## Academic Integrity and Instructional Design - What Can They Possibly Have in Common?

Dr. Greg Williams Instructional Systems Development Graduate Program University of Maryland, Baltimore County Baltimore, Maryland 21250, USA

# Abstract 200 words max

Academic integrity is a core value of the culture of higher education. eLearning has been a lightning rod for academic integrity with many academic being very skeptical about the quality and integrity of elearning. At the same time the growth of eLearning has created a demand for instructional designers. Instructional design is an applied discipline that many college and university faculty do not know much about. Some of the benefits of instructional design include using a variety of instructional strategies, applying a diversity of assessment techniques, higher level learning. Ironically, some of these same things may also make it more difficult for students to cheat, but may also lead to higher levels of learning as measured by Bloom's Taxonomy. By applying some simple instructional design strategies, faculty can not only improve the academic integrity of the their course, but also the learning outcomes

**Keywords:** Academic Integrity, Blooms's Taxonomy, Cheating, elearning, Instructional Design, Online Learning, Plagiarism, Learning Outcomes, Learning Objectives

#### Introduction

Academic integrity has always been a big issue in higher education. With the growth of eLearning, the spotlight has been focused on this issue even more. The growth of eLearning makes some members of the higher education community think that this form of instructional delivery makes cheating even easier. Additionally, many traditional faculty even question the quality of courses delivered via eLearning. Academic integrity is one of the core values of higher education. Earning a college degree is an individual achievement; the academic community put s a high price on this prized individual credential. Additionally, many academicians also are very skeptical of instructional design. Many faculty find it hard to believe that someone without a degree in their discipline can help them design an effective course. Ironically, the growth of eLearning has spurred the need for professional degreed instructional designers. So what do academic integrity and instructional design have in common? They probably have a great deal more in common than most people think.

#### **Improving Academic Integrity**

There are a number of strategies and simple techniques that can be applied to reduce cheating and improve academic integrity. The primary goal should be to design courses that improve instruction and learning outcomes. It is possible to accomplish that AND address academic integrity issues.

Unfortunately, a number of courses in higher education focus on only the first two levels of Bloom's taxonomy, knowledge and comprehension. Ironically, these are some of the easiest learning outcomes for students to cheat on, since they are often assessed by objectives test (e.g. multiple choice, true and false). Here are some simple strategies ways improve academic integrity almost immediately:

- 1. Educate the students on academic integrity and have a written policy
- 2. Assess students more than two to three times (e.g. mid-term final and paper)
- 3. Provide frequent opportunities for students to receive feedback
- 4. Limit the use of objective tests.
- 5. If you must use objective tests, have different versions of them.
- 6. Use timed tests
- 7. Do not use "generic" research papers.
- 8. Use academic integrity software tools such as "Turn it In"

There are many more was to reduce cheating than listed here. For example, if written assignments are required, there are a number of things that faculty can do. Do not allow students to write about generic topics. Give them a list of choices for research papers that are off the beaten path. Require students to turn in rough draft at periodic points. Require student to use a variety of reference and also place limits on them such no more than two printed book, three electronic article, two Internet site, etc. Additionally, you can say that all reference must be no more than five years old and require and annotated bibliography. You can require that students include certain section such as an analysis of the literature, etc.

### **Improving Learning Outcomes**

Using some of strategies noted above will indeed reduce cheating, but will they improve learning outcomes and quality of the course? Probably not. While it may be relatively easy for a faculty member to safeguard their courses against cheating, it more important to make the course a better learning experience for the student. Can both be accomplished? Taken at face value, the topics of academic integrity and instructional design probably have little in common. But if one takes a closer look, they can see that there is a significant relationship between these two topics. A well designed course can serve both purposes.

Courses that aim for low levels of learning on Bloom's taxonomy (knowledge and comprehension) usually are the easiest course in which to cheat. Why? They normally have only objective tests and generic research paper as the only type of student assessments. A well designed course can not only assist the instructor in achieving higher level of learning, but address academic integrity as a secondary benefit. For example it much more difficult to cheat on an assignment that requires the application of knowledge, or to perform an evaluation, than to simply take a multiple choice tests.

#### **Principles of Instructional Design**

One of the major goals of instructional design is to improve learning outcomes. Some of the foundations of effective instructional design include:

- Creating clear and measurable learning objectives
- Using a variety of instructional strategies
- Providing ongoing feedback
- Assessing learning frequently using a variety of assessment tools
- Engaging learners
- Providing learners opportunities to apply what they have learned
- Providing opportunities for learners to use previous knowledge and experience
- Making learning meaningful

## **Improving Academic Integrity AND Course Design**

Let's examine some of the principles of instructional design in a new context. Here are some ways that sound instructional design can not only improve learning outcomes, but address academic integrity as well. They include:

- 1. Require a variety of assignments, not just tests and papers. Have a variety of student assessments that are more frequent and smaller than major traditional assessments, such as a mid-term and final exams along with research paper
- 2. Use objective tests sparingly (e.g. multiple choice, true/false). If you must use them,

