

How Can Course Design Help Prevent Online Cheating?

Presented by:
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Hello, and welcome to this Magna 20-Minute Mentor; [How Can Course Design Help Prevent Online Cheating?](#) I'm Tom Tobin. I've been an online professor for more than 20 years now. And in that time, I've experienced just about every way there is for students to try to game the system. I'll bet you probably have some stories in mind, too.

In this 20-Minute Mentor, I want to share some proven methods for reducing dishonest behavior in your online courses.

I promise you two things: first, sending files to big comparison databases is not the “be all, end all” of academic integrity. I'll show you a model that I developed of three kinds of academic integrity strategies. And I'll also show you when and how to use them in your online course environment for maximum impact.

Let's start by thinking about how we usually try to detect and discourage cheating in our face-to-face courses. Most of us have a sixth sense about work that doesn't seem right. Suddenly a freshman student starts using semicolons properly. Or there's a section in a paper spelled with British English, you know; whilst and color spelled with o-u-r.

When we think about online assignments and courses, we usually go right to the major student writing assignments and to online exams. But academic integrity starts way before students ever engage with the high-points, high-stakes parts of our courses.

My model has three levels, or three paths, that we can give our students for academic honesty. The first, and most basic, relationship we can have with our students is one of trust. We don't have to, and we shouldn't, send every little thing that they do for us through a plagiarism checker.

The strategy of trusting students tells them two important things: one, we expect honest behavior from them. And two, we signal that we're giving them some freedom in our courses.

The best trust mechanism is an honor code. This one, from Georgia Tech, is emailed to every new student from the dean. And honor codes work when they are everywhere. Students don't see them only at freshman orientation. Faculty members put the honor code into their syllabi, on the front page of the online course shells, in the directions for every course assignment, and in the description of every test and quiz.

Let me tell you how powerful these statements are: “The honor code at our institution was on the Academic Affairs website. And students saw it in a handout and on a screen at their freshman orientation”. And those were the only times when that honor code was displayed to them.

What we've seen is our academic dishonesty rates went down after we started asking faculty members to include the honor code in their syllabi and to put the honor code into the directions of every written assignment and into the directions of every test and quiz. The greatest decrease that we saw was in our online courses.

It's tempting to cheat for things like time pressure or having things not be clear and running out of time. So when students don't understand that the expectation is, well, you can talk to your professor, that's what the honor code helps to do.

It sets up a positive expectation of ethical behavior. And it gives students a behavior that they can take if they get crammed and they're tempted to cheat. So giving students an honor code that is both "here's what we expect you to do" and "here's what you can do if things go wrong", that really moves the needle on academic integrity.

Now, more effective than honor code displays are sanction statements right at the point of need, like this one in the directions for a weekly online quiz. Sanction statements are another form of trust. They tell students that honest conduct is expected and valued, what that honest conduct looks like, and what penalties exist for not following along. Those are the sanctions themselves.

Section statements should be displayed wherever you want students to limit themselves in some way, like not using their books or notes.

For example, a sanction statement in an online test might say "question number one; by taking this online exam, I agree that I am the person who is supposed to be taking this exam. I don't have any outside help. I'm not using my textbook or my notes. I will honor the conditions of the exam. And I won't share the questions or the answers from this exam with anybody else."

Now, does this have any legal standing? Could you sue the student for sharing your exam with everybody else, say, in the fraternity or in the class? Probably not.

At the same time, in your campus online integrity process, that has great weight. And it counts as evidence for students not doing what they're supposed to be doing.

The better part of that, though, is that it shows students that you care that they're being academically honest. And that will help to reduce the number of students who are tempted to cheat in the first place. And from a faculty perspective, I hate doing the paperwork when students cheat. So I'd rather they don't cheat. So this is a great strategy.

Now, skeptics might say "well, this doesn't prevent anyone from disobeying the sanctions". But that's not the point. The point is to make students stop and think about the positive expectations for their own conduct. Research shows us that just reading and thinking about academic honesty reduces the temptation to cheat significantly.

A final strategy adds some teeth to the idea of trust and that's to use the honor code plus a typed response. As in this example, the first question of a quiz can be the honor code. And the short answer field is intended to be the name of the student who agrees to abide by the honor code and says so by keying his or her name.

