



Strategies and Techniques for Detering Cheating in Online and In-person Classes

Workshop
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Strategies to Deter Cheating

Strategies and Techniques for Deterring Cheating in Online and In-person Classes

Session Description

Cheating is prevalent in face-to-face and online college classes. Learn practical tools and techniques to proactively deter and reduce academic dishonesty.

Session Objectives

1. To describe the problem of academic dishonesty that exists at the university level in both face-to-face and online learning environments.
2. To present practical techniques and tools, from low-tech to high-tech, that teachers can use to support reducing practices of academic dishonesty in both face-to-face and online learning environments.
3. To provide a forum where higher education faculty can learn proactive techniques that can be used to deter academic dishonesty and suggest additional techniques.

Session Supports Conference Theme

Addressing cheating implies a transformed approach in design and administration of assignments and assessments. Thus, the session supports the conference theme of breaking through to transform.

Presentation Outline

- Prevalence of student cheating
- Types of cheating
- Why do students cheat?
- Strategies to deter cheating
- Strategies to support learning while deterring cheating
- Assessment strategies to deter cheating



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Prevalence of Student Cheating

It is difficult to assess rates of academic dishonesty because, by their nature, academically dishonest behaviors are secretive and the act of admitting such a behavior is akin to an admission of guilt (Anderman & Won, 2019). Data generally suggest that large numbers of college students engage in at least some form of academic dishonesty.

Researchers who have examined prevalence rates have reported wide variations in their findings, with numbers ranging from around 30% in some studies, around 50% in others, and approximately 80% in others (Anderman & Won, 2019).

A 1964 study found that 39% admitted to cheating on tests and exams, 62% admitted to cheating on written assignments, and 68% admitted to cheating on both tests/exams and written assignments. A 2020 study found that the percentage of participants who reported cheating was 74.8% ($n = 160$) across all types of graded materials (Jenkins, Golding, Le Grand, Levi, & Pals, 2022)

One study (Pavlin-Bernardić, Rovani, & Pavlović, 2017) investigated the frequency of secondary school students' self-reported cheating in mathematics. The study found that students use second-party cheating very often and more than active cheating.

A large number of students cheated for the first time in online courses using online resources following the start of the COVID-19 pandemic (Jenkins et al., 2022).

Specific Strategies to Deter Cheating

Issue: Student has pre-programmed a programmable calculator.

Address: Before the exam, have all students reset their calculators. The teacher quickly checks all by clicking the “previous” button (to see in information is still stored).

Issue: Writing answers on the inner portion of a water bottle label then reattaching it to view during an exam.

Address: Faculty increased awareness. All water bottles placed in a designated area (in teacher’s view) prior to examination.

Issue: Switching between browser tab with the test and a tab with a cheat sheet (online).

Address: Aside from using a lockdown browser, you could impose a time limit. Switching between tabs requires time and it is uncertain if the answers students have will match the test questions (Moten, Fitterer, Brazier, Leonard, & Brown, 2013).

Strict time limits may have the added benefit of encouraging students to study more diligently. Further, one researcher suggested creating a “cheating trap.”

Create a Website with the test questions and incorrect answers (Moten et al., 2013).

Issue: Student pretends to grab a pencil out of their bookbag but are really looking at a cheat sheet or their phone.

Address: Have students place personal items in a designated area for the duration of the test.

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Issue: Looking over at a peer's filled out answers.

Address: Utilize appropriate spacing between students. Also, use an alternate test version between rows.

Issue: Using signaling through peers. Students can signal answers on a multiple choice test by coding right or left hand for question number and the remaining hand for options one through five. Students can also pace themselves together working question by question and moving an eraser or object to the corner of the desk that corresponds to choices A through D.

Address: Faculty increased awareness. Be aware of signaling methods and look for patterns during the test.

Issue: Sending test information to a smartwatch and reading it during the test.

Address: Use calculator holders or other cubby-like systems to contain cellphones and other small tech items during an exam.

Issue: Using upperclassmen or other peers who have taken the class to give inside information.

Address: Offer multiple versions of tests. Update/change tests often. Utilize tools that create a unique exam for each student, drawing from a question bank.

Change the wording of the question used. A student who is planning to cheat ahead of time likely has studied the answer key word-for-word. This simple change could make them uneasy and force them to read and address each question on their own.

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Issue: Students hiring fellow students or online service to write a paper.

Address: Assign a handful of short writings (some during class to determine a baseline of student's writing style (Pauilet et al., 2016). Require submission of a paper outline and sources. Require part of the writing to be done in class. Require a draft submission (Taylor, 2014)

Issue: Students texting answers during an exam. (Another individual outside the classroom may be sending the messages, which are appearing on their personal pc.)

