Student Equity:

Techniques to Discourage Cheating in Online Courses

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I. Introduction

We began planning and designing for the BS Finance and MS Finance online programs in the spring semester of 2008 for delivery beginning in fall 2009. Our MBA program was mostly available online but we were not part of the “online” faculty at that point. We had limited experience with testing online, but we were both very familiar with WebCT and we had been delivering course materials online for more than a few years.

Our overriding design concern was “student equity,” or the necessity of parity between the online and face-to-face courses. In looking at the universe of online courses and experiences, and in talking with other faculty, students and employers here and elsewhere, we discovered that a chief concern with online classes was rigor and consistency. Our primary challenge would be to make sure that we applied the same learning objectives, resources, and expectations to the online sections of our courses, because we would likely be teaching online and face-to-face sections simultaneously. We wanted to avoid creating arbitrage opportunities over different modalities and semesters.

We wanted to make sure that students were given the same access to knowledge in each type of class, and we wanted to make sure that the classes were the same difficulty level. Having a less rigorous online course, for example, would not only leave those students unprepared for later courses and the working world, but it would create an equity imbalance with those students in the face-to-face class. Each modality had its own challenges, to be sure, but we saw the idea of keeping honest students "whole" throughout to be one of our most important considerations.

The resulting course designs reflect this principle (and several others - see "Some Core Principles..." below). To every extent possible, we have mirrored the face-to-face expectations and content in the online sections, and this has enriched our face-to-face courses in many ways. We also decided early in the process that we would try to limit the "noise" in our courses, out of respect for our students' capacity to absorb only so much new information each week. The idea that students (and faculty) had a bandwidth limit kept us to only the essentials for learning the existing material, and kept us focused on learning objectives.

We rewrote our notes to be clearer and more detailed, redesigned PowerPoints to be free-standing (not requiring clarification through discussion if possible), and we figured out how to podcast our lectures, problem sets and current events discussions throughout the semester. We also worked very hard to keep the courses tied to our individual teaching styles, because "branding" in this manner seems important and valuable to students and student outcomes.

Our final challenge, and the most demanding one so far, has been to address the problems of academic dishonesty, including cheating on exams, plagiarism on exams, and plagiarism on other written assignments. We worried about both panic cheating and planned cheating, and we have seen evidence of both. The most important thing that we have learned is that there is no secret to dealing with cheating; it requires a great deal of imagination, and a great deal of hard work on the part of the teaching faculty. If given the chance, unfortunately, some students will cheat at every opportunity.
II. Cheating Risks on Traditional Assessments\(^1\)

<table>
<thead>
<tr>
<th>Cheating Methods(^2)</th>
<th>Responses</th>
</tr>
</thead>
</table>
| Ordered Pairs: One student takes exam this time, then they switch for the next exam  
  - also works in triplets or larger if there are enough assignments | Give multiple re-ordered forms of the test, created by hand (good for essay tests).  
  - Use randomized question blocks.  
  - Deepen test banks.  
  - Prohibit backtracking on exam.  
  - Show one question at a time.  
  - Randomize answer choices if possible.  
  - Give oral or chat room exams for each student.  
  - Proctor, lab proctor or camera monitoring.  
  - Monitor online quizzes and study habits for grouping (harder in BlackBoard).  
  - Split suspected pairs over more than one form.  
  - use algorithmic test banks for problems |
| LAN Parties: Take the test at same time, location  
  - in big groups or pairs  
  - also use Chat or cell phones | Make the test open form: short answer, fill in the blank, problems or essay (avoid MC altogether). Or move to more difficult dimensions of Bloom's Taxonomy. Give very detailed learning objectives for each unit to facilitate this.\(^3\)  
  - Shorten the time per question (close the testing window). Don't give them time to cheat or use books.  
  - Submit test answers to SafeAssign.  
  - Use *Respondus Lockdown Browser* or something similar.  
  - Check IP addresses for similarities; tell students in syllabus that you log IPs during exams. |
| Students share copies of exams (over time, too)  
  - Print Screen  
  - Cell phone pictures of each question  
  - *Snip It* or *Clipping Tool*  
  - other capture software | Change exams and/or coverage or topic ordering every semester.  
  - Make subtle changes to questions by semester and version (sneaky but effective).  
  - Ask different style of question for same objectives. |

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\(^1\) From our research, it appears that proctored examination is the most common way of dealing with the risk of cheating in online and distance learning programs. The administration at UHCL has determined that Web-only courses cannot use proctors or on-site examinations. Most of the machinations we describe here are designed to work around this limitation.

