

Program Assessment for Continuous Improvement

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Labors of Love: WGSS and Assessment

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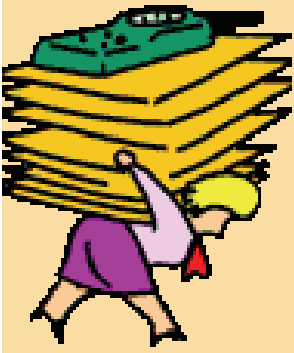
Feminist Toril Moi in “What is a Woman? Sex, Gender, and the Body in Feminist Theory” uses the metaphor of housework to describe “serious intellectual work.” According to Moi, “Serious intellectual work would seem to have much in common with housework” (120). The same could be said for the “serious intellectual work” of assessment. Like housework, assessment is never done.

In the current educational climate this fact resonates with faculty in negative and positive ways. At times it seems that those who evaluate assessment are often not the ones doing the daily work required to keep our classrooms running. In a similar vein, the speaker in Linda Pastan’s poem “[Marks](#)” connects homemaking responsibilities with assessment. After receiving grades from family members regarding her performance as a wife and mother, the speaker decides, “I’m dropping out.” The faculty—like the speaker in “Marks”—threaten to or fantasize about “dropping out” of assessment. Feeling like overworked, underappreciated housewives, we just do not want to add another task to our already full professional lives. We see inequities in how assessment is supported and rewarded.

The other side of assessment, however, asks us to view and value assessment’s labors differently. Rather than view assessment as a single, shining holy grail that, once captured, can be displayed on a shelf for all to admire (with little thought as to who keeps that grail so shiny and free of tarnish), the faculty in Women’s, Gender and Sexuality Studies see our assessment plan as grubby but rewarding work. Our assessment methodology provides our program with a series of flexible, shifting duties and concentrations that familiarize us with our program from the foundation up.

Our program began developing an assessment plan for our 2004 self study. An alumni survey was conducted and the program’s goals were refined. In the self study we indicated that the next step would be to examine outcomes for our two core courses: *Perspectives on Women* (GSS and GAH 2358) and our capstone course, the *Seminar in Feminist Theory*. (In addition, minors take three electives.) We decided to start with the capstone course.





Perspective I:
“The faculty—like the speaker in “Marks”—threaten to or fantasize about “dropping out” of the assessment game, too. Feeling like overworked, underappreciated housewives, we just do not want to take on another task in our already full professional lives. We see inequities in how assessment is supported and rewarded.”



Perspective II:
“We’ve also learned much about the approach to assessment: when shared equitably and tended to regularly, its tasks, like those of housework, should not overwhelm any one individual.”

Labors of Love, cont.

Since its development, the seminar required students to complete an independent research or creative project or to undertake and report on a service-learning project. At the suggestion of then-coordinator Ellen Mutari, the three faculty who had taught the seminar, Nancy Ashton, Elaine Ingulli, and Deborah Gussman, developed a rubric for evaluating the capstone projects. The rubric they created was adopted by the program faculty and first utilized in Spring 2008.

The process involved having 3-4 faculty members attend student presentations about their projects and review their written work. We used the rubric for three groups of minors completing the course in the Spring of 2008, 2009, and 2010. After each round, we “closed the feedback loop” by making revisions to the course and adjusting the rubric to ensure that it covered important aspects of the work and served to evaluate student learning in the minor. Our assessments of the capstone projects indicated that students did not always take the *Seminar in Feminist Theory* as the final course in the minor. As a result, the capstone course was an unreliable marker of and evaluation tool for the students’ progress in the minor.

These assessment efforts coincided with preparations for our 2010-2011 program review and discussion about the minor’s name. These discussions ultimately led to our decision to change the program’s name from Women’s Studies to Women’s, Gender and Sexuality Studies and to shift our focus away from the capstone project to a minor portfolio.

To maintain the minor’s flexibility and accessibility to the widest range of students, the program voted in the Spring of 2010 to shift the expectations of the *Seminar* and require a portfolio for all minors. A minor portfolio has the benefit of allowing students additional space and time to demonstrate their progress in and realization of the minor’s goals. The new portfolio requirement replaces the capstone project requirement.

The WGSS curriculum committee initially took up the charge of developing the portfolio requirements. In the Fall of 2010, WGSS Coordinator Kristin Jacobson formed a special committee charged with drafting the guidelines for the portfolio. WGSS affiliated faculty members Sharon Musher (committee chair), Deborah Gussman, Heather McGovern, and Kristin Jacobson developed recommendations and presented them to the faculty in the fall of 2010. Our discussions resulted in approval of the portfolio requirements by the end of the Spring 2011 term.