Now, is that a legally binding agreement? Again, no. It does, though, require that students actually take an action to demonstrate their understanding of the trust we're giving them and makes them more likely to uphold it.

The story here has to do with where else our students are being asked to key their name in. If you open a bank account, if you go to get a loan for a house, all of the accounts that you have on Facebook, Instagram, your online accounts, and life, you have to verify that you are who you are. Even when you install software on your computer, you have an End User License Agreement - the EULA - that most people just scroll down to the bottom of and say "I accept".

What the sanction statement with the keyed in name does is it gets people not to just skip past the agreement but to actually focus in on what they're signing, what they're saying they're going to do. That moves the needle on academic integrity quite a bit.

And that wraps up the idea of trust. Trust is the thing that we should do most often throughout every course that we teach online.

Now, beyond trust is verification. This is what most of us think of as an academic integrity strategy; the "catching cheaters" part of the package. Verifying what students are doing goes beyond just sending their papers to a plagiarism-checker service. Let's look at some verification methods and where you should use them in your online course shell.

Of course, the big databases like Turnitin and SafeAssign do have a role to play in catching dishonest behavior. They are very good at catching copying, since their databases scan the internet, library databases, known cheat paper sites, and millions of already uploaded students' submissions.

Use the big databases for draft work or prep work especially, so students can see their own database reports and learn how to correct poor practices. An example here is an especially revealing one:

My colleagues in the history department often had great big high-stakes papers due at the end of the semester. And the underlying assumption was, well, these students are adults. They should be able to handle their own time. We're going to give them suggested milestones at the one-third, two-thirds, and then all-the-way-done parts of the course.

At about one-third you should have a resource list together. About two-thirds you should have drafted your final paper. And then by the end of the course, you should have your final paper ready to turn in. And by the way, that final paper is worth 50% of your grade.

It's no surprise that they came to us saying "hey, people are cheating on these things". It was worth an awful lot of points. And there weren't ways for students to see; were they doing OK, were they on track as the course went along.

What we suggested, and they eventually implemented, was asking students to create their resource list and submit the resource list to the professor for a check mark that they had done it, and also putting the resource list with some annotations and their summary of what they're going to use from the resources through Turnitin, the plagiarism-checking service that our university subscribes to.

The students and the professor got back those reports. And those students whose results from those database reports were high on the index of “this is copied”, the professor was able to reach out to those folks. And oftentimes the students themselves said “oh, wait, I didn't know that I needed to do something different here”. Or “I needed to be a little bit more original”.

That meant it was a learning conversation rather than a cheating conversation. And because it happened ahead of when the students earned the points, there weren't any consequences. And the students could recover from poor performance. The incidents of cheating on the final item- that was still worth a lot of points, went down dramatically.

Now, what if you don't have one of the big databases? An alternative is the poor professor's plagiarism database; your favorite search engine. The term “Google fishing” is even part of our lexicon these days.

Take a suspect passage. Plug it into the search engine. And voila, there's the source.

Of course, in order to go fishing, you have to be suspicious in the first place. So this is a useful double-check, not a solid strategy for overall detection.

You can see that in this case I've used Google. You can use any other search engine. And I've come up with some pretty good hits that match what's in this undergraduate's paper.

And one of my challenges is “should I be lenient with this student, or should I come down on him like the hammer?” Well, I think I should be lenient because this is one of my own undergraduate papers. So academic integrity is definitely a learned skill. It's not something that we can assume our students are coming to us with. If I can get it, your students can get it.

What we don't often think of as a verification practice is to use the analytic data that the learning management system provides to us in order to check for dishonest behavior. For example; if most students in your course spend 45 minutes completing an online quiz, and one student roars through in 10 minutes, that's cause to start asking a few questions.

For example; in my own educational technology graduate courses, I have an assignment where I ask students to work through a sample website that is a simulation of what it's like to be a student with a visual disability looking at a web page. And for those students who spend more than 30 minutes trying to find information on this purposely difficult-to-access website, I know that they're probably giving it a good try.

I've had students go through in five minutes and get all the answers right; which, even as somebody who's used a screen reader 1,000 times, I could never do. Those students are either people with visual disabilities who are actually using screen readers - and I've had a few of those - or they're people who got the answers from someone else. And I've had a few of those, too.

