Immediate Feedback Assessment Technique (IF-AT)

The CET&L is pleased to introduce you to the IF-AT testing system. We hope that IF-ATs make your team-based learning activities easier and more enjoyable for you and your students. Please email us at **cetl@uc.edu** if you have questions.

What is an IF-AT?

The **Immediate Feedback Assessment Technique (IF-AT)** allows your students to receive immediate (and gratifying) feedback that assesses their knowledge. Students consider the answers to multiple-choice questions and then scratch off a thin opaque covering to reveal their desired answer choice (A, B, C, D, or E). You know...it's like a scratch-off lottery card. The correct answer reveals a star beneath the scratched choice. Incorrect answers are blank (Figure 1). Students receive partial credit (according to your specifications) for incorrect answers, which encourages them to reread the question and select the correct answer. This immediate feedback motivates students to continue applying knowledge and problem solving until they identify the correct answer.

Figure 1

While IF-ATs can be used for individual student quizzes, the CET&L recommends and supports using IF-ATs for team-based learning exercises in your class.

How should I use IF-ATs?

Instructors should write challenging, debatable questions that require evaluation and discussion. For example, a question beginning with "Pick the **best** example of..." prompts classroom discussion. After writing your quiz, use the following steps to complete your team-based learning exercise:

1. Have the students answer the questions by themselves **without the IF-AT form**.
2. Divide students into groups of four to six members each.
3. Give each group **one** IF-AT form.
4. Assign the following roles:
   Reader: reads the questions to other group members
   Moderator: keeps discussions on track
   Scribe: summarizes the group's discussion and answers
   Tabulator: keeps track of the group's score on IF-AT form (Figure 2)

5. While in groups, tell the students to discuss and compare their answers. During this discussion, they must come to an agreement on which box to scratch off **as a group**. If they get it wrong, they should discuss the next best answer and continue the process until they uncover the star.

6. You may want to allow your students to "appeal" a wrong answer. To support their argument, students should write several paragraphs or present their argument to the class using citations from the textbook or other sources. (For more information on using the IF-AT for team exercises, go to www.teambasedlearning.org.)
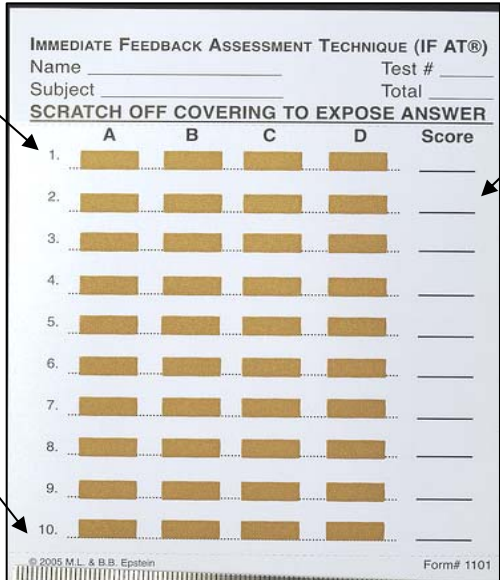
As the instructor, what do I need to know?

1. To ensure test security, there are different "versions" of the test forms that arrive with answer keys so you know where the stars are located for each question. The stars that indicate correct answers are located beneath different letters according to the version number; the version number is located at the bottom of the form (Figure 2). The answer key provides the star locations for all versions. To build your IF-AT test, you'll structure your multiple-choice answer options according to the answer key.

2. The amount of partial credit is up to you. Here are a couple of examples from http://www.if-at.com:

10 points – first choice 5 points – second try 2 points – third try 1 point – fourth try 0 points – fifth try	5 points – first choice 3 points – second try 2 points – third try 1 point – fourth try .5 point – fifth try

What do I need to know before I get started?

1. Tell your students that they will receive partial credit for incorrect answers. Regardless of how much partial credit you award, **research shows that any amount motivates students.**

2. If you are concerned about grade inflation, you may choose to alter your grading scale or include more challenging questions.

3. Make sure that you tear off the bottom part of the test along the perforated line (Figure 2). This ensures that the student will not know which version of the test you are using.

4. Collect all forms from students at the end of class. If they

Figure 2

want to keep their score, the top portion of the test can be torn off along the perforated line (Figure 2).

5. The star can appear anywhere within the box, so students can never know precisely where the star is located. Tell your students that even a small scratch counts as a selected answer.
6. Students can use the score column to record the points they earn based upon your grading scale (Figure 2). You can easily check the accuracy of their scores, because once a box is scratched, it cannot be "undone."
7. Scratching "tools" can include toothpicks (preferably unused), coins, plastic student I.D. cards, pen tops, fingernails, keys, maxed-out credit cards, etc.
8. While creating the questions for your test, keep a note of which test version you are using.
9. An answer key should never go home with a student. Never ever.

How can I get IF-ATs from the CET&L?

The CET&L will provide IF-AT forms for team-based learning exercises in your class. To purchase forms for individual student use or for longer forms (25 to 50 questions), please go to http://www.epsteineducation.com/home/order/default.aspx.

CET&L would like to thank Robin Lightner and Ruth Benander for their IF-AT insights.

(Much of the language used here can be found at http://if-at.com. Please go to this website for more information on the IF-AT testing system.)