

Enhancing Learning Through Teacher Self-Assessment

Andrew P. Barkley

Abstract

One of the most important attributes of successful teaching is the desire to succeed. This can be meaningfully addressed using simple methods of self assessment in the college classroom. The major objectives of this paper include: (1) to summarize the existing literature in teaching self assessment, (2) to evaluate and synthesize previous assessment techniques and methods, and (3) to provide practical, useful self-assessment ideas that can be easily implemented by college teachers. Several self-assessment techniques will be presented and evaluated.

Why should college teachers of agriculture devote valuable time and effort to self-assessment? The answer is easy: to improve! Improvement of teaching performance yields multiple benefits, including higher levels of student satisfaction, enhanced teacher self-esteem, and greater levels of student learning and retention. Angelo (1995) states: "When faculty 'do assessment,' they are usually motivated by a laudable personal and professional commitment to understand and improve learning (p.1)." A contention: *all* college teachers can improve, whether they are a first-year Assistant Professor teaching a difficult course for the first time and struggling to publish research results in prestigious refereed journals in their spare time, or a seasoned veteran of the classroom with over 30 years of "front-line" experience and an office wall covered with plaques and certificates paying homage to previous teaching achievements. Not all college teachers agree: in a 1992 survey of College of Agriculture faculty at California State Polytechnic University, Pomona, 77 percent stated that their teaching was in need of further improvement, and 23 percent indicated that their teaching, as reflected through student evaluations, needed no improvement (Whaley and Wickler, 1992). Educational research has demonstrated that one of the most successful methods of strengthening the college classroom experience for both students and teachers is assessment (Angelo and Cross, 1993).

Campbell (1972) concluded his highly revered philosophy for teachers with the observation, "Self evaluation is essential for improvement. Discover strengths

and build upon them; discover weaknesses and correct them (p. 272)." Campbell's advice is simple, but can be easily set aside or forgotten during the busy, stressful, academic year. The objective of this paper is to provide several fundamental, practical self-assessment techniques that agricultural teachers could adopt to improve their teaching performance. A strong attempt is made to present techniques that are simple to implement and provide immediate benefits to facilitate the ease of adoption and implementation. After all, "It does little good to talk about improvement of teaching unless we follow through and do something about it (Campbell, 1972)."

Below, four assessment tools are presented, with the intent to provide pragmatic ideas which facilitate the adoption of individualized assessment styles. There are no "cook book" methods for achieving success in the classroom. Therefore, each teacher may find that modification or revision of the tools is necessary to be most effective. The tools are intended to be flexible enough to accommodate all teaching styles.

One: Assessment of Course Objectives and Content: *Relevant and Rigorous? Important and Interesting? Current and Contentious?*

Once a class has been taught, a "low-cost" method of making it through the next semester is to use last semester's syllabus, course outline, and lecture notes. Given the high level of interest in recycling, perhaps even the same examples and jokes could be reused. However, great benefits accrue to a teacher willing to take a hard look at course goals, outline, and content well in advance of the first day of class. The first self assessment tool is:

Write down clear goals and objectives for a course, and then evaluate how well the current course outline, content, lecture style, assignments, and examinations meet the specified objectives.

Successful teaching demands work and foresight: "Teaching at higher cognition levels requires thoughtful and creative planning." (Whittington and Newcomb, 1992). Angelo and Cross (1995) identified three advantages for teachers who plan a course beginning with goals: (1) goal-setting encourages faculty to engage in a deep level of self-assessment about their teaching aims, (2) goal setting enhances teacher motivation by placing emphasis on what the individual classroom teacher values the most, and (3) planning with goals in mind ensures that faculty are

Barkley is an associate professor in the Department of Agricultural Economics, Kansas State University, Manhattan, KS 66506-4011. Presented June 16, 1996 at the 1996 NACTA annual meetings, Crookston, Minnesota.

assessing what they are teaching and teaching what they are assessing.