Using the analytics in your learning management system is an easy double-check for time on task. Most learning management systems today can tell professors "how long did a student stay on this page?" How many times did the student come back and look at it again? How long did the student take to answer this particular question on this particular quiz?"

It can be a really deep dive. And because of that, beware though, of using time on task for everything students do online. It's a meaningless indicator for static content like lecture notes, since some students will read them on the site, and some will just download the file for later.

Another tactic for verification is unique to online tests and quizzes. We can set limits for students in terms of the dates and times when tests are available. Be careful not to be so restrictive that some students cannot get time to take the assessment, though.

There are also third-party tools that restrict test takers to using a special browser that disallows common actions like opening new computer windows, copying, and pasting.

In both of these cases, with time limitation and using special browsers, these are technological limitations. We have to make sure that the human limitations are also taken into account. For example; with my online tests and quizzes, I'll always make sure that they're available during the day on a weekday, in the evening on a weekday, and on at least one weekend day.

That might be more than we would offer our face-to-face students. And we don't want to open it up for, oh, you know, a whole week or two weeks, if the minimum amount of time we need to have it open is only maybe two or three days. At the same time, for academic integrity, we want to make sure that we give students a good shot to take the examination or quiz, and we give them enough time to be able to do it.

My good rule of thumb is you, the professor, take your own test or quiz. Actually do it online. See how much time that takes you. Multiply that by one and a half. And give your students that much time. If it took me 60 minutes to take my test or quiz, I'll give my students 90 minutes.

Again, the aim is not to prevent cheating-- students can defeat restricted browsers by pulling out their mobile phones-- but to underscore the importance of test security and the gravity of choosing to be dishonest. Use this kind of verification only for the big stuff that is worth the most course credit, usually the middle, term, and final examinations.

When we apply for credit cards, auto loans, or mortgages online, we usually have to prove that we are who we say we are. We answer questions about where we used to live, what car we used to drive, and how many teeth we had extracted after we got into a fight behind the high school when we were 17. No, I'm just kidding about that last one. I think.

This type of verification includes not only challenge questions like these but also fingerprint scanning and other biometrics. You can probably also tell that this kind of verification is on the more expensive end of the spectrum from plagiarism databases and Google fishing. So use this only where the stakes are really high, like with online certification and licensing examinations.

The gold standard of all academic integrity methods is observation. If we can directly see the student as he or she is demonstrating the skill, we are most confident in their performance.

There are three kinds of observation. Even though we're talking about online tests and quizzes, face-to-face observation is still the most reliable anti-cheating strategy. Bring your students into a classroom or computer lab and have them take your online test or quiz under observed conditions.

This doesn't work for fully-distance education courses where students are spread out geographically. But if you can bring students together for at least the high-stakes pieces of your course, like the final exam, it's the best way to observe them.

Fortunately, the next best thing is to set up proctoring agreements with other institutions, such as public libraries, other colleges and universities, and even workplace supervisors. Define the conditions you need for testing. Get the proctor to sign off for the observation. And then either pay that person a small stipend or offer reciprocal proctoring on your own campus for others.

As you can see here, the US military is a big believer in remote proctoring. These service members are taking a test on an aircraft carrier in the Pacific Ocean.

A final form of observation takes advantage of the computerized nature of tests and quizzes. Third-party software and some LMSs allow you to take continuous video, snap random camera shots, or record the key strokes of test takers. These methods are the most intrusive and should be used only for high-stakes assessments. In fact, none of the observation approaches are appropriate for everyday academic integrity needs.

That's where we'll wrap up, actually. What you can take away and use from this 20-Minute Mentor is the idea that various parts of our online course interactions deserve different academic integrity approaches and tools. Where students are working together, starting processes, and doing everyday things like taking quizzes, allow them a measure of trust.

For assessments, draft work, lab results, anything that shouldn't be faked; make sure to verify that the students are doing authentic work and that they are respecting the conditions you've set for their work, too. And for the times when students are playing for big points or high stakes, use a strategy for observing them as they demonstrate their skills.

By adopting this three-tiered approach to academic integrity, your online interactions with your students can focus on building a culture of credibility and honesty for your course. And you can catch cheaters, too.

Thank you for watching this 20-Minute Mentor program.

Tell us what you think and how you plan to use what you've learned in your own courses or program. Here's a link to a survey: <https://www.surveymonkey.com/s/OLCheating>.

Thank you.