- have some short answers questions. If you are aiming at higher levels of learning, objectives test won't work very well.
- 3. Use measurable learning objectives that link to higher levels of learning in Bloom's Taxonomy (application, synthesis, evaluation). The old saying that "you can't learn to ride a bike in a seminar" is very true.
- 4. Try not to require "generic" written assignments. Give them a list of topics that you approve that have a different slant on the topic. For example, you can post some "critical thinking skills" questions in the assignment. It is less likely that there will be existing papers "for sale" on more unique topics. Also, require rough drafts that give you the opportunity to provide feedback long before the final written assignment is due.
- 5. Make students do presentations on their written assignments, projects, portfolios, etc. They can be live or recorded. This can be easily done with just a webcam or a consumer camcorder, or other forms of multi-media.
- 6. Incorporate individual project assignments (not tests), where students can actually apply what they learned.
- 7. Use a portfolio approach that requires students to reflect (using a written journal) on their learning. For example, you can provide opportunities for students to incorporate their prior learning or experience in an assignment. Since this will be unique by definition, every student will have something different
- 8. Use "open book" approach to assignments that requires students to use higher level learning (e.g. application, analysis, synthesis, evaluation). This will force students to come up with a variety of different ideas and approaches, compared to choosing one correct answer on a multiple choice test.

#### Conclusion

The issue of academic integrity will never go away completely. Academic integrity and instructional design are not often mentioned in the same sentence. However there is a relationship that may help faculty in both areas. By incorporating some of the instructional design principles, faculty will improve academic integrity as, well as improve the design of the course. This will require the faculty member to do more work, but in the end, it will improve learning outcomes for the students

The issue of academic integrity will never go away completely. Academic integrity and instructional design are not often mentioned in the same sentence. However there is a relationship that may help faculty in both areas. By incorporating some of the instructional design principles, faculty will improve academic integrity as, well as improve the design of the course. This will require the faculty member to do more work, but in the end, it will improve learning outcomes for the students.

#### References

[1] J.C. Adkins, C. Kenkel, Lo Lim. Deterrents to online academic dishonesty. The Journal of Learning in Higher Education 1(1): 17-22. Accessed September 7, 2007, from

http://jwpress.com/JLHE/Issues/v1i1/Deterrents%20to%20Online%20Academic%20Dishonesty.pdf

- [2] B. Christe, Designing online courses to discourage dishonesty, 2003 Educause Quarterly November 4: 54-58.
- [3] G. J. Cizek, Cheating on tests: How to do it, detect it, and prevent it. Lawrence Erlbaum Associates: New Jersey, 1999
- [4] R.A. Dewey, Writing multiple choice items which require comprehension. Retrieved September 6, 2007, from <a href="http://www.psywww.com/selfquiz/aboutq.htm">http://www.psywww.com/selfquiz/aboutq.htm</a>
- [5] V. Harsh, V. (2004). Assessing well: Using publisher test banks as a component of an assessment portfolio. Educator's Voice 5(7). Retrieved September 24, 2007, from

http://www.ecollege.com/Newsletter/EducatorsVoice/EducatorsVoice-Vol5Iss7.learn

- [6] C. Kleiner, and M. Lord. (1999). The cheating game. U.S. News and World Report November 22. Retrieved September 24, 2007, retrieved from <a href="http://www.usnews.com/usnews/culture/articles/99112">http://www.usnews.com/usnews/culture/articles/99112</a> 2/archive 002427.htm
- [7] Olt, M.R. Ethics and distance education: strategies for minimizing academic dishonesty in online assessment. Online Journal of Distance Learning Administration, 5(3). 2002, Retrieved September 6, 2007, from

http://www.westga.edu/%7Edistance/ojdla/fall53/olt53.

- [8] G.C. Rakes, (n.d.). The effects of open book testing on student performance in online learning environments. Retrieved September 6, 2007, from <a href="http://edtech.tennessee.edu/rite/rite2006/rakes\_rite\_06.pdf">http://edtech.tennessee.edu/rite/rite2006/rakes\_rite\_06.pdf</a>
- [9] E. Rohrer, Creating quality multiple choice

questions. Educator's Voice 7(5). 2006, Retrieved September 24, 2007, from

http://www.ecollege.com/Newsletter/EducatorsVoice/ EducatorsVoice-Vol7Iss5.learn

[10] N. C. Rowe, Cheating in online student assessment: beyond plagiarism.
Online Journal of Distance Learning Administration
VII (II), Summer. 2004, Retrieved September 6, 2007, retrieved from

http://www.cs.nps.navy.mil/people/faculty/rowe/dlcheat.htm

[11] S. Trenholm, S. A review of cheating in fully asynchronous online courses: a math or fact-based course perspective. Journal of Educational Technology Systems 35: 281-300, 2006-2007.