

Increasing Learning When Returning Exams

Following are various methods that can be used to increase learning when returning exams. Each method can be applied as directed or modified to meet individual needs. Some methods may not work for large classes.

General Procedures for Returning Exams in Class

- Design your exams effectively
- Before students take the exam, give students an idea of the types of test questions to expect on the test and the cognitive processes they will need to use in answering the questions (e.g., recall/remember, understanding, apply, analyze).
- After students take the exam, study the student responses. Notice questions with a high number of students selecting a wrong answer. Ask yourself if you should rewrite the test question, teach something differently or encourage students to study harder.
- Give students points for any missed questions that you didn't teach well enough or that are poorly written questions.
- Return exams to students with an indication of which items were missed and an answer key to indicate the correct responses.
- Allow ample time for students to ask questions about the exam, clarify any misconceptions and to receive feedback from you. This makes the test a learning experience as well as makes the students feel like they are being treated fairly. Plan time to review every question on the exam.
- Be prepared to acknowledge poorly written items or teaching failures on your part. Welcome student critiques, but know when to cut off discussion by inviting students to discuss their concerns after class.
- Allow students to keep a copy of the exam only if you plan on never using the test questions again.
- Consider administering a short evaluation to ask for student feedback about your exams.

Group Exam Analysis -- Option A

Step 1: Make a complete grading key

- When you create the exam, develop a complete grading key for use in grading the exams and for students to use to analyze in class their responses to the exams.
- In the answer key include feedback for all answer options on the multiple-choice and matching questions. *Include explanations for why correct answers are correct and wrong answers are wrong.*
- In the case of essay questions, the grading key should contain an ideal answer.
- Also, when you grade the exams, revise the answer key to account for unanticipated answers.

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Step 2: Start class by organizing students into groups

- Divide the students into groups to discuss each test item together. Students teach and learn with one another as they figure out together in small groups what went wrong and right on their exams.
- Invite students to use notes, text and other materials to analyze the correct answer to each item.

Step 3: Hand back the exams and the answer key

- Make a copy of the exams. You keep the original, the students get the copy.
- Be sure that the scores on the exams are not open to others' view so students can keep their score confidential.
- When students receive their exams back, they are usually eager to find out what questions they answered wrong and why. The answer key is therefore a great teaching tool because students can see why certain answers were right and other answers were wrong.
- As the teacher, you should be a resource to support students in resolving discrepancies. As you listen in to the different groups you may also discover areas for further clarification in your teaching or in your test questions. These sessions not only help students learn but they also provide you with feedback with regards to the effectiveness and clarity of your teaching.

Step 4: At beginning of next class give a short quiz

- At the start of the next class give a short quiz with the 5 questions most students missed on the exam. You can do this activity for learning only or you can also count the quiz points toward grading.

Take-Home Exam Opportunity -- Option B

Step 1: Students take exam

- Students complete the closed book exam in-class (or in the Testing Center).

Step 2: Students receive a second copy of the exam that they can complete at home as an open-book exam.

- After taking the first exam students may choose whether or whether not they want to complete the take-home exam. However, they have to make that decision without knowing their score on the in-class exam. This gives students a chance to gage their own performance.
- For the take-home exam, you score only those questions that the students missed on the in-class exam; then add half of the points (or whatever amount of points you decide) students earn on the take-home exam to their score on the in-class exam.

Step 3 (optional): Follow steps 1-3 of the Group Exam Analysis - Option A

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More Ideas for Increasing Learning from Exams

Include a Blank Question on the Exam

- On the test, let students write a test question or problem they were well prepared to answer, yet were not asked on the exam. They also need to answer their proposed question. You can grade students' added test questions on their answer to the question and/or on the quality of the question (appropriateness, difficulty level).

Try Group Testing

- Group testing is an extensive and well researched process written about by Larry K. Michaelson. The process includes taking tests individually and again as a group. For additional information about implementing this idea, visit with Tim Bothell in the Faculty Center or refer to the resources listed below.

Encourage Students to Analyze Their Learning and Study Habits (Metacognition)

- Have students make a list of the number of each question missed.
- Invite students to go back through their notes and find out how many of those questions were from days they were not in class.
- Tell students which test questions came from the reading and which came from classroom teaching.
- Invite students to determine if they are missing more questions from the reading or from class notes. Ask students who miss no questions from either reading or class notes to tell the rest of the class how they study and prepare for the exam.
- Invite students to determine how many questions they missed after changing their original answers. Ask them if it pays to change their answers.
- Have students summarize on a piece of paper what they learned from this entire exercise.
- Collect the papers and redistribute them to each student the week before the next exam.

Resources

Aldrich, H. E. (Summer, 2001). How to Hand Exams Back to Your Class. *College Teaching*, Vol. 49, No. 3. p. 82.

Davis, B.G. (1993). *Tools for Teaching*. San Francisco, CA: Jossey-Bass Inc., Publishers, pp. 256-257.

Michaelson, L.K. (1992). Team Learning: A Comprehensive Approach for Harnessing the Power of Small Groups in Higher Education. *To Improve The Academy*, Vol. 11. Stillwater, Oklahoma: New Forums Press, Inc.

Ory, J. C. (1993). *Tips For Improving Testing & Grading*. Newbury Park, CA: Sage Publications.

Weimer, M. (2002). *Learner-Centered Teaching: Five Key Changes to Practice*. San Francisco, CA: Jossey-Bass.

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