

Time for a Test! Two-Stage Tests enhance learning and bring laughter in classes of any size... and at STLHE?

Keynote Workshop presented at Southwest Florida Symposium on Teaching and Learning, 30 January 2020, by

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If you try this technique and/or use materials I have shared here, I'd love to hear about it! Let me know how it goes, how you've adapted to fit your context, what suggestions/ideas you have...

References and Resources

Gilley, B. H., & Clarkston, B. (2014). Collaborative testing: Evidence of learning in a controlled in-class study of undergraduate students. *Journal of College Science Teaching*, 43, 83-91.

For a summary of my first introduction to Two-Stage Exams, including links to resources, tips, and additional references, visit my blog post at: <http://ow.ly/KIG350uDh2c> or consult this chapter for a fully curated set of resources, tips, and literature review:

Rawn, C. D., Ives, J., & Gilley, B. (2019). Two-Stage exams increase learning and laughter on exam day in classes of any size. In J. Golding, C. D. Rawn, & K. Kern (Eds.). *Strategies for Effectively Teaching Large Classes in Higher Education*. San Diego, CA: Cognella Academic Publishing.

Multiple Choice Questions for Demo (from Quantitative Research Methods)

1. If a result is *statistically significant*, this means that
 - a. if there is truly no effect in the population, a result this large is unlikely.
 - b. it is valid.
 - c. it will replicate.
 - d. it is important.
 - e. All of the above.
2. When everyone in the population of interest has an equal chance to participate in the study, the researcher is
 - a. using random assignment.
 - b. striving for high internal validity.
 - c. introducing selection bias.
 - d. using random selection.
3. Consider the following survey question: "Do you agree that reckless teenagers are more dangerous drivers than mature adults?" What question wording mistake does this question exemplify?
 - a. It violates the simplicity principle.
 - b. It is a double-barrelled question.
 - c. It is a loaded question.
 - d. It is negatively worded.

Additional Materials: Coversheet Instructions for Students

The next two pages are the exam coversheets I have created for Stage 1 and Stage 2, respectively. This class had 370 students and ran in 50 minute blocks, 3 times a week, for 13 weeks. Each of the three midterms was completed in 50 minute block. The Final exam was a 3 hour block, 2 hours for Stage 1 (59 MC, 16 Fill-in-the-Blanks, and 2 essay questions), and about 1 hour for Stage 2 (MC and FIB only).

Psyc 101 Section 005 Introductory Psychology
Instructor: Dr. Catherine Rawn

Test 2: 26 October 2015

TEST CODE (in “Codes”) = 1

First Name _____ Last Name _____

Student Number _____

IMPORTANT INSTRUCTIONS

Please do not open this test booklet until you are instructed to do so. Place all personal items (bags, books, jackets) at the front, sides, or back of the room, or zipped up and completely tucked beneath your chair.

- ❖ Stage 1: You have 30 minutes to complete this test independently. When time is called, you must immediately turn in your Scantron and test booklet. If you finish early, raise your hand and we will come collect your test. Stay seated quietly and await further instructions for Stage 2.
- ❖ Stage 2: As soon as all Stage 1 tests have been collected and Dr. Rawn gives the signal, find a group. Once you have your group of four or five people, everyone should raise their hands to receive a new copy of the test and a new Scantron sheet. As soon as you receive it, you may begin to re-do the test as a group. Raise your hands again when you are done and we will collect it. You will have until the end of the class period. *No group may leave before official dismissal.*
- ❖ Print your name and student number **on this page** and on the **Scantron sheet**.
- ❖ This test booklet has 4 physical pages, and questions appear on both the front and the back. Please check to make sure that your booklet has all pages.
- ❖ Part 1 of this test contains 20 multiple choice questions. For multiple choice questions, the Scantron sheet will be marked (*not* this test booklet). **Choose the best answer for each multiple choice question, and mark it on the Scantron sheet in pencil.**
- ❖ **You will not be given extra time at the end of the exam to fill in the Scantron sheet. Please do so as you go.**
- ❖ Part 2 of this test contains 6 fill in the blank style questions (including 2 diagram labels) for a total of 6 marks. **Complete all fill-in the blank responses in pen.**
- ❖ To avoid disrupting the class once the exam has begun, I will post notices on the projector screen. Please look up periodically to check for new notices.
- ❖ Please *do not* give us *any* reason to suspect that you are cheating. Keep your eyes well away from your neighbours' papers at all times.
- ❖ *Remember, your value as a person of worth has nothing to do with your performance on this or any other exam.*

Psyc 101 Section 005 Introductory Psychology
Instructor: Dr. Catherine Rawn
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Stage 2

Test ("Student ID") # _____

Record your TEST number IN THE STUDENT ID NUMBER AREA on the Scantron sheet. Without this step, we will not be able to link your MC points.

Who is contributing to this test? Print the names and Student ID numbers of all people collaborating on this test. If we cannot read your name, you will receive zero for the group portion.

<i>Print First Name</i>	<i>Print Last Name</i>	<i>Print Student ID #</i>

IMPORTANT INSTRUCTIONS

- ❖ Stage 2: As soon as all Stage 1 tests have been collected and Dr. Rawn gives the signal, find a group. Once you have your group of four or five people, everyone should raise their hands to receive a new copy of the test and a new Scantron sheet. As soon as you receive it, you may begin to re-do the test as a group. Raise your hands again when you are done and we will collect it. You will have until the end of the class period. *No group may leave before official dismissal.*
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