\(^2\) Source: Table format adapted from Clinton and Gregg (2008).

\(^3\) In FINC 4331, we give students four pages of very detailed learning objectives/expectations for each of the three exams. The short answer exam questions and problems come from those lists.
<table>
<thead>
<tr>
<th><strong>Student hires someone to take their exams</strong></th>
<th><strong>Students search Internet for answers, cut and paste</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Give back score sheets instead of using feedback options in BlackBoard that may allow printing of full questions after the exam.</td>
<td>• Require a detailed personal information survey at the beginning of course; insert questions from this survey on exams.</td>
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<td>• Use remote cameras, fingerprint and/or retinal scans, voice recognition software (or anything else that we saw on <em>Mission: Impossible</em>).</td>
</tr>
</tbody>
</table>
| • Use remote cameras, fingerprint and/or retinal scans, voice recognition software (or anything else that we saw on *Mission: Impossible*). | • Write each exam as if it is open book.  
4 | • Turn off all course materials and services when they take the exam | • Use **Respondus Lockdown Browser**  
• Use proctors  
• Enter test answers into SafeAssign if they are suspicious |
| • Turn off all course materials and services when they take the exam | • Accept only official excuses from doctors on their letterhead or excuse pad. Call references.  
• Accept only letters from employers on company letterhead. Call references.  
• Ask for funeral notices.  
• Require advanced notice of absence.  
• Use participation or quiz points that count only if the student is online or present, with no consideration for excuses at all. |

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4 This suggestion comes up frequently in discussing online assessment. However, we don't do this in 4331 because the course materials are so extensive and involved for each test. Instead, on FINC 4331 exams we crunch the window and include a bunch of focused, short-answer questions (usually straight from the learning objectives) - just like in the face-to-face section.
General ideas

- Discuss penalties and University process in syllabus and test headers. Make sure students understand that cheating will be prosecuted.

- Give students enough resources that they aren't tempted to cheat.

- Require that students score 100% on syllabus quiz with details of all course policies, test schedule, academic honesty policy, etc. before unlocking study material for the class.

- Have students complete individual honor pledges for the class and/or each assignment.

- Give students explicit incentives (real or exaggerated) to report cheating by others.

- Require a short paper on academic dishonesty & plagiarism (useful in Academic Honesty Council).

- Participate in Academic Honesty Council to "learn the ropes."

- Avoid high-stakes assessment altogether, and adopt a completely new and innovative system for assessment in your class unrelated to the years and years of success that have been experienced with testing.

- Do nothing, and assume that the bad karma associated with cheating will lead to terrible things happening to the student later in life, such as being hit by a bus. This is known, therefore, as the "Bus Method."

- Do nothing, and assume that "the market will straighten it out" once they've graduated. Unfortunately, the market tends to straighten out uncertainty about graduate quality by not hiring any of our graduates. This is called a "lemons problem."

- Do nothing, and assume that "cultural differences" or that their status as a Millennial, first-gen, or non-trad is to blame (or all four conditions). Spend time creating other excuses and rationalizations as to why our graduates might have trouble getting jobs.

Other student circumstances to consider

- Using ADD Section 504 to extend window or completion time on tests
  - or to require online tests

- Students claim "cultural differences" caused them to cheat or plagiarize
  - they "didn't understand what plagiarism was"
  - "it's done differently in my home country" or "at home we were more about learning and not about arbitrary rules of intellectual property."
III. Ideas for Preventing Plagiarism

THE MOST IMPORTANT CONSIDERATION

The best remedy for plagiarism is showing students that it isn't necessary. Show them that they CAN write well, and think well, and that they can do their own work and they won't need to plagiarize. Confidence and ability trump cheating every time. Of course it helps to minimize the opportunities for them to be tempted as well, because they may not understand the karmic consequences of cheating - cheating undermines one's self-esteem and self-image in addition to all of its other toxic products.

