Assessing the Quality of Teaching

Milap C. Nahata
College of Pharmacy, The Ohio State University, 500 West 12th Avenue, Columbus OH 43210-1291

Teaching is a primary mission for each of our institutions. We strive to make certain that our students gain knowledge and learn to comprehend. We help them learn to apply, analyze, synthesize, and evaluate the existing and new knowledge. Effective teaching is essential in achieving outcomes of learning among students.

What are the characteristics of effective teachers? Commonly accepted descriptors include knowledgeable, competent, well-prepared, organized, enthusiastic, approachable, concerned, caring, sympathetic, and open to questions and to change. Effective teachers create a warm classroom climate, get right down to their subject matter, use a variety of instructional strategies, raise probing questions and provide timely response to student questions and feedback for improvement. According to Chickering and Gamson, the seven principles of good teaching practice are encouraging contacts between student and faculty, developing reciprocity and cooperation among students, using active learning techniques, giving prompt feedback, emphasizing time on task, communicating high expectations, and respecting diverse talents and ways of learning. In another study, the six best predictors of teacher effectiveness were the perceived value of the course, motivating students to do their best, a comfortable learning atmosphere, course organization, effective communication, and a concern for student learning.

My most effective teachers were those who loved teaching, were intensely inquisitive, and had high expectations. I was curious about the opinions of current students, and therefore surveyed a junior class in our Pharm.D. program, asking, “What are the qualities of good teaching?” The three most common answers were interest in teaching, clarity of presentation, and willingness to explain important points. They felt good teaching also included giving appropriate amounts of information, which can be understood and retained, being flexible during teaching, and answering questions which emerge during the presentation.

How should we assess the quality of effective teaching by faculty? Research findings and classroom applications suggest that it can be done in multiple ways. Barrett and Matthews found that all schools of pharmacy utilized student evaluations of classroom teaching; peer evaluations were done by 50 percent of the schools for classroom teaching but only by 12.5 percent of schools for experiential teaching; and, self-assessments, evaluations by alumni, portfolios, interview of students, and reviews by experts in teaching methodology were rarely used to determine the effectiveness of teaching.

Student Evaluations
Feedback from students is an extremely important component of assessing the quality of teaching; after all, no one else can tell us better about their learning than our students. Both summative and formative evaluation methods should be used to reflect learning by our students. Many instruments are available. One summative instrument used at Ohio State is shown in Table I.

The evaluation report provides mean scores and standard deviations of each item for the instructor, group, course-offering unit, college and University. The group and University distribution of mean scores on overall rating are also included. This standard evaluation can be supplemented with additional questions, depending on the...
Table I. Student’s evaluation of instruction*

1. The subject matter of this course was well organized.
2. This course was intellectually stimulating.
3. The instructor was genuinely interested in teaching.
4. The instructor encouraged students to think for themselves.
5. The instructor was prepared.
6. The instructors were genuinely interested in helping students.
7. I learned a great deal from this instructor.
8. The instructor created an atmosphere conducive to learning.
9. The instructor communicated the subject matter clearly.
10. Overall, I would rate this instructor as...

*Each question is answered on a scale of 1-5.

nature of the course being offered. Formative comments can be sought by faculty along with this evaluation. The most frequently asked questions in such evaluations are: “What did you like the most about this course?” “What do you think needs improvement?” “What suggestions do you have for change?”

The student evaluations should not be simply dismissed as unreliable, biased based on grades received, or a reflection of a “popularity contest.” I believe student evaluations are generally reliable to assess teaching effectiveness, and their validity is supported in the literature(3). I had an opportunity to serve on a University Distinguished Teaching Awards Committee. Faculty members can be nominated by current or former students, peers, or administrators. For those selected from the initial screening, the Committee sought detailed input by mail from the randomly chosen samples of students taught by the faculty over the previous three years (some had become alumni). In general, the former students were very thoughtful in their responses. Some commented that although they had received good grades (A’s or B’s), they did not learn much. Others praised the teachers who were effective in their facilitating learning (regardless of grade they received, as long as it was fair) and truly cared for the quality of their teaching and for their students. The process emphasized the importance of seeking input from alumni, and was supplemented by a letter from the department chair and from peers in making selections of the award recipients.

As typically used, student evaluations raise some important issues: Do summative evaluations measure effectiveness and quality of teaching? How frequently and when should evaluations be done? How should standardized evaluations be supplemented by questions customized for specific courses? What is the role of formative comments made by students? Are students able to understand and answer each question? Do students think that their comments matter in leading to changes in the course?

Peer Evaluation

Some aspects of teaching may be best assessed by peers. These include course content, focus of the course, adoption of course material by other faculty within or outside the institution, performance of students, and presentations and publications related to teaching and learning. These are generally evaluated by peers through a review of record rather than by direct observation, at the time of formal evaluation for tenure candidacy (fourth year review) or for consideration of tenure and promotion for faculty members. Ohio State now requires peer evaluation by direct observation of teaching performance on an ongoing basis. However, unlike student evaluation process which is standardized across the University, each college can decide how to conduct its peer review of teaching. The best way to accomplish this is yet to be identified: Is there a qualified senior faculty member in the same area as a junior faculty member to critically evaluate content?

Should each course be evaluated by a peer, just as it is by students? How many times should the peers visit a colleague’s class or experimental site to validate the evaluation results? How are the differences in quality expressed by students and peers resolved? Can peers provide constructive criticism within a process where comments are openly shared with the faculty candidate and administration? Should faculty from other departments within or outside the university serve as peers? Will senior faculty devote substantial time and required effort to conduct a thorough and continuing peer review of teaching?

Administrative Review

Department chairs and deans play an important role in leading the faculty to define, develop, and implement effective methods to assess the quality of teaching and learning by multiple approaches. They should identify contributions of the faculty to the teaching mission and goals of the department or college, provide corroborating evidence related to the teaching effectiveness of the faculty, interpret the evaluations of teaching by the students and peers, and acknowledge contributions of the faculty to student learning within and outside the classroom. Improvement in learning should be documented before new methods can be regarded as innovative. Evolving curricula, use of technology, and the knowledge of educational methodology provides us opportunities to assess the outcomes of our efforts. The administration should demonstrate that effectiveness and scholarship of teaching are highly valued and rewarded.

Achieving high quality in teaching by faculty in individual courses should correspond to attaining the desired outcomes of learning from the entire professional program. Performance in the program, NAPLEX scores, job offers and retention, acceptance into graduate education or training programs (residencies/fellowships), feedback from preceptors, employers, patients, and other healthcare professionals can assist in evaluating outcomes of programs. A joint AACP-ACPE Task Force on Assessment and Accreditation is reviewing ACPE standards for professional programs in pharmacy to identify data that should be collected by AACP to assist our schools with self-assessment and ACPE with the accreditation process.

We should attract, retain, and reward faculty committed to high-quality teaching. Our professional and graduate students, residents, and postdoctoral fellows should receive experience in teaching. Besides teaching assistantships, some schools provide elective teaching rotations and others have begun to offer certificate programs in teaching. Even with this preparation, however, junior faculty would require mentoring from some senior peers and department chairs in shaping their teaching philosophy and goals, developing course materials, effectively teaching the courses, interpreting the evaluative information, implementing changes to improve the quality of teaching, and nurturing students within and outside the classrooms. Regardless of our years of experience, all of us can improve the quality of our teaching to maximize learning by students. Students not only need knowledge for the immediate future, but also an ability to integrate it within changing work environments throughout their lives. I believe we are ready for this important challenge.

References