

Teaching Tips/Notes



Crafting the Exam

In addition to teaching and delivery of information is measuring what students understand; that is, when preparing a course for delivery, the instructor is giving consideration to the appropriate questions to assess learning and one way to approach framing questions is to set expectations appropriately. We have found that using a tool such as Bloom's Taxonomy (2014), the level of deep can be considered in composing the question. For instance, Bloom's suggest six general areas for questioning: 1) knowing, 2) understanding, 3) applying, 4) analyzing, 5) creating, and 6) evaluating, thus the expectation is gradually different but points to a level of progression such as the difference in expectations between freshmen through senior level assignments. So, how does one consider framing the questions?

Understand fully what you expect them to know relative to the course level and expectations.

Develop a strategy on how to gauge level of understanding. Here some tips to consider: a) Let's consider the instructor is wanting to give a multiple choice exam, then ask students to submit 2-3 multiple choice questions per person for consideration on the next exam. In this exercise, the instructor will gain an appreciation for the level of depth and if there were any miscommunications regarding the subject matter, i.e., possible instructor stated something incorrect and this would be an ideal time to make an adjustment in-class before the actual exam or b) Let's consider the instructor desires to test student's knowledge using open ended/written type questions. Similar to the multiple choice, the instructor can ask for possible questions and get a feel for how well the students may know the materials and/or if anything may have been miscommunicated. Like the multiple choice, if students are way off from the intended point, take the opportunity to bring the substance back to where it should be relative to the question. Further, the instructor should clearly communicate the writing expectations, i.e., grading, grammar or just reading for content or both, so no one is surprised when exams are returned.

When planning a test it is also important to consider class size and the time available to prepare and/or grade an exam. Some instructors desire to choose essay/open-ended type questions and for a large class that may be time prohibitive for both the test taker and grader if not crafted carefully. We have found that it requires less time to write an essay type test because point values are typically higher and there are fewer questions to develop than on a multiple choice type exam. Its known essay type tests will take much more time to grade and can be more subjective, especially when considering the level of detail expected compared to other types of exams. When creating effective test questions it is key that the format of the test questions you select are best for what skills or concepts you are testing the students on. The methods outlined above that involve the students provide an excellent way to address student comprehension of the material, while building an extensive bank of questions. Lastly, it is critical to spend time formulating the questions so they are concise and well-written.

References

Bloom's Taxonomy, http://en.wikipedia.org/wiki/Bloom's_taxonomy accessed on [November 7](#), 2014

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