1. Discuss plagiarism consistently & persistently within the course.
   - In the syllabus, make students aware of what constitutes plagiarism and how you handle it.
   - Especially in online sections, have a “syllabus quiz” explaining the course policy, and explaining your definition of plagiarism. Require students to make 100% on this quiz before any other course material will be unlocked for them (also, give them a hard deadline to do this so they won’t wait too long to study).
   - Discuss the University process for dealing with academic dishonesty and plagiarism.
   - Be sure to have your course’s policy for academic honesty cases in the syllabus. If you want students to get an “F” on the assignment or an “F” for the course, state this clearly.
   - Every faculty member should volunteer to sit on Academic Honesty Council hearings so they can see what gets successfully prosecuted and what doesn’t. Your college rep(s) can brief you on this too, but experience is priceless.
     - You should keep up with changing University policy and outcomes.
     - Faculty attention makes the process better.
   - Explain the SafeAssign tool in BlackBoard in your writing assignment outlines.
   - Point students to library resources on plagiarism.
   - Point students to the university’s student writing center. Have the writing center speak to your class about their services and plagiarism.
   - Talk about copyright and the Internet. Talk about how to document information from the Internet, and the value of different sources (legitimate news agencies vs. bloggers or Wikipedia).
   - Follow the University policy in every case, and encourage others to do the same. That might include preparing cases for the Academic Honesty Council.

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5 Source: This was inspired by a page put together by the Kimbrel Library, Coastal Carolina University, Cheating 101, at www.coastal.edu/library/presentations/easystep.html. They failed to mention that student confidence and ability will trump plagiarism every time.
2. **Focus on the structure and process of professional (technical) writing.**
   - Be prepared to hear "But this isn't a writing class!" and be ready to respond.
   - Give a list of allowed topics for students to choose from, and rotate it often, eliminating those topics that have been "overdone."
   - Don't let students get into a time crunch, which drives panic cheating.
   - Have different sections due at different times and provide feedback along the way.
   - Ask students to keep a writing journal (or a blog) throughout the semester that they update and submit for review periodically. It will help them learn to document sources better and provide a window to their process.
   - Have conferences with students regarding their progress and to see what they have written or journaled so far.
   - Being familiar with a student's style of writing, grammar, and vocabulary makes it easier to determine if they are the writer of the paper.

3. **Have students turn in any or all of the following over the course of a semester.**
   - A thesis statement/abstract.
   - Written proposal for paper.
   - Outlines.
   - Working or annotated bibliography, literature review.
   - Rough drafts or working notes. Drafts should be cited properly, too.
   - All working drafts turned in with the final paper.
   - Copies of cited references. (Some online paper mills will send these for an extra fee.)

4. As part of the paper or as a separate assignment, have students **reflect personally** on the topic they are writing on or on the process of doing research and writing.

5. Make sure students know that you actually read the papers that are handed in. Give as much feedback as humanly possible.

6. Make sure that they know you will send their paper to SafeAssign, and that you will add their paper to your ever-expanding database of those that get checked against every semester.

7. Allow students to self-submit a draft into SafeAssign early in the semester and actually see a report, with or without you getting a copy. In this way they can see where they have been too casual about citations.

8. **Tie the topics and assignments to the class experience.**
   - Use writing assignments that have students analyze classroom activities or discussions in light of the text.
   - Ask students to summarize their findings in class on the day they turn it in, or ask for one unusual thing that they learned about their topic or field.\(^6\)

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\(^6\) You should see their eyes bug out when we pull this one. Effective for group projects as well (pick a member at random and ask for a summary). Perhaps give them a few minutes to prepare in either instance; it won't change the
o Ask test questions for each student that are tailored to their specific writing topics.
o Use local issues as topics.
o Ask students to include a section in their term paper that discusses their topic in light of what was covered in class.
o On the final exam, ask students to summarize the main points of their research paper.

Example Syllabus Statement on Plagiarism

University of Houston-Clear Lake’s Dr. Carol Carman’s language from her syllabus (she readily admits that it was selectively cribbed from the catalog); circa 12/08 (emphasis added):

Statement on Academic Honesty
According to UHCL’s Student Life Policies:

All students at the University of Houston-Clear Lake are expected to maintain complete honesty and integrity in all academic work attempted while enrolled at the University. This standard of conduct includes reporting incidents of alleged violation of the honesty policy to the instructor involved or, if necessary, to the appropriate academic dean. Each student acknowledges, by the mere act of turning in work for a grade, that he or she has honored the Academic Honesty Code.

The university’s Academic Honesty Code is as follows:

I will be honest in all my academic activities and will not tolerate dishonesty.

Academic Honesty Code Violations can include (but are not limited to):

1. Acquiring information:
   a. Acquiring information for any assigned work or examination from any source not authorized by the professor.
   b. Working with another person or persons on any assignment or examination when not specifically permitted by the instructor.
   c. Observing the work of other students during any examination.
   d. Using, buying, selling, stealing, soliciting, copying, or possessing, in whole or part, the contents of an unadministered examination.
   e. Purchasing, or otherwise acquiring and submitting as one's own work any research paper or other writing assignment prepared by others.

