IFAT – if at first you don’t succeed… try, try again

By Professor David DiBattista
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Although I have often used multiple-choice questions in my courses, it has always been a source of great concern to me that most students never take the time to review the multiple-choice items after they have received their graded exams. As a consequence, they never obtain confirmation that their correct answers were indeed correct, nor do they learn the correct answers for the items that they got wrong on the exam.

Recently however, I have introduced into my course a new technique for multiple-choice testing that has some tremendous advantages. The Immediate Feedback Assessment Technique (IFAT) was developed by Professor Michael Epstein, of Rider University, in New Jersey.

The IFAT form is similar to the more well-known Scantron form that is used in multiple-choice testing. However, on the IFAT form, each of the four alternatives is covered by a waxy opaque coating similar to the coating that is used on scratch-and-win lottery tickets. For each question, the student selects the answer believed to be correct and scratches off the coating. If the choice is correct, a star appears in the box and the student goes on to the next item. If the student’s choice is incorrect, a blank space appears. The student then reconceives the options that remain and continues scratching boxes until the star is found. The student’s final choice is always the correct answer.

Students earn full marks for answering correctly on the first attempt, and progressively fewer marks for answering correctly on later attempts.

From a pedagogical perspective, the IFAT has several advantages over standard multiple-choice testing procedures. First, it provides immediate rather than delayed feedback for the test items. Second, this feedback is corrective, allowing students to learn the correct answer to every item before they leave the test situation. Third, because students can still earn marks even if their first attempt is not correct, they are rewarded for their proximate knowledge of the correct answer. Fourth, because students can determine their own test mark, they receive immediate feedback on their overall performance before leaving the test situation.

To determine whether students like the IFAT, Professor John Mitterer and I had students complete a brief questionnaire after using the IFAT on an examination. We found that the students strongly prefer the IFAT to the more commonly used Scantron form, with 83% per cent saying that they would like to be able to use the IFAT in all of their courses.

Students’ responses indicate that they like IFAT for a variety of reasons, including the following: it is easy to use; it makes the multiple-choice portion of the test feel a bit like a game; it lets them know the right answer to every question; it allows them to learn more than the Scantron form; it allows them to get part marks on multiple-choice questions; and it lets them figure out their marks on the multiple-choice portion of the test. Mike Epstein has recently demonstrated that students do actually learn more when they use the IFAT instead of the Scantron on their multiple-choice tests. So students not only prefer the IFAT, but they also learn more when they use it — a winning combination!

Web modules serve as ‘Critical Tools’

By Barry W.K. Joe, Director (CTLET)

The Centre for Teaching, Learning and Educational Technologies (CTLET) is pleased to make available Critical Tools, a new suite of highly interactive web-based tools developed at the University of Texas at Austin. The six tools in this modular set may be implemented individually as required, or en suite to complement each other. Each module is extremely user-friendly. Both students and instructor interact merely by filling in the on-screen prompts.

Critical Tools comprises the following modules:

• Addlink allows instructors and students to create pages that serve as "archives" of links to other sites on the Internet.
• Discussion Forum is an asynchronous, threaded discussion board such as one finds in WebCT.
• ClassContact builds a hyperlinked list of student e-mail addresses that can be used by other students to communicate with their colleagues or to e-mail the entire list.
• Interactive Archives allows you and your students to create, organize, and interlink documents in an online archive. It is an "archive" because it stores and organizes information; it is interactive because the documents that are posted to it can be linked to other documents already posted.
• Annotator provides the electronic equivalent of a shared hard copy of a text, where all members of the class can contribute extensive marginalia, read each other's comments, and comment on others' comments.
• BiblioFile creates a frames-based module of Web pages that allow the students in a course (or members of any group) to enter bibliographic citations in MLA format to a common Works Cited (or, as we say, BiblioFile) page. By completing the prompts on the page, students submit bibliographic information that is then automatically formatted in MLA style and posted to the BiblioFile page. A nice feature of this tool is that students may also include descriptive or evaluative comments about the sources they cite.

Critical Tools may be used as an alternative to an integrated virtual learning environment such as WebCT, or they may be used as supplementary tools within WebCT.

Contact the CTLET, at ext. 4707, to request a Critical Tools account. A directory will be created for you and you will then be able to set up the modules you wish to use.

Complete details of each module may be found at the Critical Tools Web site at the University of Texas at Austin: www.cwrl.utexas.edu/~criticaltools

Did you know …

The CTLET Teaching Assistant Award was established in 1998 to recognize the superior contributions to the University by teaching assistants, seminar leaders and lab demonstrators. Two TA awards are available:

SENIOR TA AWARD ($500)
Presented to an individual TA in recognition of an outstanding contribution to teaching and learning at Brock. Eligible teaching assistants must have a minimum of three years of experience as TAs.

TA AWARD ($300)
Those eligible to receive the award are novice teaching assistants who have less than three years of experience as TAs but who have demonstrated a commitment to assisting others in reaching their educational goals.

Watch for the call for nominations in early February. For those who might want to think about the kind of supporting documentation required for a TA Award, drop by the CTLET (F313) to pick up a set of guidelines.