The housework of assessment cannot be reduced to one measure. So while moving forward on the new portfolio, the program has been developing other assessment tools as well. During the Summer of 2010, incoming WGSS Coordinator Kristin Jacobson applied for and attended a Stockton faculty development workshop on assessment. She focused her work on crafting an assessment plan for the newly named WGSS program.

In this workshop she revised the minor’s mission statement and the goals and objectives for the required courses, aligning WGSS’s mission and goals with the College’s primary course and faculty assessment tool, [IDEA](#). Jacobson presented these revisions to the WGSS faculty along with an assessment plan early in the Fall 2010 term; after incorporating revisions, the WGSS faculty approved the revisions and assessment plan.

WGSS will continue to assess our core required classes. We received IDEA group reports for these classes and analyzed the results. Our next step will be to look at the diverse and vibrant scope of cross-listed electives for the ways in which they advance WGSS’s learning outcomes. Our assessment plan is summarized on our website: <http://wp.stockton.edu/wgss/about/assessment/>.

So, WGSS has learned much about how our required courses meet and do not meet our goals. We have made adjustments accordingly. We’ve also learned much about the approach to assessment: when shared equitably and tended to regularly, its tasks, like those of housework, should not overwhelm any one individual.

Gerontology Assessment

Assessing Gerontology Minors

Christine Ferri

Last year, Gerontology assessed one of its five goals for its minors, Goal 3:

- 3) Graduates will have the skills necessary to acquire, refer to, learn from, and apply peer-reviewed research literature in gerontology to academic and applied settings.

All gerontology minors were emailed an instrument designed as a direct assessment of Goal 3. The instrument included a research article from *The Gerontologist*. Students were instructed to read the article and answer 5 multiple-choice questions. The number of questions students answered correctly reflects whether the student has the academic reading skills necessary to learn from the article; higher scores indicate more reading skills and more learning.

All gerontology minors (n=51) were emailed and invited to participate. A sample of 20 students completed the instrument, for a response rate of 39.2%. Results showed that the mean score on the 5 point assessment was 3.3 (sd = 1.13). The results demonstrate that students have average competency in reading empirical research and interpreting results. As shown in Table 1, this project demonstrates that there is room for improvement in indentifying theories, in identifying outcome variables, in reading tables and in identifying results.

Students also were asked to find a peer-reviewed article and cite it in APA format. Almost all students found a peer-reviewed article, mostly clearly relevant to the assigned task. The APA citations were more mixed—5 did a poor job, 9 a good job, and 6 a perfect or nearly perfect job of applying APA format.

Table 1: Correct Answers on Professional Reading Assessment Project

Question topic	Number correct (%)
Research procedure	17 (85%)
Identify theory	12 (60%)
Identify outcome measure	11 (55%)
Reading table	13 (65%)
Identify results	13 (65%)

Students answered a question about what they would do in a follow-up study to improve the research results. Four suggested no changes. Many suggested more participants (7), more time, or more diversity in participants (5). Others (5) wanted a random sample or random assignment to treatment conditions, and many students suggested a host of other reasonable research directions.

Based on these results, the program has a goal of assuring that all students are exposed to reading skills of professional literature in gerontology in their coursework for the minor. The plan for improvement is to have all instructors of the required Introduction to Gerontology/ Aging & Society courses emphasize professional reading skills as part of the course. At the end of the Fall 2011 and Spring 2012 semesters, all instructors of these courses will administer an instrument similar to the one described above. A mean score of 80% correct or higher will indicate that the student has the reading skills necessary to refer to and learn from the professional literature.

1. Based on the article by Yan et al. (2009), the leaders of the exercise programs were
 - Exercise professionals
 - Trained peer leaders
 - Senior center directors
 - Graduate students
2. Which theory did the researchers base their intervention upon?
 - Behavioral activation
 - Activity theory
 - Transtheoretical Stages of Change
 - Theory of reasoned action
3. How did the researchers measure the effects of the intervention?
 - Senior Fitness Test
 - Active Living Every Day Test
 - Blood pressure scores
 - Frequency of at-home exercise
4. Which of the following statements is true about the intervention group?
 - At pretest, 27.81% were sedentary
 - At pretest, 29.82% rated their health as poor or fair
 - At pretest, 25.17% were Hispanic
 - At pretest, 17.79% were male
5. The study results showed that
 - The intervention group scored significantly better than the comparison group
 - Black participants performed better than Whites or Hispanics on posttest on most measures
 - Participants with more education showed more improvement
 - In the intervention group, participants improved on all measures of physical fitness