2. Providing information:
   a. Providing answers for any assigned work or examination when not specifically authorized by the instructor to do so.

* outcomes or lasting impressions. This also works to improve their oral communications skills, or at least their ability to read aloud, even with grad students.
b. Informing any person or persons of the contents of any examination prior to the time the examination is given.

3. Plagiarism:
   a. Incorporating the work or idea of another person into one’s own work without acknowledging the source of that work or idea.
   b. Attempting to receive credit for work performed by another person, including papers obtained in whole or part from individuals or other sources.

4. Conspiracy: Agreeing with one or more persons to commit any act of academic dishonesty.

5. Fabrication of information:
   a. Falsifying the results obtained from a research or laboratory experiment.
   b. Presenting results of research or laboratory experiments without the research or laboratory experiments having been performed.
   c. Substituting for another student to take an examination or to do any academic work for which academic credit will be received.
   d. Changing answers or grades after an academic work has been returned to the student and claiming instructor error.
   e. Submitting work for credit or taking an examination and employing a technique specifically prohibited by the instructor in that course, even if such technique would be acceptable in other courses.

6. Failure to report: Failing to report to the instructor any incident in which a student witnesses an alleged violation of the Academic Honesty Code.

Students who commit an Academic Honesty Code Violation in this course will be penalized with the following penalties, at minimum:

1st offense – Zero on the assignment with no opportunity to “make-up” the assignment

2nd offense – Immediate failure of the course

[This last part may be the most important, especially if the case ends up going to Academic Honesty Council.]
IV. Other Development Resources

<table>
<thead>
<tr>
<th>Some Core Principles for Online Development&lt;sup&gt;7&lt;/sup&gt;</th>
</tr>
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<tbody>
<tr>
<td>These might work well as a daily affirmation of your role as an online faculty member. \nRevise as appropriate as you learn the ropes.</td>
</tr>
</tbody>
</table>

Murphy's Law of Academia: Anything that can go wrong will go wrong, and it will be the faculty member's fault.<sup>8</sup>

Principle: Faculty are always and everywhere responsible for determining the direction, scope and value of online courses, programs and assessment. We are the sole guardians of a program's reputation, whether we like it or not. Consistency is everything.

Principle: Be very careful when designing classes for students, and focus on the most important concepts and dimensions first, for they have a limited ability to absorb information over time (they have a bandwidth constraint). Faculty have bandwidth constraints as well.

Principle: Everyone knows that online development and instruction is far less demanding than traditional teaching (until they have actually developed & taught online).

Principle: Students know that online classes are much easier than face-to-face classes (until they've actually taken a properly-designed one).

Principle: Learn everything and anything that you can about your CMS; learn to be your own "go to" support person - **because you will be**.

Principle: Online classes have to be created to be as rigorous and thorough, and difficult, as face-to-face courses, even with the interface disadvantage, or it creates a student equity issue. And an arbitrage opportunity.

Principle: Make the same resources available to both online and face-to-face students; otherwise you are creating a student equity issue.

Principle: Take every opportunity to add bells and whistles to your course, except for those things that might distract from the purpose.

Principle: Research shows that online attrition is much higher than face-to-face attrition, in every discipline, worldwide. (So…it's not just about YOU.)

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<sup>7</sup> From Michael & Williams (2011).

<sup>8</sup> A related idea is Hopper's First Rule of Leadership: "Everything is your fault." From the Pixar film "A Bug's Life," 1998. (Hopper is the evil grasshopper voiced by Kevin Spacey.)
Testing Differently: Learning outcomes and Bloom’s Taxonomy (Revised)

Bloom’s Taxonomy (1956) and its update by Anderson and Krathwohl (2001) have proven useful for classifying and understanding the type of learning process (and learning objectives) that we are asking our students to assimilate. Krathwohl (2002) gives a good summary of the update to Bloom’s original committee document.

The Taxonomy of Educational Objectives discusses three categories (domains) of thinking behaviors: cognitive, affective, and psychomotor. The cognitive domain is the one we are likely to be most interested in when developing our learning objectives; it is composed of six increasingly complex and interdependent dimensions:

- Remembering (updated from the original “Knowledge”)
- Understanding (from “Comprehension”)
- Applying (from “Application”)
- Analyzing (from “Analysis”)
- Evaluating (from “Evaluation,” originally ranked highest)
- Creating (from “Synthesis,” originally ranked second-highest)

In designing assessments using multiple-choice questions, it seems to be common to stick to the first two dimensions. Whether using multiple-choice questions or not, if we move beyond the first two dimensions in setting up online assessments, we can make it more difficult for students to cheat on high-stakes assessments.