A common method of planning a course is to follow a textbook outline or a course syllabus provided by a helpful instructor who has taught the course in the past. While this is certainly an acceptable form of preparing an academic course of instruction, a more thorough planning method may include evaluation of the instructor's values and biases concerning what he or she is attempting to accomplish in the classroom. There are numerous teaching objectives including higher-order thinking, basic academic skills, disciplinary knowledge, liberal arts values, work and career skills, personal development, and interpersonal abilities (Angelo and Cross, 1993). Different instructors assign varying levels of importance to each of these objectives depending upon student ability, place of course in curriculum, disciplinary background, and personal preferences and abilities. Therefore, a personalized assessment is likely to lead to better results than a "one size fits all" planning and evaluation procedure.

The first self assessment exercise appears in Table 1. The idea is to clearly define what is hoped to be accomplished in a course through the articulation of course objectives (Step One). In Steps Two and Three, course content, style, and format are "matched" to the overall course objectives by assigning "grades" to each course component. Finally, any course component which does not receive an outstanding grade should be analyzed for improvement or expulsion from the course: any lecture, homework assignment, or reading which does not strongly contribute to the course objectives is a prime target for elimination. While many instructors perform this procedure each semester in a cursory fashion, formalization of the evaluation and revision process forces us to "ask the tough question" of whether or not we measure up to our own standards.

The objective of this exercise is to assess the *relevance* and *rigor* of our teaching methods and course content by carefully scrutinizing each course ingredient to determine how well it conforms with the overall instructional goals. Devoting extra effort to planning using this simple procedure can "weed out" less relevant or outdated topics, and make every lecture count. Schurle (1995) concludes his teaching philosophy with, "While I attempt to use interesting examples, I do not typically spend time on jokes or other activities which are not an efficient and wise use of another person's time. Their time is their life, it is the most valuable thing that they own, and it must be treated with respect (p. 5)." By devoting more class time to fruitful, productive activities and less time to less useful activities, the shift toward greater rigor and relevance is made.

Table 1. Matching Course Objectives with Course Content.

Step One: Develop a "mission statement" for the course that you will teach. This statement could include one or more of the following instructional goals:

1. Higher Order Thinking Skills
2. Basic Academic Skills
3. Disciplinary Knowledge
4. Liberal Arts Values
5. Work and Career Skills
6. Personal Development
7. Interpersonal Abilities ("People Skills")

Step Two: Place copies of the course mission statement and the course syllabus in front of you. Evaluate each topic covered in the course by assigning a grade (A=Outstanding to F=Failing Performance) based on how relevant the topic is to the objectives specified in the mission statement from Step One. Repeat this procedure for (1) lecture content, (2) reading assignments, (3) homework assignments, and (4) examinations.

Step Three: Answer the following three questions for each course component:

- (1) Is this topic (lecture, assignment, examination) relevant and rigorous?
- (2) Is this topic (lecture, assignment, examination) important and interesting?
- (3) Is this topic (lecture, assignment, examination) current and contentious?

Step Four: Evaluate and assess how well each topic covered in the course meets the objectives of the course. Any course topic which earned a grade lower than an "A" is a strong candidate for revision or expulsion from the course! Evaluate the possibility of eliminating the topic(s) with the lowest grades, and expanding the topic(s) with the highest grades. Repeat Step Four for (1) lecture content, (2) reading assignments, (3) homework assignments, and (4) examinations.

Source: Angelo and Cross (1993).

Two: Assessment of Course Performance: *Constructive Criticism from Colleagues*

Constructive criticism can lead to considerable improvements in teaching effectiveness. Self analysis is difficult; it is hard to imagine how our lecture style and content is "coming across" to our audience. However,

another person can observe your teaching style and communicate possibilities for improvement. Assessment tool number two is:

Invite a trusted, experienced teacher to observe your lectures and discuss strengths, weaknesses, and possibilities for improvement.

