

Integrating Effective Academic Integrity Practices into your Online Course

For School of Engineering

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Overview

- Key Problems (10 min)
- Elements of Academic Misconduct (5 min)
- Best Practices (45 min)
 - Strategies to reduce rationalization
 - Strategies to reduce opportunity
 - Strategies to reduce pressure
- Discussion and Q&A (30 min)

Key Problems

- Access and data censorship
- Student privacy
- Student anxiety
- Effectiveness

Access and Data Censorship

- Access to some website and software currently not a legal option in some countries
 - VPNs are not legal workarounds
 - It is unethical to put students in a position where they feel the need to violate laws to participate in education
 - Consequences may be much harsher than Canada in other countries if students violate

Student Privacy

- Potential for invasions of privacy and long term storage of sensitive information outside of Canada
 - Student must agree to this to use this software if we require it
 - Personal information such as one's address, date of birth, parent's name, web-browsing history, biometric data (retina scans, fingerprints, etc.),
 - Other challenges with some exam proctoring software
 - No bathroom breaks
 - Requires silent room... not possible in many areas where living in small quarters with family is reality

Student Anxiety

- Anxiety already heightened due to
 - COVID-19
 - General uncertainty around online education processes
 - Managing education and schedule without immersion of campus life
- Digital proctoring seen as intrusive
 - Heightens existing test anxiety
 - Requires students to set up according to software needs (lighting, positioning, sound, etc.)
- High achieving students treating “low-stakes” assignments as all “high-stakes” assignments

Questionable Effectiveness

- There will always be counter measures to cheating prevention
 - Contract cheating
 - Professional cheaters
- Measures and countermeasures is a losing battle
 - only focused on opportunity
 - increases pressure
 - doesn't address rationalization

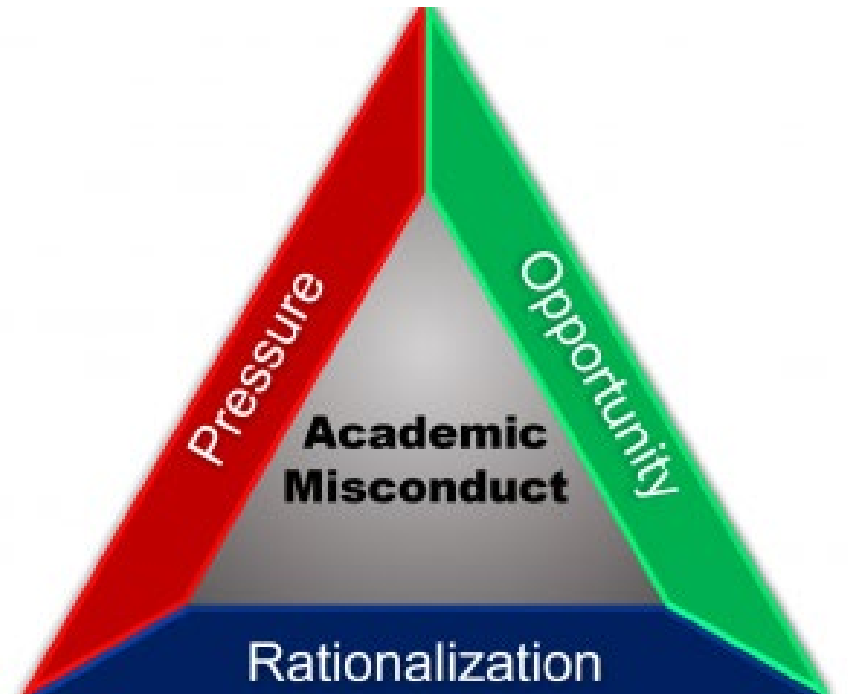
Elements of Academic Misconduct

Pressure – academic... high grades or just pass...
can cause uncharacteristic behaviour

