TWO-STAGE TESTS

PCMI JULY 2017

VICKI A LYONS
IS THIS YOUR CLASS DURING A TEST?
OR

IS THIS YOUR CLASS DURING A TEST?


Aaron Hutchins (November 25, 2014) http://www.macleans.ca/education/multiple-choice-multiple-students/
To give students immediate corrective feedback, Michael Epstein, now retired as a psychology professor from Rider University in New Jersey, invented the Immediate Feedback Assessment Technique testing system in 1997 to replace regular multiple-choice tests.

Similar to a “scratch and win” lottery ticket, students scratch one multiple-choice answer, and an X underneath reveals if they have chosen correctly. If there is no X, however, students select another answer to try to receive points for partial knowledge.

“It wasn’t fair that on a multiple-choice exam, students who can narrow it down to two choices before selecting and make the wrong choice are just as wrong as someone who has no idea, guesses and gets it wrong,” says Epstein. It could be four points for a correct answer on the first scratch, two points on the second try, and one point on the third try.

No matter how many scratches it takes, students leave knowing what the correct answer is and how they performed on the test.

Aaron Hutchins (November 25, 2014) http://www.macleans.ca/education/multiple-choice-multiple-students/
“The longer you delay the feedback, the less useful it becomes,” says Jim Sibley, a staff member at University of British Columbia’s Centre for Instructional Support and co-author of a book on team-based learning. “Can you imagine you hit a golf ball and I tell you in a week in which direction it went, and then you try to adjust your shot?”

Aaron Hutchins (November 25, 2014) http://www.macleans.ca/education/multiple-choice-multiple-students/
ADAPTIVE TESTS

Figure 1. A Model of Two-Stage Testing
TWO-STAGE TESTS

All tests?

Yes! (OR perhaps not final exams)

• In my AP classes – especially!
• Obviously they are used at the university
“Groups do not waste time on questions which were answered the same way by all group members. Therefore the more challenging questions receive all the discussion time resulting feedback on learning where it is needed most.”
HOW CAN YOU CHANGE A TEST THAT YOU ALREADY HAVE TO MAKE A TWO-WAY TEST?

- Shorten the test so students can do same test again during the class period
- Give the same test again the next class period
- Give part of the test again (not the entire test)
- Leave most of the test questions the same but take some of the test questions and put them on the group test
- Use some repeat questions and some new questions
- Try something you think will be effective for your students!
HOW CAN YOU ARRANGE THE GROUPS?

• Teacher assigned, making sure that multi-levels of expertise are in each group
• By convenience, as students finish they work with other students that finish near the same time
• Students choose their own groups
• Visible random grouping
• Limiting the size of the group to 3-4 students seems to work the best (pairs seem to be too small but pairs of students work well on quizzes)
SCORING

• 80-85% for grade on original test & 15-20% grade on Stage-Two test

• Stage-Two grade can be an add-on (weighted scores)

• Whatever you feel is fair for your students
“As instructors increase their use of active learning strategies in classes, incorporating group work in exams is a natural next step that can benefit student learning and long term retention. It is also more engaging and rewarding for everyone.”
FOR MORE INFORMATION:

just Google two-stage test