Address: Online tests taken in the school setting should be on regulated devices such as a school monitored Chromebook or desktop computer in a lab.

Issue: Collaborate on online tests with other students.

Address: Utilize video-monitored tests. Have remote students submit their GPS location at the beginning of test. Use a reporting system that reveals a student's IP address (Moten et al., 2013).

Issue: Ghost students -- people hired to take an entire online course for a fee (Hollis, 2018).

Address: Identify fraud requires steps to be taken to establish identity authentication.

Strategies to Support Learning While Deterring Cheating

Issue: Students using PhotoMath to obtain answers without understanding.

Strategy: Require students to create a step-by-step explanation of how to solve problem.

Utilize online tools such as Padlet or Spark Video or a screencasting tool such as Screencast-O-Matic. For young students, consider using a “puppet” tool such as Puppet Pals. Ask non-standard questions (in math, ask which item cannot be right and why).

Issue: In Literature, students using Cliff Notes or online story summary.

Strategy: Ask a few questions that are basic to the story, but something someone would not know if they did not read the story.

Compliment model behaviors such as by showcasing students’ original writings or evidence of creative thinking (Ma, Wan, & Lu, 2008).



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- Provide practical application exams with student supports:
Students get to design one “cheat sheet” for formulas.
Students can use any resource to check their work, such as Desmos or Wolfram Alpha (Maciejewski, 2021).
- Provide 2-step exams:
In step 1, students complete items individually/independently.
In step 2, students work together and learn from their mistakes with the help of peer collaboration.
- Diversify assessment methods. Students will be less likely to cheat if they are unaware of what type of assessment will be utilized. This may motivate students to spend more time learning the content if their goal is to get a good grade.
- Research suggests that cheating on assessment could be reduced: By 36.6% by frequently changing tests. By 49.4% by using assigned seating. By 65.0% by monitoring students during tests (Bernardi, Baca, Landers, & Witek, 2008).

Assessment Strategies to Deterring Cheating

- On assessments, ask practical application questions vs. recall questions.
- Provide a practice test to provide students with a feel for the teacher's testing style.
- Ask for daily feedback. Using an exit ticket, ask students to describe what was covered in class. Then ask which areas represent comfort vs. struggle. Ensures students are understanding before moving on to the next day's topics.
- Provide more exams. With more exams, content is divided into more "digestible" chunks. In one study (Lavery, Bauer, & Kortemeyer, 2012), faculty experimented with number of exams (3 or 6 per semester). In the 6-exam system, students scored an average of 67% on the final exam; in the 3-exam system, students scored an average of 42%.

In this study, students viewed homework as a study tool rather than a chore. This reduced the risk of students cheating on homework and the higher gain in knowledge made students less likely to cheat on exams. Student poll indicated a preference for more exams.

References

Amigud, A. (2013). Institutional Level Identity Control Strategies in the Distance Education Environment: A Survey of Administrative Staff. *International Review of Research in Open and Distance Learning*, 14(5), 128–143.

Amigud, A., & Lancaster, T. (2020). I will pay someone to do my assignment: an analysis of market demand for contract cheating services on twitter. *Assessment & Evaluation in Higher Education*, 45(4), 541–553. <https://doi.org/10.1080/02602938.2019.1670780>

Anderman, E. M., & Koenka, A. C. (2017). The Relation Between Academic Motivation and Cheating. *Theory Into Practice*, 56(2), 95–102.

<https://doi.org/10.1080/00405841.2017.1308172> Anderman, E. M., & Won, S. (2019).

Academic Cheating in Disliked Classes. *Ethics & Behavior*, 29(1), 1–22.

<https://doi.org/10.1080/10508422.2017.1373648>

Bain, L. Z. (2015). How Students Use Technology to Cheat and What Faculty Can Do About It. *Information Systems Education Journal*, 13(5) pp 92-99.

<http://isedj.org/2015-13/n5/ISEDJv13n5p92.html> ISSN: 1545-679X.

Bernardi, R., Baca, A., Landers, K., & Witek, M. (2008). Methods of Cheating and Deterrents to Classroom Cheating: An International Study. *Ethics & Behavior*, 18(4), 373–391. <https://doi-org.misericordia.idm.oclc.org/10.1080/10508420701713030>

Strategies to Deter Cheating

Etter, S., Cramer, J. J., & Finn, S. (2006). Origins of academic dishonesty: Ethical orientations and personality factors associated with attitudes about cheating with information technology. *Journal of Research on Technology in Education*, 39, 133 - 155.
doi: 10.1080/15391523.2006.10782477

Hollis, L. P. (2018). Ghost-Students and the New Wave of Online Cheating for Community College Students. *New Directions for Community Colleges*, 2018(183), 25–34. <https://doi-org.misericordia.idm.oclc.org/10.1002/cc.20314>

