

Alternative Testing Modes

By: Barbara Gross Davis
University of California, Berkeley

Take-home tests. Take-home tests allow students to work at their own pace with access to books and materials. Take-home tests also permit longer and more involved questions, without sacrificing valuable class time for exams. Problem sets, short answers, and essays are the most appropriate kinds of take-home exams. Be wary, though, of designing a take-home exam that is too difficult or an exam that does not include limits on the number of words or time spent (Jedrey, 1984). Also, be sure to give students explicit instructions on what they can and cannot do: for example, are they allowed to talk to other students about their answers? A variation of a take-home test is to give the topics in advance but ask the students to write their answers in class. Some faculty hand out ten or twelve questions the week before an exam and announce that three of those questions will appear on the exam.

Open-book tests. Open-book tests simulate the situations professionals face every day, when they use resources to solve problems, prepare reports, or write memos. Open-book tests tend to be inappropriate in introductory courses in which facts must be learned or skills thoroughly mastered if the student is to progress to more complicated concepts and techniques in advanced courses. On an open-book test, students who are lacking basic knowledge may waste too much of their time consulting their references rather than writing. Open-book tests appear to reduce stress (Boniface, 1985; Liska and Simonson, 1991), but research shows that students do not necessarily perform significantly better on open-book tests (Clift and Imrie, 1981; Crooks, 1988). Further, open-book tests seem to reduce students' motivation to study. A compromise between open- and closed-book testing is to let students bring an index card or one page of notes to the exam or to distribute appropriate reference material such as equations or formulas as part of the test.

Group exams. Some faculty have successfully experimented with group exams, either in class or as take-home projects. Faculty report that groups outperform individuals and that students respond positively to group exams (Geiger, 1991; Hendrickson, 1990; Keyworth, 1989; Toppins 1989). For example, for a fifty-minute in-class exam, use a multiple-choice test of about twenty to twenty-five items. For the first test, the groups can be randomly divided. Groups of three to five students seem to work best. For subsequent tests, you may want to assign students to groups in ways that minimize differences between group scores and balance talkative and quiet students. Or you might want to group students who are performing at or near the same level (based on students' performance on individual tests). Some faculty have students complete the test individually before meeting as a group. Others just let the groups discuss the test, item by item. In the first case, if the group score is higher than the individual score of any member, bonus points are added to each individual's score. In the second case, each student receives the score of the group. Professors can have students evaluate other members of their group, which allows students to provide feedback on the participation of their partners. Make sure the use of group exams and how students will be evaluated is clear from the beginning of the course. Faculty who use group exams offer the following tips:

- Ask students to discuss each question fully and weigh the merits of each answer rather than simply vote on an answer.
- If you assign problems, have each student work a problem and then compare results.
- If the test is multiple choice, students reach their decision based on discussion and group consensus. Individual students then have to write the explanation in

their own words. This will help you know if the students truly understand the material.

- If you want students to take the exam individually first, consider devoting two class periods to tests; one for individual work and the other for group. Professors can also have students do one portion in class and the second part outside of class.
- Show students the distribution of their scores as individuals and as groups; in most cases group scores will be higher than any single individual score.

A variation of this idea is to have students first work on an exam in groups outside of class. Students then complete the exam individually during class time and receive their own score. Some portion of the test items are derived from the group exam. The rest are new questions. Or let students know in advance you will be asking them to justify a few of their responses; this will keep students from blithely relying on their work group for all the answers. (Sources: Geiger, 1991; Hendrickson, 1990; Keyworth, 1989; Murray, 1990; Toppins, 1989)

Paired testing. For paired exams, pairs of students work on a single essay exam, and the two students turn in one paper. Some students may be reluctant to share a grade, but good students will most likely earn the same grade they would have working alone. Pairs can be self-selected or assigned. For example, pairing a student who is doing well in the course with one not doing well allows for some peer teaching. A variation is to have students work in teams but submit individual answer sheets. (Source: Murray, 1990)

Portfolios. A portfolio is not a specific test but rather a cumulative collection of a student's work. Students decide what examples to include that characterize their growth and accomplishment over the term. While most common in composition classes, portfolios are beginning to be used in other disciplines to provide a fuller picture of students' achievements. A student's portfolio might include sample papers (first drafts and revisions), journal entries, essay exams, and other work representative of the student's progress. You can assign portfolios a letter grade or a pass/not pass. If you do grade portfolios, you will need to establish clear criteria. (Source: Jacobs and Chase, 1992)

Additional Reading from the library of the CTL:

Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques : a handbook for college teachers*. San Francisco: Jossey-Bass Publishers.

For test-taking teams see Chapter 12 (163-167) in Barkley, E. F., Cross, K. P., & Major, C. H. (2005). *Collaborative learning techniques : a handbook for college faculty*. San Francisco: Jossey-Bass.

Davis, B. G. (2009). *Tools for teaching*. San Francisco, CA: Jossey-Bass: 367-370.

Revere, L., Elden, M., & Bartsch, R. (2008). Designing Group Examinations to Decrease Social Loafing and Increase Learning. *International Journal for the Scholarship of Teaching and Learning*, 2(1). <http://academics.georgiasouthern.edu/ijsotl/v2n1/articles/Revere-Elden-Bartsch/index.htm> (accessed March 4, 2010).