Anderson et al (2001) described dimensions of knowledge that would be relevant to each cognitive dimension. According to the authors, knowledge consists of four types:

- Factual: This is the set of essential facts, terminology, details or elements students must know or be familiar with in order to understand a discipline or solve a problem in it.
- Conceptual: This is the set of classifications, principles, generalizations, theories, models, or structures pertinent to a particular disciplinary area.
- Procedural: This is information that helps students to do something specific to a discipline or subject area of study. It also refers to methods of inquiry, specific skills, techniques, and particular methodologies for a certain field.
- Meta-cognitive: This is strategic or reflective knowledge about how to go about solving problems, cognitive tasks, including contextual and conditional knowledge and knowledge of self.

Oregon State University provides an excellent set of examples for understanding the relation of knowledge dimensions to cognitive process dimensions adapted from Anderson et al. (2001). In particular, this matrix shows how these dimensions relate to the different types of evaluation or task necessary to measure understanding when creating learning outcomes or
objectives. In creating learning objectives for our classes, we should be able to integrate and adopt (or at least consider) measures and activities that are more difficult to "game."

Another outstanding resource related to this is Carneson, Delpierre and Masters (1996). In their “Appendix C: MCQs and Bloom’s Taxonomy” the authors discuss both the taxonomy and the challenges of building more difficult and direct questions multiple-choice questions, and how questions from the different dimensions should represent different challenges.
V. Glossary

**ADA Section 504:** The section of the Americans with Disabilities Act that describes accommodations that must be provided to disabled students.

**Adaptive release:** a feature of the CMS that allows you to keep information hidden until students have passed a point in time, or passed a certain test, or even to just keep certain items in the shell from being available for all but one student. Very useful for ADA Section 504 students. Good for the "syllabus quiz" that some folks use to maintain consistency on policies in the course.

**Arbitrage opportunities:** In financial economics, our research has demonstrated many times that things with the same value must have the same price (cost). For example, having an easy summer course and a hard regular semester course with the same rubric and credit hours creates an arbitrage opportunity – lazy students can wait until the summer to take it. Of course, better students taking the course in the summer will be disappointed with the lack of rigor or content.

**Assessment:** Another name for the evaluation of student learning outcomes as related to the stated learning goals of a course or program. Also used to describe the "assurance of learning" activities required by accreditation bodies such as AACSB and SACS.

**Asynchronous delivery:** Instruction that allows students to access podcasts or course material and use it any time, outside of scheduled sessions. In many cases this means that the material is easily downloaded and archived. This creates the most flexibility for students, and there may be a mandate from a university’s administration that courses be designed for this type of delivery above all. Correspondence courses are the extreme version of this. The opposite of this is real-time or synchronous delivery, where classes are held in real time using technology rather than a classroom. Both methods have their proponents.

**Bandwidth:** the information capacity of a particular channel or network node, measured as data accurately received per unit of time. In our discussion, we assume that the student can only digest so much information in a given period of time. Also, students may be conditioned to receive and process information in a certain manner. Similarly, faculty can only process and structure a limited amount of information during a particular period.

**BlackBoard:** The course management system that is replacing existing WebCT installations.

**Bloom's Taxonomy:** An abbreviation of Benjamin Bloom’s 1956 report on learning objectives entitled “Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.” This document identifies six basic types of learning objectives: knowledge, comprehension, application, analysis, synthesis and evaluation. Anderson et al

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9 And they will. There was a "summer clientele" in the upper division finance requirements at the University of South Carolina, at least until 1997.

10 Economist Herb Simon referred to this as a component of "bounded rationality." Never before have we experienced "bounded rationality" to such an extent as in online instruction.
(2001) updated this list to reflect changes in instructional technology: remembering, understanding, applying, analyzing, evaluating and creating.

**Chat room:** a real-time window for typing messages when online, used either for communication during synchronous course delivery or during office hours or something similar.

**Clientele:** A group with similar expectations about the difficulty or value of a course (with or without justification). For example, it has been suggested that many students just expect online courses to be easier than face-to-face courses.

**Correspondence:** The method of instruction where students are provided materials to work on their own and submit for grading. This may or may not involve a campus component at some point during the program of study.

