Best Practices to Reduce the Impact of Cheating in Online Assessment

Although it may be difficult to prevent cheating entirely, faculty can implement steps to reduce its impact in the student learning online assessment process. The following are some practical tips to prevent or reduce cheating for two common learning assessment activities, namely testing and homework assignments.

Tips for Testing

- Purposefully Select Assessment Methods Use online testing, particularly objective test (i.e., multiple choice, multiple answer, true/false) for lower stakes assessment of student learning. In assessing student mastery of course goals and objectives, objective tests should be only one option considered among a spectrum of methods considered. Each type of assessment method may be designed to measure different indicators of student learning based on course goals and objectives. While an objective test can measure a student's ability to recall or organize information, other methods can be used to assess higher order/critical thinking skills including understanding, applying, analyzing, evaluating, and creating (Krathwohl, 2001). Adding applied problems for solving to your online exam will reduce the likelihood of a student being able to find a quick answer online.
- Mix Objective and Subjective Questions While online testing can include objective measures (multiple choice, multiple answer, true/false, fill in the blank, etc.), faculty can also include short answer or essay questions. This type of question is more subjective in nature and may demand a deeper understanding of the subject being tested. While mixing objective and subjective type questions may not discourage or stop sharing of information, it may limit the effect on the student's final grade (Watson & Sottile, 2010).
- Use Question Pools Rather than using a fixed number of items that remain unchanged for each administration of the test, consider creating a <u>question bank</u>. A question bank will generate an assessment with randomized questions selected by the faculty member. Pools can be created from new questions or questions in existing tests or pools. Pools are most effective when there are large numbers of questions in one group. For example, one might have a pool of true/false questions, another of multiple choice and a third for fill in the blank. The faculty member could then create an assessment drawing a specific number of questions from each of the question-type pools.

- Randomize Questions When creating a test in TITANium, one test option allows faculty to <u>randomize the selection of test questions</u> as well as <u>shuffle the order</u> in which they appear. The result is that students are not likely to get the same questions in the same sequence when taking a test. This strategy can address the issue of students who take a test at the same time in order to share answers. This is also relevant if faculty allow students to repeat the test. Each time this occurs, a test will be made up of questions that are randomly selected and ordered.
- Limit Feedback Limit what types of feedback is displayed to students upon completion of a test. Available test options include test 'Score', 'Submitted Answers', 'Correct Answers', and 'Feedback'. Providing test scores is important feedback that indicates how well students have performed and should be made available. However, through a process of elimination, students may be able to determine the correct answer for each test question if their submitted answers are identified as incorrect, or if the correct answer is provided. Students could lose the incentive to both prepare for testing or to seek out correct answers by reviewing lecture notes, assigned readings, or through group discussion after completing tests. Thus, faculty might reconsider whether to include 'Submitted Answers' as an option to be displayed to students. This is especially relevant if faculty have allowed students to repeat tests. Each time a test was taken, students could attempt a different answer for a test question that was previously graded as incorrect. Correct answers to all test questions could eventually be accumulated and passed on to other students, or to students of future classes.
- Set Time Limits Recognizing the fact that students taking an exam that is not proctored are free to use open book/notes, faculty may decide to limit the time for an exam in TITANium. Students who adequately prepared for a test may be less likely to rely on open book/notes compared with students unprepared for testing. By setting a test with an expected completion time, unprepared students could have the most to lose as they spend time going over material, and risk not having sufficient time to respond to all the test questions.
- Display Questions One at A Time If a test has more than 5 questions, do not choose the 'All at Once' option for displaying all the questions on the same screen. It is quite easy for students to take a screen capture of the displayed questions and share them with other students. While students can still screen capture pages with single questions, or even type them into a document, it is more time consuming and unwieldy.

Tips for Homework Assignments

 Create Application Assignments – Create <u>assignments</u> that require students to apply essential course concepts to a relevant problem. This may force students to seek relevant information beyond the assigned readings and lectures, and to conduct independent research by identifying credible sources to support the development of their assignments. Students can be required to report their progress on a regular basis through email or a shared Google doc. This documentation makes it easier for faculty to see the development of a student's work from inception to completion, and possibly identify unexplained gaps that could occur if students used the work of others and claimed it as their own. Faculty can add input at any point in this process to provide guidance, and perhaps suggest new directions for students. Both documentation of progress through regular status reporting and occasional faculty input can add a greater level of scrutiny to students, making it more difficult to pass off the work of others as their own.

- Create Group Assignments Create group assignments that require students to interact with group members regularly, using a group Wiki activity in TITANium. Groups can be made responsible for determining the functional roles for each member, establishing a mechanism for accountability (i.e., submitting weekly progress reports), and sharing drafts of individual progress on a group project. For a project to be truly collaborative, each group member should be familiar with everyone else's work, and be able to describe how every group members' contribution supports the whole group assignment. Students who are using the work of others may not be able to adequately describe the significance of their 'own' work, or how it integrates with the group's overall project.
- Create Assignments that Require Presentations Faculty with a TITANium course can use the web conferencing tool, <u>Zoom</u>, to conduct a synchronous online session for class presentations. Students may be asked to submit a progress report to reflect on what they have learned in the past week that supports work toward the presentation. To further scrutinize work on the presentation, students may be asked to include time for questions and answers. Students who have developed the presentation should be comfortable answering a range of topic-related questions. Another option is to add a <u>VoiceThread activity</u> in TITANium that requires students to engage in an asynchronous discussion.
- Check for Plagiarism using Turnitin <u>Turnitin</u> is a plagiarism prevention tool that detects matches between students' submitted assignments and existing works by others.
- Use Discussion Assignments Create a <u>Discussion Board/Forum assignment</u> that requires students to demonstrate critical thinking skills by responding to a relevant forum topic. Create a rubric that gives very specific instructions on what the student needs to address and how they are to address those items in the forum assignment. Having assignments that are very specific makes it more difficult for students to use portions of a previous term paper or other sources that may only indirectly touch on the Discussion Board topic.