Jenkins, B. D., Golding, J. M., Le Grand, A. M., Levi, M. M., & Pals, A. M. (2022). When Opportunity Knocks: College Students' Cheating Amid the COVID-19 Pandemic. *Teaching of Psychology*, 1. <https://doi-org.misericordia.idm.oclc.org/10.1177/00986283211059067>

Laverty, J. T. L., Bauer, W., Kortemeyer, G., & al., et. (2012, November 20). Want to Reduce Guessing and Cheating While Making Students Happier? Give More Exams! The Physics Teacher. <https://doi.org/10.1119/1.4767487>

Levine, J., & Pazdernik, V. (2018). Evaluation of a four-prong anti-plagiarism program and the incidence of plagiarism: a five-year retrospective study. *Assessment & Evaluation in Higher Education*, 43(7), 1094–1105.
<https://doi.org/10.1080/02602938.2018.1434127>

Strategies to Deter Cheating

Ma, H., Wan, G., & Lu, E. (2008). Digital Cheating and Plagiarism in Schools. *Theory Into Practice*, 47(3), 197-203. <https://doi-org.misericordia.idm.oclc.org/10.1080/00405840802153809>

Maciejewski, Wes (2021). Let Your Students Cheat on Exams, *PRIMUS*, 31:6, 685-697, DOI: 10.1080/10511970.2019.1705450

McKibban, A. R., & Burdsal, C. A. (2013). Academic dishonesty: An in-depth investigation of assessing measurable constructs and a call for consistency in scholarship. *Journal of Academic Ethics*, 11, 185 - 197. doi: 10.1007/s10805-013-9187-6

McNeilage, A. & Visentin, L. (2014, Nov. 12). Yingying Dou: The mastermind behind the University essay writing machine. *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/education/yingying-dou-the-mastermind-behind-the-university-essay-writing-machine-20141111-11kk50.html>

Moten, J., Jr., Fitterer, A., Brazier, E., Leonard, J., & Brown, A. (2013). Examining Online College Cyber Cheating Methods and Prevention Measures. *Electronic Journal of E-Learning*, 11(2), 139–146.

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Muñoz-García, A., & Aviles-Herrera, M. J. (2014). Effects of academic dishonesty on dimensions of spiritual well-being and satisfaction: A comparative study of secondary school and university students. *Assessment & Evaluation in Higher Education*, 39, 349 - 363. doi: 10.1080/02602938.2013.832729

Münscher, S., Donat, M., & Kiral Ucar, G. (2020). Students' Personal Belief in a Just World, Well-Being, and Academic Cheating: A Cross-National Study. *Social Justice Research*, 33(4), 428–453. <https://doi-org.misericordia.idm.oclc.org/10.1007/s11211-020-00356-7>

Park, S. (2020). Goal contents as predictors of academic cheating in college students. *Ethics & Behavior*, 30(8), 628–639. <https://doi.org/10.1080/10508422.2019.1668275>

Paullet, K., Chawdhry, A. A., Douglas, D. M., & Pinchot, J. (2016). Assessing Faculty Perceptions and Techniques to Combat Academic Dishonesty in Online Courses. *Information Systems Education Journal*, 14(4), 45–53.

Pavlin-Bernardić, N., Rovani, D., & Pavlović, J. (2017). Academic Cheating in Mathematics Classes: A Motivational Perspective. *Ethics & Behavior*, 27(6), 486–501. <https://doi.org/10.1080/10508422.2016.1265891>

Strategies to Deter Cheating

Shu, L. L., Gino, F., & Bazerman, M. H. (2011). Dishonest deed, clear conscience: When cheating leads to moral disengagement and motivated forgetting. *Personality and Social Psychology Bulletin*, 37, 330 - 349. doi: 10.1177/0146167211398138

Suud, F. M., Azhar, M., Mudasirmudasir, & Madjid, A. (2020). Student's Academic Cheating at Pondok Pesantren Teknologi Riau, Indonesia. *Utopia y Praxis Latinoamericana*, 25, 72–80. <https://doi.org/10.5281/zenodo.4280090>

Taylor, Susan M. "Term Papers for Hire: How to Deter Academic Dishonesty." *Education Digest*, vol. 80, no. 2, Oct. 2014, pp. 52–57. EBSCOhost, <https://search-ebscohostcom.misericordia.idm.oclc.org/login.aspx?direct=true&db=asn&AN=98510557&site=ehost-live>.

Visentin, L. (2015, March 18). MyMaster essay cheating scandal: More than 70 university students face suspension. *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/national/nsw/mymaster-essay-cheating-scandal-more-than-70-university-students-face-suspension-20150312-1425oe.html>

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