**Course Management System or CMS:** WebCT, Sakai, Moodle, or BlackBoard. Software used to organize and deliver material online, and usually used to test and/or collect assignments as well. In the old days our CMS was "the classroom" supplemented by "the chalkboard."

**Course shell:** The prepared set of menus or folders, assignments and instructions that comprise a class's online component. For a Web-only course, the course shell contains the only opportunities for interaction that faculty will have with students. For a traditional course, the shell (also called a support shell, below) might only contain a copy of the syllabus or slides or assignments but it will not be as completely developed.

**FAQ:** A list of Frequently-Asked Questions which can save a lot of time and frustration by answering common concerns in one place. These build over time as new and interesting situations come about.

**Face-to-face (F2F) course:** A course presented in a traditional fashion, also referred to as "traditional" delivery. This may include the use of the Web to distribute in-class materials. In the modern era, in fact, Web material is a strong expectation in nearly all F2F delivery.

**First-generation college student:** A student with no family tradition of attending post-secondary or graduate education, who therefore may need extra support in the transition to college or graduate school. This term is also used by student services cultists to increase their staff size and influence. See Millennial student (below).

**Hybrid course:** Course where some component of the class contact hours is accounted for by student access to the course management system (CMS). These are also called Web-assisted courses, or Web-enhanced, and other euphemisms exist. This may mean that students only come to campus or go to a proctor to take tests, depending on the institution.

**Instructional Designer, or ID:** This is the IT person assigned to translate your course into an online format, and to help you decide what to do differently. For example, they might take the syllabus and translate it into an "instructional plan" that is much more detailed on a week-by-week basis. Unfortunately, this person may be inexperienced with respect to actual instruction.
Learning style: Type of sensory input most compatible with an individual's cognitive abilities or preferences. There are three main types: visual, auditory, and tactile/kinesthetic. Instructors who are putting courses online for the first time might be briefed on these learning styles by their instructional design team so that the instructor can customize the course material for one group or another. See also: Millennial Student.

Millennial student: Students belonging to the generation born after 1981. This label has been created to describe their peculiar behaviors and frames of reference. It is also used by some to justify "dumbing-down" material rather than enforcing the same standards we've used in classes for the last two or three generations. This term has also been applied to faculty (as in “those darn Millennial faculty”).

Modality: The method of presentation of the class, usually face-to-face, hybrid, or online (Web-only). Correspondence is another, time-honored, modality.

Non-traditional student: A college student who doesn’t fit the mold of the traditional 18-24 year-old, full-time, on-campus student. In particular, they may be attending part-time or at night or online; they probably have a family; and they probably work at least one job. This term can also be used to justify "dumbing-down" curricula (see Millennial student, above).

Online course: Also called Web-only. These courses have no face-to-face component at all; student contact, delivery, and assessment is via the CMS. Some institutions prohibit proctoring of exams for this modality claiming that it creates false advertising – any need to come to campus during the student’s course of study means that it cannot be billed as an "online" degree program.

Podcast: A recorded audio and/or video presentation made available in electronic format. Some of these will have "bumpers" or lead-in and lead-out music or sound effects, but this adds to their size. The advantage of having small podcasts, and not too many podcasts, is that students can take them along and listen whenever they have time. Podcasts may or may not follow lectures.

Proctoring: The most common method used by online and Web-only courses to prevent cheating and academic dishonesty.

Quality Matters™: QM is a consortium of schools that has established standards for online instruction. Some universities subscribe to this material and training and some do not, but the standards are available on the Web for anyone to see. Located at http://www.qminstitute.org.

Self-paced (assessment): Students can move through course material at their own pace and finish as rapidly as they want to. Some universities specifically require that online courses not be done in a self-paced fashion, mainly due to the contact hour requirements imposed by accreditation bodies.

Student equity issue: In the enrollment management (EM) or student services lingos, any perceived difference in student treatment or experience. In distance education, it may exist
between the traditional and/or online sections. Some of these could also result as arbitrage opportunities, in the lingo of financial economics (see above).

**Support shell:** This is a course management system shell used to store and give access to materials for students in a traditional or face-to-face course. Twenty years ago this role would have been played by an ftp site or "class homepage" at some institutions. For example, one of the authors maintained his homepage at America Online from 1998 onward, and wrote his own html code to create homepages for each class to give students access to slides, article readings, etc.

**Syllabus quiz:** A quiz used to make sure that students have read (and understood) the course syllabus. It is often combined with adaptive release to lock students out of the remaining course material until after they've certified to the professor that they understand what the expectations of the course are.