This tool is considered “self” assessment even though the evaluation is conducted by a colleague because the biggest input to the procedure is overcoming the intimidation that results from asking someone to watch you perform. Merely getting in front of a classroom full of students can be intimidating, let alone having a peer in the audience. The colleague’s job is to watch every step you make and critique each move! The benefits can be truly enormous once the hurdle of the initial invitation is overcome. Young faculty often find experienced teachers to be positive, empathetic, and helpful. Rather than continue to elaborate on the virtues of this assessment tool, I advise all teachers to “JUST DO IT,” and you will be rewarded with success. Table 2 presents a sample peer review evaluation form.

Peer review can also be formally introduced into an academic unit with positive results. Hoover et al. (1995) described the successful development of a Teaching Resource Center (TRC) within the Institute of Food and Agricultural Sciences at the University of Florida. The TRC provides for one-on-one consultation which involves videotaping instruction, classroom observations, and evaluation of course materials (p. 13). McCallister et al. (1993) described a course review process designed for the Department of Agronomy at the University of Nebraska-Lincoln, and concluded that the review process successfully highlights course strengths, provides unbiased input on innovations, and establishes a teaching support network.

Not only is peer review a valuable tool, but watching other teachers can be beneficial. Campbell (1972) observed. “One of the best prescriptions to help improve inexperienced teachers is to develop the habit of studying successful teachers (p. 269).” One of my favorite professional experiences is to evaluate other speakers... to learn about both the form and substance of the presentation. Something can be learned from virtually all presentations, including both superb speakers with professional experience, and a beginning speaker who struggles through a job interview seminar. Carefully evaluate why some speakers “win over” an audience, while others fail. Critical appraisal of others provides an excellent foundation upon which to build successful teaching styles and techniques.

Three: Assessment of Classroom Learning: Frequent Feedback for Effective Evaluation

Student evaluations conducted at the end of the semester are too late! Angelo and Cross (1993) emphasized

Table 2. Peer Review Form for Constructive Comments.

After watching several lectures, write out answers to the following questions about the instructor and the class. Set up an appointment to present your review and answer any questions for the instructor.

Questions about Students

1. How many students appear to be learning well, and how many are not?
2. What type of students are likely to be successful students in this class, and what types are not?
3. What do less successful students do that might account for their failures?

Questions about Course Content

1. How much of the course content are students learning?
2. How well are the students learning the various elements of the course content?
3. How well are students integrating the various elements of the course content?

Questions about Teaching

1. How does the teacher affect student learning, positively and negatively?
2. What changes could lead to enhanced learning in the classroom? (be specific here)
3. What changes could lead to enhanced learning outside of the classroom? (be specific here)

Source: Adopted from Angelo and Cross (1993).

this point, “...faculty and students need better ways to monitor learning throughout the semester. Specifically, teachers need a *continuous flow* of accurate information on student learning (p. 3, emphasis added).” Student feedback in the form of mid-course evaluations, or feedback questionnaires, is easy to acquire and extraordinarily useful. Students appreciate the opportunity to provide input, and instructors can respond to any issues or concerns identified in the mid-course evaluations. Worley and Casavant (1995) documented how responding to student feedback with course adjustments can be an effective means of contributing to teaching quality in the agricultural classroom. Self assessment tool three:

Collect feedback from students *throughout the course*, and respond to each issue and concern raised.

An example: after a few lectures, an instructor could ask students to evaluate the course to date by writing comments down in class. One question that could be raised is the appropriateness of the speed of the lecture. One group is likely to report that the lectures are “too fast,” while another coalition will say that they are “too slow.” The instructor

could report these mixed results to the class, together with the information that he or she is mindful of the situation, and striving to meet the needs of all of the students in the class. If this is done, students may appreciate the instructor's attempt to do the "greatest good for the greatest number of people." Wahl and Casavant (1995) found that "Using multiple SETs [student evaluations of teaching] during a term allows mid-course adjustments to be evaluated by the same set of students and the dynamics of evaluations over the entire course to be investigated (p. 29)."

