



Best Practices for Teaching with Technology

Guidelines to Reduce the Risk of Cheating in Online Examinations

Mode of Cheating	Method(s) to Reduce it
Students obtain old exams.	<ul style="list-style-type: none"> Do not send out electronic files of the exam. Change your exams regularly.
Students obtain answers to the exams before taking the exam.	<ul style="list-style-type: none"> Do not post the answers to the exam until the exam deadline is over.
Students copy the exam while they are taking it (copy and paste into a word doc or make a screenshot) and then distribute to others in class.	<ul style="list-style-type: none"> Do not keep your exams available or open for extended periods of time so that students don't have time to look up answers to questions before they take the exam. Present exam questions one at a time as opposed to having all questions posted. This makes it more difficult to make a screenshot. Students would still be able to copy and paste each question into a word doc or screenshot every question individually.
Students have a web browser open in another page and look up answers to questions while taking an exam.	<ul style="list-style-type: none"> Do not allow students that much time. The exam should be timed and only allow enough time for students who know the material to answer the questions without looking up answers online or in notes. Do not allow backtracking so that students cannot quickly go through the exam and then go back and start looking up the answers to all the questions.
Students have all their notes open in another window and do a search in their notes to look up answers as they are taking the exam.	<ul style="list-style-type: none"> Time the exam more stringently. Only keep the exam open long enough for students who know the material to answer the questions based on what they know and not by looking up answers.
Students who are friends can be taking the exam together either at the same time in the same room or on the phone together or one takes it while another looks up answers and then the other takes it.	<ul style="list-style-type: none"> Randomize the questions and answers. Have a pool of exam questions so that students will not have the exact same exam. Stringent time limits so that students don't have enough time to look up answers.
Students consistently have "computer issues" and ask for you to re-open their examination after they either spent 20 minutes in the exam reviewing every question or they submitted the exam and then received all the answers to each question (if you have it set up where they get the correct answer when the exam is submitted).	<ul style="list-style-type: none"> Make suggestions in the syllabus that students should not use wireless internet connections to take their exams. Suggest that students take the exam at a local or university library. Have a rule stated in the syllabus that you will not re-open exams.



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Guidelines to Reduce the Risk of Cheating in Online Examinations, continued

Online Exam Control Procedures (OECPs).

Material adapted from Cluske, G.R. and Ehlman, C.R. "Thwarting Online Test Cheating." *J. Acad. Bus. Ethics*, pp. 1 – 7.

- 1. Offer Exam at a Set Time** – this prevents students from forming a team to take the exam sequentially (the first person likely getting the lowest score and others getting an A).
- 2. Open the exam for a stringent period** - If you are giving a multiple-choice exam, it has been shown that approximately 45 seconds per question is more than enough time for students who know the material to be able to answer the question. This prevents students from doing a Google search or searching their notes to find the answer.
- 3. Randomize Exam Questions and Answer Choices** – This prevents students who may be taking the exam together from asking questions such as "what did you get for question 10?"
- 4. Present Exam Questions One at a Time** - This strategy makes taking a screenshot of the exam more difficult.
- 5. Do Not Allow Back Tracking** - This will reduce the ability of students to finish the exam early and then go back to questions and do a web search or note search to find the answers.
- 6. Question Banks** – Create question banks with more questions than are given in the exam. The online exam can then be set to use a percentage of the total questions. This strategy provides each student a different set of questions in a different order.
- 7. One Time Access to the Exam** - Students should only be allowed to access the exam ONCE. You can establish a policy that there are NO EXAM RESETS. In addition, suggest that students not use a wireless internet connection to take their exam. This may reduce calls and emails from students who report that the exam crashed in the middle of taking it.
Note: If a student does have a problem, you can see how long they spent in the exam and which questions they already answered. You can open the exam again but give them a new time limit allowing only the unanswered questions to be completed.
- 8. Showing Exam Results to Students** – It is suggested that the exam answers are only shared when all exam attempts have been graded. The student can see their grade but after they submit the exam but will only be able to see the answers after all attempts were graded.
- 9. Changing Multiple Choice Questions** - Instructors should change at least 1/3 of the multiple-choice questions on each exam every time the course is taught.
- 10. Question Types** - Include more than just simple recall questions, which can be easy to search for in a browser or notes while taking the exam. Include "higher-level thinking" questions, such as application questions. This strategy will prevent students from finding the answer through a quick Google search, etc. They will need to understand the material to answer the question, thwarting most typical cheating methods.