**Synchronous delivery:** Students attend "virtual classes" at the same time each week, and may have access to the professor and other classmates via a voice or camera hookup, or via a chatroom. Often these will be recorded for later or repeat use by students when studying, asynchronous review or playback in podcast or A/V form.

**Testing window:** The period of time during which an exam is available to students in the CMS. This is different from the actual time allowed during the test; students can start the test anytime during the testing window but will have some other time limit (say, 2 hours) to complete the test once it has been started by the student. Large testing windows encourage cheating either by allowing time for the copying or printing of tests or by working in groups, as do long periods that they can work on the test.

**Web-assisted:** A term for classes that have some online component (materials, for example, or a support shell) but for which the Web doesn't play a significant role in assessment or contact time. As discussed, this term means different things at different institutions.

**“zz” account (prototype account):** A dummy user account that allows the professor to see exactly what the student will see. Even if the CMS has a “preview” mode for tests, you typically cannot use that mode to test things such as adaptive release or password protection (and trying to do so may cause errors). In fact, we’ve recently decided that having TWO dummy student user accounts is probably the only way to test many of the features in BlackBoard 9.1 before giving an exam “live.”
VI. Bibliography of Cheating Resources


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Watson, George and James Sottile (2010). Cheating in the Digital Age: Do students cheat more in online courses? Online Journal of Distance Education and Administration, Vol. 13, No. 1.

Other References


Frequently Asked Questions (FAQ) from FINC Online classes

Here are some popular Questions & Answers from the Finance online mailbag. Feel free to ask them again in your course shell online, but the answers you get back will probably look a lot like the answers here.

Question 1.
I don't understand why this class is so much harder than my other "online" classes? I've done much better in other online classes and they've been so much easier, too. I can't understand why Dr. X asks us to do so much.

Answer: FINC classes, in general, are harder because FINC is harder. Online classes SHOULD BE harder if they're actually designed to convey the same knowledge as face-to-face classes, because they require more work on the student’s part.

We all learn how to learn in a face-to-face environment, so to keep up with the amount of learning taking place in a traditional classroom setting, Web-only learning requires a lot of time. Sometimes it means a whole lot of time, on your own, working problems and reading and making outlines or doing whatever it is that helps you learn.

The difference between most of our classes at UHCL and a lot of online classes (and frankly, some face-to-face classes at other schools, I'm sure) is that we actually expect our students to LEARN THE MATERIAL AND BE ABLE TO APPLY IT.

Why do we expect this? Because that's the whole point of taking classes in the first place.

Furthermore, we KNOW you can do it. We know you can, if you will apply yourself. Most of us in FINC have been teaching a while, we know what's important, and we know you can make the connection between all this stuff if you put your mind to it. None of this stuff is easy, but it's not like, brain surgery, either. If you practice, and try, and work real hard, you should be able to do well.

*If you don't plan to put your mind to it, or work real hard, you won't do well in finance or accounting in school or in the "real world." It's just that simple. As much as anything else we're trying to help you get ready for THAT realization too.*

If something's too easy, it's probably not worth doing in the first place. That idea won a Nobel Prize in economics - maybe they were onto something.

NOTE: Taking an online class isn't like using Facebook to post pictures of your dog. Here, there will be a quiz at the end. Regardless of how familiar you may feel with all of this online technology stuff, do not underestimate the workload of an online class. Especially an online finance class.
Question 2.
I just noticed that the answer to one of my questions on the exam did not save. I am emailing you to see if you could consider my answer (here’s my answer) and give me credit for it on the exam.

Answer: For a variety of reasons, we do not accept answers to exam questions that have been emailed to us. It is your responsibility to make sure that your answer is saved before moving to the next question.

Question 3.
I ran out of time before I got to save the last answer to the last question on my exam. Could you please consider my answer (typed in here) and give me credit for this answer?

Answer: Unfortunately, we give timed exams, because anything else can't really be called an exam. When the exam time is up no more answers can be entered. Also, we won't accept answers that are emailed to us. If the answer is not recorded within the exam it will not count, and you will get a zero on the question.

Question 4.
I just don’t understand why I score so poorly on the exams in this course. I read the chapters, work all the end-of-chapter problems, work through the learning objectives or exam reviews, and take the practice quizzes. I do fine on all these but yet my grades don’t seem to reflect all that preparation. Can you please give me some advice on how I can improve my exam scores?

