

## TEACHING TEACHERS TO TEACH: THE CASE FOR MENTORING\*

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Teaching—like medicine, auto mechanics, professional basketball, and chemical engineering—is a craft. There are distinct skills associated with its practice, which people are not born knowing. Some people are naturals (in education, the so-called “born teachers”) and seem to develop the skills by intuition; most are not, however, and need years of training before they can function at a professional level. Doctors, mechanics, basketball players, engineers, and teachers at the K-12 level routinely get such training—but not college professors, most of whom get their Ph.D.'s, join a faculty, and set off to teach their first course without so much as five seconds on how one does that.

Not realizing that there are alternatives, new professors tend to default to the relatively ineffective teaching methods they experienced as students. Although they work hard to make the course material as comprehensible and interesting as they can, many of them consistently see only glazed or closed eyes during their lectures, terrible test grades, and evaluations suggesting that the students liked neither the course nor them. Some of them eventually figure out better ways to do their job; others never do, and spend their careers teaching ineffectively.

The absence of college teacher training is not an unrecognized problem, and at least some institutions are trying to address it. Various schools offer graduate courses on teaching, hold faculty teaching workshops lasting anywhere from one morning to several days, and provide teaching consultants to critique end-of-course evaluations and videotaped lectures. However, while such programs are worthwhile and should be standard on every campus, there are limits to what they can accomplish. You can't turn someone into a skilled professional in a one-semester course, much less a three-day workshop or a two-hour consultation. True skill development only occurs through repeated practice and feedback.

Fortunately, the resources needed for effective training of college teachers are readily available on every campus. Most academic departments have one or more professors acknowledged to be outstanding teachers by both their peers and their students. They have learned how to put together lectures that are both rigorous and stimulating and homework assignments and tests that are comprehensive, challenging, instructive, and fair. They have found ways to motivate students to want to learn, to co-opt them into becoming active participants in the learning process, to help them develop critical and creative thinking and problem-solving abilities.

Unfortunately, under our present system, faculty members may collaborate on research but generally don't even talk to each other about teaching. Most professors must therefore plod through the same lengthy trial-and-error process when learning how to teach, seldom benefiting from the knowledge and experience of their colleagues.

Here is a proposal for what I believe might be a better way.

- *All new professors should team-teach their first two courses with colleagues who have earned recognition as excellent teachers and who agree to function as mentors.*
- *The first course would begin with the mentor taking most of the responsibility for laying out the syllabus and instructional objectives, planning and conducting the class sessions, and constructing the homework assignments and tests. Both professors would attend most classes and have regular*

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\* *Chem. Engr. Education*, 27(3), 176–177 (1993).

*debriefing sessions to go over what went well, what didn't go so well and why, and what to do next. The protégé would gradually take over more of the course direction, ending up with primary responsibility by the end of the course*

- *In the second course, the protégé would take sole responsibility for planning and delivering the course. The mentor (who may be the mentor from the previous semester or a different professor) would function entirely as a consultant, observing class sessions and participating in debriefing meetings.*
- *When planning teaching assignments, the department head should recognize that team-teaching a course and serving as a mentor to a new instructor is a heavier time burden than simply teaching a course alone, and should provide a suitable reduction in the mentor's other responsibilities. Ideally, the mentor would get additional compensation like a summer stipend, release time, or a travel grant.*

The potential benefits of this plan are evident. New professors would get a jump-start on learning their craft rather than having to rely entirely on painfully slow self-teaching. The experience would likely energize the mentors as well, stimulating them to reexamine and improve their own teaching as they provide active guidance to their junior colleagues. The overall quality of the department's instructional program would inevitably improve. Caution, however—mentoring is also a craft, with its own assortment of skills and pitfalls. As it happens, teacher educators have explored this subject for decades and have developed a variety of methods to make mentoring successful.<sup>1</sup> If you find yourself serving as a mentor, formally or informally, consider the following guidelines:

- *When you teach, you often do subtle things that you learned by experience and you also occasionally make errors in judgment when handling classroom situations. The inexperienced observing protégé is likely to miss it all. Go over items in both categories during debriefings*
- *When protégés get into trouble in class, fight off the temptation to rescue them immediately. Instead, prompt them in debriefings to figure out for themselves what went wrong and how to fix it.*
- *Offer suggestions, not prescriptions. What you lay out for protégés explicitly is unlikely to stick. What they discover for themselves with your help, they will own.*
- *Don't try to turn your protégés into clones of you. Instead, help them find the teaching style best suited to their own strengths and personalities and encourage them to develop and perfect that style.*

Only one step remains to complete the process. When a department colleague—perhaps one of your protégés—starts to win teaching awards, talk her into serving as a mentor for the next faculty hire. When she protests that she doesn't know how, pass along this column and add that while she's figuring it out you'll be happy to be her mentor.

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<sup>1</sup>I am indebted to Dr. Rebecca Brent, my mentor on all matters related to teacher education, for many of the ideas that follow. See also T.M. Bey and C.T. Holmes, *Mentoring: Contemporary Principles and Issues*, Reston, VA, Association of Teacher Educators, 1992.