Assessing Awareness of the Importance of Ethical Behavior

Jill Gerhardt

Ethical Issues

Recently there has been a great deal of discussion at computer educational conferences concerning including ethical issues in the computer curriculum. Benveniste [2] wrote that a “profession” is defined by six elements, one of which is “existence of a code of conduct or ethics.” Where should students get this code of ethics? Little [1] states that it is not enough for computing graduates to have technical capabilities: they should have an awareness of the importance of appropriate ethical behavior. I decided to make my systems analysis and design students aware of the importance of ethical behavior. However, what I did to make the students aware of ethical behavior is not the topic of this article, but how I measured their awareness is. Please refer to a previous published article for a description of how I increased their awareness [3].

Ethical Issues Assessment

In order to measure the impact of including ethical issues in my course, I searched for validated questionnaires and found one developed in Madrid, Spain by Porfirio Barroso [4]. He was using it in universities all over the world and allowed me to use it as long as I provided the results to him. In addition I developed my own questionnaire that would be more compatible with the ethical issues that were discussed in my class. The questionnaires were given out the first day of the course and the last. The statistic “rate of change” was computed for each question {i.e. (last day - first day) / first day}. I wanted to measure if the student’s attitude “changed” concerning ethical issues.

Results

Barroso’s questionnaire asked students to rate the following subjects according to the importance that they give to them using a scale from 0 to 10. Therefore, if the rate of change increased from the first class to the last class that meant they considered the topic more important at the end of the course. Barroso’s questionnaire consisted of 41 questions. Only some of Barroso’s questions dealt with the same issues which were covered in my course, which were the following:

Question #3- Professional integrity = 3% increase

Question #6- Duty to rectify, correct errors = 8% increase

Question # 13- The information professional should only employ just and honest means = 10% increase

Question # 19- Author’s rights, no to plagiary and to piracy = 1% increase

Question #32- Obligation to fulfill the ethical-professional code = 24% increase

Since the rate of change increased for the above five topics that meant that the importance of the topics to the students increased from the first day of the course until the last day. They still did not seem to care a lot about author’s rights which is disappointing (1% increase). However, their obligation to fulfill the ethical-professional code increased in importance by 24%.

My questionnaire, which consisted of 12 questions, asked to what extent the students agreed with the following statements using a scale going from 1= strongly disagree to 7 = strongly agree. Therefore, if the rate of change increased from the first class to the last class that meant the students felt stronger agreement about the statement at the end of the course. Questions in my questionnaire that related to the course:

Question #2- I have a good understanding of what is meant by the term ethics = 10% increase

Question #3- I know how to judge what is ethical = 8% increase

Question #4- I have thought a great deal about computer ethics = 22% increase

Question #5- I have a good understanding concerning computer ethics = 29% increase

Question #6- It is important to teach computer ethics to computer professionals = 11% increase

Question #7- Ethical questions will be an integral component of the workplace = 5% increase

Question #8- I will have to deal with ethical questions in the workplace = 8% increase

Question #12- I would like to learn more about computer ethics = 2% increase

Assessing Awareness of the Importance of Ethical Behavior, cont.

All eight questions that related to the course increased in agreement from the first class until the last although the questions varied from a 2% to a 29% increase. Basically the students did not seem to want to learn much more about computer ethics (2% increase). That might mean that the students thought that they already learned a good amount in the course. I hope that is the case. However, by the end of the course the students are thinking about computer ethics a lot more (22% increase) and they have a much better understanding of the topic (29% increase).

This is an excerpt from the following article:

Gerhardt, "If You Can Teach It, You Can Measure It," *The Journal of Computing Sciences in Colleges*, v 20 (3), 114-120, February 2005.

References

- [1] Little et al (1999) "Integrating Professionalism and Workplace Issues into the Computing and Information Technology Curriculum" *SIGCSE Bulletin*, 31, 4, 106-120.
- [2] Benveniste, G. (1987) *Professionalizing the Organization*, Jossey-Bass Publishers, San Francisco, California.
- [3] Gerhardt, J. (2001) "Put Ethics and Fun Into Your Computer Course," *The Journal of Computing in Small Colleges*, v 16 (4), 247-251, May 2001.
- [4] Barroso, D. Porfirio Ethics Questionnaire, Clinica Puerta de Hierro, San Martin de Porres, 28035 Madrid, e-mail: porfirio.barroso@ubet.cph.es

Using Assessment to Improve Teaching and Student Learning

The Institute for Faculty Development hosted its annual speaker on October 17. Dr. Richard Shavelson spoke on using assessment to improve teaching and student learning to a group of about 40 attendees, a mix of faculty, staff, and administrators. He noted that assessment is not an objective in and of itself—that weighing the pig won't fatten it. Instead, he emphasized that assessment that does not result in improved teaching and student learning is a waste of time.

