On the surface, open-note and take-home exams (open exams) may seem less rigorous than an in-class timed exam. However, when properly designed and aligned with the course objectives, open exams can measure student performance and aid learning in ways that in-class timed exams cannot. Open exams can even be more accommodating to students that need extra time on exams or suffer from test anxiety. If instructors have never considered including an open exam in their assessment scheme, now is the perfect time to implement one. Below are a few things to consider when creating an open exam:

Choose the format

There are many popular formats for open exams that each have their advantages and disadvantages. Instructors should choose the format that fits best into the overall course design and purpose behind the assessment. Consider the following:

- The amount of time students have access to questions and opportunity to write/complete the assessment. This will depend on the effort needed to complete the assessment and total points they will earn (relative to other assessments).
- Will collaboration be allowed? What sources can be used? Clearly explain these expectations to the students.
- Choose question styles that make sense. An exam with all essay responses may be easier to create, but comes with some downsides (grading time and variance of responses for example). Feel free to include multiple choice and fill-in-the-blank questions if they meet the learning objectives.

Create questions that are not easily found on search engines

Help students avoid the temptation to plagiarize by writing questions with answers that are not easily found with a simple Google search. Questions like these can be created by writing novel case studies or situations. For example, if a biology instructor wants students to demonstrate their knowledge of how the information in a gene results in a phenotype, the instructor could find a lesser known gene for a case study, or create a fictional gene for the students to perform a thought experiment on.

A word of caution: these questions do not need to be incredibly intricate or complex. If the instructor’s goal is to assess whether students can explain or describe a phenomenon, the assessment should involve students explaining or describing the phenomenon. Just because students have more time to complete the assessment does not mean instructors have to ask questions that would push the limits of experts in their field.

Consider having students create concept maps and/or models

Another way to promote unique work is to ask students to create concept maps or models to answer a question. This can be done easily in software like PowerPoint or a photograph of a hand drawing. An instructor who is interested in assessing a network of concepts or ideas could easily have their students create a concept map to explain relationships in a system, rather than having students type out an essay. Many instructors who try this technique end up including it in other assessment (homework and in-class exams) due to a concept map’s ability to assess student understanding without the restriction of a paragraph response.

Clearly explain the depth of response needed to answer the question
Some students may assume they should spend 50 minutes (the time they would dedicate to an in-class exam) completing an open exam, while others may spend a week completing it. Instructors should strive to clearly explain to the students both how long they should be spending on the assessment, and the depth of detail students should include. In addition, the level of detail could differ from questions to question. While an instructor would not do this for an in-class timed exam, on open exam, an instructor could consider asking students to limit their answers to a specific question to 12 words. This would require the student to be as concise as possible in their answer. Another question on an exam may require 2 paragraphs to completely answer. In either case, the instructor can aid students by describing the detail needed to answer the question.

**Make rubrics for open-ended (essay) questions**

While creating rubrics may be time intensive, they will save time in the end. Creating a detailed rubric on how a question will be graded will help identify points of confusion for students, and changes can be made before the exam is sent out to students. Instructors can also consider sending the rubric with the exam to students. This does not mean giving the students the answers, instead it can be a way of informing students of the standards they are being held to. For example, if an instructor asks students to create an argumentative essay, a rubric may help students include all the major pieces needed. The rubric may detail that three pieces of evidence supporting the argument would obtain full marks, and that one paragraph stating the opposing argument (and disproving it) is necessary. Providing standards of grading is essential for an open exam.

Open exams can be a great opportunity to introduce multiple means of assessment into a course. Now is the time to assess whether in-class timed exams are essential to the course, or are even the best way to measure student learning. Take this time to try out alternative assessment scheme and collect data on this new assessment.