.
- Lefrancois, G. (1991). *Psychology for teaching*. Belmont, CA: Wadsworth.
- Lowman, J. (1995). *Mastering the techniques of teaching*. San Francisco, CA: Jossey-Bass.
- McKeachie, W. J. (1999). *Teaching tips* (10th ed.). Boston, MA: Houghton Mifflin.
- Paulsen, M. B. (2000). The relation between research and the scholarship of teaching. In C. Kreber (Ed.), *Scholarship revisited: Defining and implementing the scholarship of teaching*. New Directions for Teaching and Learning, No. 82. San Francisco, CA: Jossey-Bass.
- Paulsen, M. B. & Feldman, K. A. (1995). *Taking teaching seriously: Meeting the challenges of instructional improvement*. ASHE-ERIC Higher Education Report No. 2. Washington, DC: The George Washington University, School of Education and Human Development.
- Paulsen, M. B., & Gentry, J. A. (1995). Motivation, learning strategies, and academic performance: A study of the college finance classroom. *Financial Practice and Education*, 5 (1), 78–89.
- Pintrich, P. R. (1989). The dynamic interplay of student motivation and cognition in the college classroom. In M. Maehr and C. Ames (Eds.), *Advances in motivation and achievement: Goals and self-regulatory processes*, 7. (pp. 371–402). Greenwich, CT: JAI Press.
- Pintrich, P. R., & Schunk, D. H. (1996). *Motivation in education*. Englewood Cliffs, NJ: Prentice Hall.
- Schuster, J. H. (1993). Preparing the next generation of faculty: The graduate school's opportunity. In L. Richlin (Ed.), *Preparing faculty for the new conceptions of scholarship*. (pp. 27–38). New Directions for Teaching and Learning, No. 54. San Francisco, CA: Jossey-Bass.

- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1-22.
- Svinicki, M. D., & Dixon, N. (1998). The Kolb model modified for classroom activities. In K. Feldman & M. Paulsen (Eds.), *Teaching and learning in the college classroom* (2nd ed.). (pp. 577-584). Needham Heights, MA: Simon & Schuster.
- Vahala, M. E., & Winston, R. B. (1994). College classroom environments: Disciplinary and institutional-type differences and effects on academic achievement in introductory courses. *Innovative Higher Education*, 19(2), 99-122.
- Weinstein, C. E., & Mayer, R. (1986). The teaching of learning strategies. In M. Wittrock (Ed.), *Handbook of research on teaching*. (pp. 315-327). New York, NY: Macmillan.

Contact:

Michael B. Paulsen
Department of Educational Leadership, Counseling & Foundations
348 Bicentennial Education Center
University of New Orleans
New Orleans, LA 70148
(504) 280-6661
(504) 280-6453 (Fax)
Email: mpaulsen@uno.edu

Michael B. Paulsen is Professor of Higher Education in the Department of Educational Leadership, Counseling & Foundations at the University of New Orleans. His research and teaching interests are in college teaching, learning, and faculty development; and the economics and finance of higher education. Dr. Paulsen serves as Consulting Editor for *Research in Higher Education* and Associate Editor of *Higher Education: Handbook of Theory and Research*. He and Ken Feldman are coeditors of *Teaching and Learning in the College Classroom*, now in its second edition, and are coauthors of *Taking Teaching Seriously*.