Dr. Shavelson suggested using both formative and summative assessments in ways that would allow external benchmarking to other courses or programs or colleges in order to signal whether students are learning similarly to similar students in other similar contexts. He also recommended integrating students into assessment—letting them know where they and their program's stand as a way of giving them a stake in assessment and helping them self-reflect and learn.

Perhaps the most timely portions of Dr. Shavelson's speech for Stockton were two-fold. 1) The need for faculty and staff to receive support for assessment, especially early on as they "tool up" regarding assessment and get assessment underway, so that assessment doesn't fold under its own weight when it is done as an unrewarded add-on (see Mutari and Jacobson's article in this issue for other opinions on the "work" of assessment). 2) The need for college's to engage in experimentation and continued assessment to respond to signals that indicate a need for change—what we are beginning to do at Stockton in response to year's of poor CLA data and mixed internal data on many student learning outcomes.

You can see Dr. Shavelson's Power Point slides online at the IFD website:

The IFD thanks the Provost's Office, especially Provost Kesselman, Peter Baratta, Theresa Marinelli, and Nancy Capella, for providing support in planning this event. The IFD also thanks the Deans, Assistant Deans, faculty, and other administrators and staff who attended either the luncheon or speaking event or both.

"The sessions were very informative and gave further insight to the process we are experiencing at Stockton."

Joyce Welliver

"Thank you for hosting Dr. Shavelson for a wonderfully enlightening talk on teaching and learning assessment. .. I trust that my colleagues who were there will share their new found wisdom with their program colleagues and help RSC move toward truly effective assessment strategies."

Marilyn Vito

To Click or Not to Click

Kathleen Klein

Personal response systems (commonly referred to as clickers) are ubiquitous on College campuses. Of course, widespread use of educational technology is not necessarily the best measure of that technology's worth in the classroom. The ability of clicker technology to improve student learning outcomes and increase pedagogical effectiveness requires proof. Mary Kientz and I are collecting data demonstrating the effectiveness of clicker use with MSOT students. To understand the data, it is useful to begin with an understanding of clicker technology and its use in the OT classroom.

A “clicker” is a receiving device that students use to interact with questions or materials created by the instructor. Typically, “clicker questions” are provided in PowerPoint or other common applications. The receiving device permits students to respond to questions by pressing a letter or number on the clicker. This replaces the no-tech option of having students raise their hands or a low-tech method using index cards or other simple symbols. When students respond to questions with hand raising, we are fortunate if up to 10% of the class responds to the question posed. However, with clicker use, we have 100% of students responding to our questions and use less time than required for one or two students to verbally respond. The clicker system tabulates each student's response and provides an aggregated display of the responses instantly (in real time). This display (bar graph) is a unique and extremely beneficial aspect of clicker use. With all student responses tabulated, the graph offers evidence that students know or don't know the correct response. This offers an excellent method for the instructor to quickly assess students' prior knowledge or concept mastery and/or seek opinions. The graph itself can become a learning object as the class can discuss the graph. The questions can be quiz questions and data obtained is available for faculty review and assigning grades.

The literature on the use of clickers in higher education provides ample evidence that clicker use **paired with effective pedagogical practices** may offer the following benefits:

- student engagement/participation
- critical thinking/problem-solving skills
- active learning in the classroom
- achievement of desired learning outcomes
- discussion of sensitive topics (anonymity option)
- student and teacher satisfaction
- delivery of content related to a unique class of students
- collection of formative and summative assessment data (has additional uses in research)
- social collaborative learning (constructivist paradigm)
- collection of demographic information (attendance)



Effective pedagogical practice with a personal response system involves careful planning and use of the clicker technology. The faculty member must decide how the technology supports desired learning outcomes. Pedagogical use based on a behaviorist paradigm might result in an instructor using clicker questions to see if students understood main concepts in the assigned readings. Student investment in this activity increases if a grade is associated with these short reading quizzes. Using a constructivist paradigm, the instructor may use a technique pioneered by Dr. Eric Mazur called peer instruction. Clickers are used to answer complicated questions that go beyond mere memorization/understanding and require higher order thinking skills such as analysis or application. Students individually respond to a question and results are displayed. The correct response is not yet confirmed for the class but the responses are visible (usually varied and possibly lacking a clear majority). The students form small groups (or pairs) to discuss the class results found on the display and their individual responses. Students explain to group members why one response is more correct than the others. The same clicker question is repeated and the instructor can observe if effective peer teaching resulted in more students arriving at the correct response. The instructor can use student results to further explain the concept and refer students to additional resources.