Answer: Some students have discovered that, up to this point, they could get by with “memorizing” how to answer the problems/questions asked in the practice quizzes and/or the end of the chapter exercises and reviews. When they get to the exam in a FINC online course they’ll find that the questions/problems are not asked EXACTLY as they were in the practice quizzes/end of the chapter exercises. So they have difficulty answering the questions. Our test questions are designed to see if the student can apply what they've learned in similar but perhaps somewhat different scenarios to what he or she saw in the practice quizzes/end of chapter exercises. This requires that you actually learn the ideas and work to understand the concepts and how they work and how to apply them.

It is not ever enough just to “memorize” the questions/problems asked in the practice quizzes or end-of-chapter exercises. We expect you to be able to apply what you have learned in differing scenarios.

Question 5.
I had to go out of town and didn’t have an Internet connection during the exam. Can I please schedule a time for a makeup exam?

Answer: You signed up for an online class which means that you must have access to an Internet connection during designated time periods. You have known the dates of all of the exams since the beginning of the semester. If you were going out of town, it was your
responsibility to insure that you had access to an Internet connection. So unfortunately you will not be allowed to take a makeup exam. Your exam score on this test will be a 0.

**Question 6.**
**I was wondering if there were any extra credit opportunities.**

**Answer:** There are no “EXTRA” credit opportunities. Your course average is determined by a weighted average of the assignment grades as described in the syllabus. There will be no exceptions made for anyone.

The very snarky but also very true observation (courtesy of Dr. Michael’s undergrad econometrics professor): It's hard to understand how you would have time for "EXTRA" credit work when you can't do well on the work that we already have to do for the class. "EXTRA" credit would be for those folks who've already blown through all the class stuff with high marks and need some more work to do. And no, there won't be any opportunities like that.

If you feel like you want to do more work this semester and what we're doing in class isn't enough for you, work on your creative writing and organizational skills - we could all use more work on those things. Or perhaps write a personal role-based mission statement that will help you focus on your life priorities.

**Question 7.**
**I am not ready to take the exam tomorrow because … (fill in the reason). Can I have a couple of extra days so I will be better prepared to take the exam?**

**Answer:** No, that's not possible. Everyone takes the exam when it is scheduled unless there's a medical emergency. You have known since the beginning of the semester the exam dates and times. It is your responsibility to allocate your time such that you are sufficiently prepared for the exam on the date and time it is scheduled.

**Question 8.**
**There is a good chance that it will rain at my house during the exam tomorrow, and my Internet doesn't work very well when it's raining outside. I wanted to know whether I could postpone my exam.**

**Answer:** You signed up for an online class which means that you must have access to a RELIABLE Internet connection during designated time periods. The fact that it might rain at your house is not a reason for me to postpone/move the exam date/time. You need to find an Internet connection that works when it rains, like those at McDonalds, Starbucks, and the UHCL campus, just to name a few.
Question 9.
I'm frustrated that the exams in this course won't let us go back to questions we've already answered, and that we have to take our exams during very narrow windows during times when I'd like to be doing something else.

Answer: Your exam is put together to test your ability, first, and to discourage cheating and working together, second. In particular, the time limits are designed to make sure that you are answering the test questions from your knowledge and not from looking through your notes or book -- you shouldn't have enough time to finish if you're going to be digging around in other sources. We ask essay questions and open-ended difficult problems because those are the only things that adequately test your knowledge and prevent getting things right by "guessing," which, again, you shouldn't have enough time to do successfully anyway.

Why shouldn't you use your book? Because we're not testing how well you retain facts, but how well you integrate those facts and understand the "Big Picture". In the Internet Age, we all have access to any facts we might need, instantly. It's being able to structure those facts into a cogent argument and an understanding of how things work that sets you apart from people who DIDN'T take Finance courses in college.

Question 10: But won't we work together in the "real world"? Shouldn't we work together on tests now so that we'll know how to collaborate once we're out of school?

Answer: The good news is that once you're earning a paycheck, it gets a whole lot easier to work with others. For one reason, they all have similar motivation (not getting fired, for example). To prepare you for a life of working collaboratively, we are trying to make sure that you have the study skills and cognitive ability to prepare, on your own, for adding value to a group situation. So, no, that one doesn't fly either - working together is cheating, at least in this class. Studying for tests together is OK, working on them is not. Proofreading each other's papers on different topics is OK, copying ideas or words (without proper attribution) is not.

When in doubt, ask a professor.

FAQ Revised 04/27/11