Opportunity – too easy; insufficient barriers to
minimize cheating

Rationalization – students justify behaviour,
reward vs. risk

Freddie Choo and Kim Tan, The effect of fraud triangle factors on students' cheating behaviors, *Advances in Accounting Education: Teaching and Curriculum Innovations*, Volume 9, 205–220, 2008, ISSN: 1085-4622/doi:10.1016/S1085-4622(08)09009-3



Preliminary Findings

- It is impossible to prevent all cheating, but we can make a significant impact with best practices.
- Any solutions must consider the following, especially in online contexts:
 - Highest standards of academic integrity and ethics
 - Ease of use by faculty
 - Ease of use by students
 - Privacy and accessibility laws internationally
 - Technological access internationally
 - Combine strategies to deal with pressure, opportunity, and rationalization

A Note about Best Practices

- Use strategies to deal with all three elements
- Not all of these strategies will work with all classes, you need to decide
- Many strategies have already been implemented successfully since the switch to online
- Needs to be a larger culture shift in department and university

Implementation of Best Practices

- Strategies to reduce rationalization
- Strategies to reduce opportunity
- Strategies to reduce pressure

Strategies to Reduce Rationalization

- Clear and consistent communication of expectations before instances occur
- Clear and consistent communication of what constitutes cheating/academic misconduct
- Understanding of implications on professionalism, identity, public trust
- Strategies:
 - Clear language on syllabus, assignment descriptions, exams, etc.
 - Implementation of integrity pledge
 - Clear and repeated discussion of expectations in class

Clear language on syllabus, assignment descriptions, exams, etc.

- Written expectations of academic integrity in the syllabus with links to the academic calendar
- Reminders of what is and is not allowed in assignment descriptions and preceding exams and quizzes

- Sample language on next slide
 - Courtesy of Department of Psychology
 - Currently being worked on in the Provost's Academic Integrity Working Group for broader distribution

Sample Syllabus Language

Academic Integrity Examination Policies for Closed-Book Exams

The examinations in this course are all closed-book, so you are **not** permitted to access any of the course materials, including your notes, during the exam. You are **not** to use any search engines or other programs except for the program required to complete the exam. Nor are you to communicate with anyone – you are to work independently. If you violate these conditions you have engaged in Academic Misconduct and will be subject to the consequences articulated in the Academic Integrity section. [include a link to this section in Academic calendar/your syllabus] Communication with other students (written, text, verbal, etc.) is also not permitted and will constitute Academic Misconduct.

Implementation of Integrity Pledge

- Signature on pledge/agreement needs to be a requirement to access the exam/assessment
- In addition to the pledge, on that same page, include clear rules of what is and is not appropriate on that assignment
- Failure to sign the pledge, no access to the exam/assessment = no grade

Clear and repeated discussion of expectations in class

- Clearly state syllabus rules and expectations around academic integrity and what constitutes misconduct
- Repeat relevant academic integrity expectations before each assignment in class
- Discuss the implications for professionalism and reputation
- Students hear consistent message from faculty that this is a priority and exactly what it means for each assignment

Strategies to Reduce Opportunity

- Do not make it easy for students to cheat
- Limit time on exams
- Control student access to online exams
- Consider the use of proctoring software, if accessible to all

Limit time on exams

- May need to give 24 hour window for time zone considerations
 - Make the exam appropriate for 3 hour exam, not extra difficult
 - Have different exam times for different time zones
 - Using Canvas quiz as an option
- Allow for time for uploading of additional documents outside of exam time
 - 30 minutes right after exam
- Have a policy in place anticipating typical issues (slow internet access, software issues, etc.)
 - There is sample language available

Control student access to online exams

- Time limit helps
 - Provide some extra time for internet connection issues (15-20 minutes), but not too much
- Display only a single question on the screen at a time (to make it more difficult to copy and share exam questions)
- Have bank of questions so that students don't all have the same question and vary order
- Do not allow students to return to questions they have completed
- Allow each student to access an online exam only one time