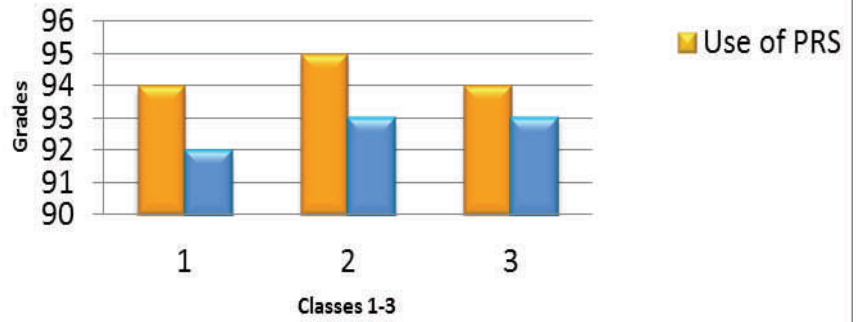
The ability to quickly assess what all students in your class know (even in a class of 100 or more students) is power in teaching. If you teach concepts that rely on understanding of foundational principles, knowing that your students have mastered the foundational concepts provides confidence in teaching more advanced concepts. Conversely, knowing that students are confused about foundational concepts offers an opportunity to clarify before proceeding to more advanced concepts. Having student data to reflect on the effectiveness of your teaching is priceless in retaining or modifying your teaching activities.

In the MSOT program, students are exposed to behaviorist and constructivist uses of the clickers. We have started the process of collecting and examining outcome data. The charts on the next page represent subjective and objective outcome measures that have demonstrated benefit to MSOT students with appropriate use of personal response systems.

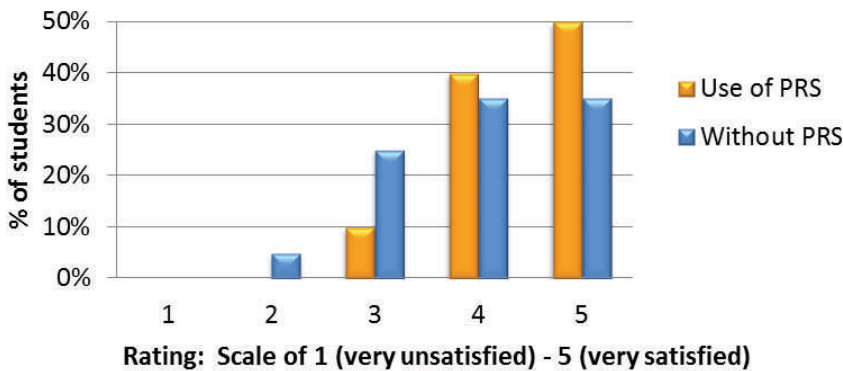
To Click or Not to Click, cont.

To Click or Not to Click? That question started this article. This question is best answered by examining our pedagogical needs to help students achieve desired learning outcomes. The clicker is one educational tool and its use must be appropriate to the actual learning need. Choosing the appropriate tool for the task is critical. We do not use a screwdriver to pound a nail—the appropriate tool for the job is a hammer. Likewise, clicker use has appropriate applications. If we are to adopt clickers, we must carefully design our use of clicker technology to support student engagement, problem-solving, critical thinking and other desired student behaviors. We must honestly assess the effectiveness of our use of clickers and measure student outcomes. With reflective use and assessment, we can confidently justify our decision **to click or not to click**.

Mean Final Course Grades in Three Courses with the Same Materials and Faculty



Student Satisfaction Course Ratings



Note: The personal response system available at Stockton is Turning Point. The clickers and training are available (at no cost) for faculty use through Computer Services. You can preview the Turning Point system and find a variety of resources at <http://www.turningtechnologies.com>. Some textbooks are available bundled with a clicker and instructor resources include clicker questions and quizzes. Clickers are a form of polling. There are additional (and sometimes free) polling options available for classroom and online use, e.g. through use of student cell phones.

Student Report of Percentage of Assigned Readings Completed (Clickers implemented in 2007)