If any and all comments and concerns are addressed, this builds trust, respect, and rapport between the instructor and the students. This can be accomplished by taking just a few minutes at the end of one lecture to solicit comments, and a few minutes at the beginning of the next class period to respond. Kreps (1994) examined the use of the business concept of Total Quality Management (TQM) in the classroom, and provided three TQM techniques, including feedback questionnaires, student journals, and student teams. A sample feedback questionnaire is presented in Table 3. Barkley (1995) described the use of weekly homework assignments for continual feedback between student and instructor. Feedback in any form, including informal discussions with students, can increase teacher effectiveness.

Four: Assessment of the Learning Environment: Verification Via Visiting is Very Valuable

Aaron and Ely (1994) articulated how teachers can create a climate conducive to students listening to their instructor. Also important is the reverse: the ability of teachers to listen carefully to students, as stressed in self assessment tool number four:

Use informal interactions with students before and after lectures, and outside of the classroom to gather information about how well the class is going and how much learning is taking place.

Visiting with students during office hours can be rewarding for both students and instructors. Instructors gain a huge amount of information by simply asking students, "How is the class going... are you learning the material?" or "Do you see the connection between the lectures and the questions on the assignment?" Answers to questions such as these can facilitate mid-course adjustments to "fine tune" a course to best meet the needs of the students. This idea is further clarified by Bowman and Whittington (1994), who studied five University of Idaho professors who were assessed as consistently reaching higher cognition levels in their classroom discourse. Their assessment of one professor, "The professor listens critically to students' questions and affirms their analyses of concepts. He encourages expression of students' opinions by asking them to 'please

Table 3. Classroom Feedback Questionnaire.

Please answer the following questions about today's lecture:

1. Overall, how much did you get out of today's class?
 - _____ Little or Nothing
 - _____ A Fair Amount
 - _____ A Great Deal
 2. What was the most important thing that you learned?
 3. What was the muddiest point?
 4. What single change by the instructor would have most improved the class?
 5. Please comment briefly on the helpfulness of the advance reading assignments for today's class.
 6. Your preparation for today's class:
 7. Overall how much did you get out of your preparation for today's class?
 - _____ Little or Nothing
 - _____ A Fair Amount
 - _____ A Great Deal
 8. What one thing can the instructor do to help you to improve your future class preparations?
- Source: Kreps(1994).

comment' (p. 11)." All five professors were found to establish a clear channel of communication "by creating an environment of trust within the classroom (p. 13)." This type of environment can also be fostered outside of the classroom during informal "visits" with students. Ellis (1993) summarized bonding techniques as creating a "safe environment" for freshmen in agricultural curricula with the objectives of increasing student retention and enhancing academic performance. Listening to students and responding to their needs and concerns is one method of promoting teaching excellence: the concluding section further describes the quest for excellence.

Concluding Comments

College educators often contend that the most important skills developed in higher education include (1) problem solving, (2) a lifelong love of learning, (3) critical thinking, and (4) interpersonal ("people") skills. Professors unfailingly insist that the college students who develop these skills will be better off: they will lead richer, more productive lives than those members of our society who do not develop these "higher order" skills (National Research Council). As college instructors, we need to heed our own advice! The application of these four skills to our own craft

will result in significant improvements in the amount of learning that takes place in our classrooms.

* A *problem solving* instructor will desire to continuously improve lectures so that they are relevant, rigorous, important, interesting, current, and contentious.

* A teacher who possesses a *love of lifelong learning* will seek out constructive criticism from colleagues.

* A teacher who practices *critical thinking* will revise and update course content and lecture material based upon continuous feedback from students.

* A college teacher with *interpersonal skills* will seek out opportunities to visit with students to obtain informal feedback on how the course is going.

While not every teacher will find all four ideas compelling, it is hoped that each teacher will find at least one self assessment tool worthy of implementation. Once the skill is adopted, improvement will occur! Perhaps the most important ingredient for successful college teaching is the desire to succeed. "Unless teachers do something beyond that which they have already mastered, they fail to improve. Only when teachers strive to strengthen their relatively weak traits will their aspirations to teaching excellence be realized" (Campbell, 1972). JUST DO IT!

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