Consider the use of proctoring software, if accessible to all

- Collaborate Ultra is UBC sanctioned
- Zoom may be an option
 - SoE supported... everyone can see video... other students can see IDs too
- Have students show ID live, not in a photo
- Again, have a policy for technology interruptions

Strategies to Reduce Pressure

- Anxiety already heightened... online education can heighten more
- Not the time to require students to make up for downsides of a challenging teaching situation
- Students do rely on academic misconduct out of desperation
- Strategies:
 - Appropriate expectations of a 3 credit course
 - Appropriate translation of synchronous vs. asynchronous time
 - Utilize more low-stakes assessments, and a variety of assessments in your course
 - Include policies for flexible grade weighting
 - Encourage a culture of collaboration.

Appropriate expectations of a 3 credit course

- 1 week = 168 hours
- 3 credit hours = 3 contact hours synchronous class time per week + 2-3 hours per week of homework per contact hour, or 6-9 hours of homework a week on average
- 1 course = 9-12 hours/week
- 5 courses = 45-60 hours/week
 - Labs and tutorials not included
 - Weaker students may take longer with homework
- More than fulltime hours... students have other obligations as well... sleep, eating, work, family, socializing, exercise...
- Your estimation of how long something should take is likely well under what it will actually take a student to do
 - Do the assignment yourself, then multiply the time it took you by 3.

Appropriate expectations of a 3 credit course

- Calculate how much time what you are asking of the students will actually take them
- Consider when “extra” hours might show up
 - End of term, when everyone else is asking for extra hours?
 - Becomes mathematically impossible for the students
- Don't require students to use a skill set that you are not teaching them in class (ex/ video editing)
 - If you must require them to use that skill set, account for it in the learning time.
 - If that impedes with CUs for accreditation, then choose another way
- Your course is not a hero course by making it more rigorous for the students. It is only an unfair burden on students who get the same number of credits as any other course.
- It is not necessary, nor advisable, to compensate with increased difficulty in your course... the goal is to reduce pressure on students

Appropriate expectations of a 3 credit course

- Consider the “invisible” time requirements
 - Technology downloads, set ups, sign ins, and malfunctions
 - Flipped classroom strategies that aren’t considered in time allotment
 - Team conflicts/inefficiencies
 - Out of class time exams/projects not counted in contact hours
 - Account for difference between synchronous and asynchronous delivery of content
- Adjusted expectations of overall time required for students to complete out of class assessments to prevent overload (<https://cat.wfu.edu/resources/tools/estimator2/>)

Appropriate translation of synchronous vs. asynchronous time

- 3 contact hours/week of synchronous class time... under normal circumstances
 - Allows for interruptions and questions
 - Can see if students understand and switch strategies if needed
 - Use time for individual/group activities
- Does not translate to 3 hours/week of asynchronous video
 - 2 x 80 min classes = 160 min x $\frac{1}{2}$ = 80 min broken down into 10-15 min videos
 - 3 x 50 min classes = 150 min x $\frac{1}{2}$ = 75 min broken down into 10-15 min videos
 - Small chunks easier to download and manage for students

Utilize more low-stakes assessments, and a variety of assessments in your course

- Shorter quizzes
 - Note of caution about pop quizzes... time requirement makes it difficult to plan around
- Reduces pressure on heavily weighted exams that happen at the same time
- Consider more application questions to test higher order thinking
- Provide frequent and early feedback (formative and summative) in your course
 - Students have ample opportunity to improve
- Make sure you give students a realistic indication of how much time to spend
 - high performing students can increase anxiety with too many small assignments

Include policies for flexible grade weighting

- Ex/“only count the best 5 of 6 quizzes” or similar
- Give students an opportunity to focus on learning instead of grade
- Can still improve grades and reduces pressure on any one assignment

Encourage a culture of collaboration

- Learning as the goal, rather than competition or grades as the goal
- Starting with us as faculty
- Shared schedules and being flexible with yours so students are not overwhelmed

Discussion

- What worked for you last term?
- What do you plan on doing in the coming term?
- Recording and slides will be posted to SoE website