Exploring Cheating Behaviors At Dartmouth

Engs 12 Professor Robbie

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Executive Summary

After surveys of over 50 Dartmouth students, we found that when it happens, cheating is commonly motivated by **pressure to get high grades and disengagement with course material**. In an effort to combat cheating at Dartmouth we propose a two-pronged approach, which focuses on decreasing evaluative stakes and increasing access to resources. In order to increase resources, we propose expanding access to materials and adding collaborative elements to testing. To decrease the stakes, and thereby increase the focus on learning, we suggest that professors offer a test correction option and that the college expand non recording options to distributive requirements.

Challenge:

The challenge tackled by our team was to explore cheating and propose a solution to decrease cheating at Dartmouth.

Team:

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Methods:

To gain a fundamental understanding of our topic, we began by conducting a number of different interviews. 48 of these interviews were conducted with Dartmouth Students, and 2 with Dartmouth professors. We decided to primarily focus on the student, because the **student is certainly the main stakeholder in their education** and further how it affects his or her self worth.

In our first round of interviews, we tried to evaluate what kinds of cheating behaviours were taking place, and how people felt about them in general. While we thought that getting people to open up would be more difficult, the truth is that when anonymity could be guaranteed, most were comfortable talking about cheating that they had seen or participated in. We experimented with two main interview formats for preliminary interviews.

The first looked something like this: after a brief introduction along the lines of "Hi, I'm in a course called Design Thinking course, could we ask you some questions about cheating at Dartmouth and record the answers" we asked: "Have you ever cheated?" If the answer was yes, then we prompted them for stories about specific incidents, behaviours, motivations, and circumstances. If the answer was no, then we asked about their attitudes about cheating, their motivations for abstaining, and times that they had seen or been tempted to cheat.

The second aimed at finding the same information- behaviors, attitudes, motivations- through more structured list of questions (see appendix 1). Both methods proved useful and yielded similar breadths and depths of information.

Once we had an initial idea about the methods, motivations, and actors involved in cheating, we conducted a second round of interviews aimed at fleshing out what kinds of cheating had been seen on campus, using a story-based method.

Research Findings:

Here are some quotes from our interviews that served as light bulbs for our solution:

"I hate distribs, I wish they didn't exist. I have to pick them carefully because I don't want them to mess with my GPA. I wish I could just take the ones I'm interested in."

"Pass/Fail takes the stress off. It makes me feel like I can take risks without it negatively impacting an internship I'm trying to get or a career I'm trying to have."

"I know a lot of people get **previous exams and materials from upperclassmen**. Some profs have tried to get ahead of it by releasing their own past exams, but a lot of them are **too lazy to rewrite their exams**."

"How hard I work isn't reflected in my grades. It's frustrating. **Grades are all people see.**"

We came to the conclusion that cheating of various forms is common at Dartmouth. 40 of our 48 interviewees admitted to cheating themselves, and all 48 students affirmed that they had seen it before. The majority of cheating occured when students were taking Distributive Requirement classes, where a common sentiment was that the course work was less relevant to their fields of study. We found that this trend was especially prevalent amongst humanity majors who felt that the distributive requirements were tailored more towards science based majors. They felt that their major put them at a disadvantage because, although

certain culture distributives were available in science and economics departments, TAS and SCI requirements were not offered in humanities departments, taking them further out of their element than science-centered students.

Additionally, we found that there was a prominent campus meme that **grades are more important than both learning and integrity.** Students felt that grades were a large determiner in terms of their **self-worth** and future hiring ability.

Our research also made it clear that **students who are affiliated with Greek organizations, sports teams, or other students based organizations cheat more.** This is frequently done with the possession of "course bibles," which are journals or google docs that have been composed by group members over many years. These "course bibles" typically consist of some combination of old tests, homeworks, notes, and study guides. In these organizations, these "course bibles" are passed down from upperclassmen to to underclassmen.

Student organizations also have the advantage of upperclassmen resources. This is shown not only in "course bibles," but is also evident in the form of strong collaboration. Many freshmen and sophomore students expressed that upperclassmen in their respective organizations often help them fill out homeworks and advise them on what to expect on tests. These students felt that this gave them an advantage over those who do not have access to upperclassmen connections.

Data Analysis:

As a method of analyzing our research we grouped information into two main categories: **environments and personas.**

In our environment category we mapped the places in which cheating happens most often. We found that cheating occurs in classes where it is easiest to do so: large classes with multiple choice in which professors leave the room.

We also separated our interviewees' responses into 3 personas: the Angel, the Relativist, and the Pro.

The Angel - never cheats, doesn't believe that cheating is rampant at Dartmouth, feels as though they are only hurting themselves if they were to cheat.

The Relativist - cheat when their back is against the wall, sees cheating around Dartmouth, feels moral ambiguity about cheating. Most students fell into this category.

The Pro - cheats all the time, believes that everyone cheats at Dartmouth, sees cheating as an edge to get ahead and doesn't see the problem with it as long as they don't get caught.

We decided to **focus on the relativist** for two reasons. First, they constituted the largest part of our interviewees- of those we interviewed, two might have been categorized as pros, while only a handful professed to have never cheated. Second, we decided they would be a good target due to the moral ambiguity they felt towards cheating, which lead to cheating behavior that looked like a coping mechanism. We thought there was a good opportunity for intervention if we could help reduce the stresses and increase resources to make them better able to achieve success without cheating.

Why relativists cheat:

Assuming best intentions, students cheat when they have **exhausted** their resources and feel like their **future** is **on the line**.

How might we:

...increase resources and decrease stakes so that students focus on learning instead of grades?

Proposed Solution:

Our solution was two-pronged:

- 1. Increase resources:
 - a. Universal material distribution
 - b. Collaborative testing elements
- 2. Decrease stakes:
 - a. Second Chances
 - b. Expand NRO to distributive requirements

Increase Resources

The first prong of our approach was to increase resources so they students felt as though they were supported as much as possible by Dartmouth and didn't have to look elsewhere for an edge.

Universal Distribution of Materials:

The first method for increasing resources is the universal distribution test prep materials. In light of the advantages held by groups like Greek organizations and sports teams with increased resources, and the infeasibility of removing that organizational access, we believe that access should be expanded to all students, and distributed by professors. We recommend that professors share previous tests on canvas in the weeks leading up to an exam. This brings the information flow back under the control of the professor, and evens the playing **field** for students.

Model - Economics 26 & Economics 10.

Collaborative Testing Elements:

Our second method is to implement collaborative testing elements. Students might take the tests once on their own, and then a second time in small groups, discussing answers, using their peers as resources, and otherwise Collaborative testing induces social pressures that would incentivize students to be prepared and contribute to their groups, re engage with material, and learn from their peers. This method further emphasizes teamwork and legitimizes collaborative learning, which are important real world values.

Model - Psychology 23

Decrease Stakes

The second prong of our approach was to decrease stakes so students felt that their self-worth was not intrinsically tied to their grades.

Test Corrections (Second Chances):

We propose to allow all students the opportunity to retake tests and explain the right answer for **partial credit** during X-hours or other predetermined times. This satisfies the **corrective reflex** that often leads to cheating in the first place. This method allows students the opportunity to actively and fairly correct their mistakes, recentering the focus of these tests on learning rather than grades.

Model - Latin I & Philosophy 6

NRO Distribs:

We propose expanding the NRO option to distributive requirements. By allowing students the opportunity to NRO these classes, they still get the benefit of a liberal arts education, without hurting their GPA. In an NRO'd course, students can take **intellectual risks** that will lead to them being more engaged in the material. Without the threat of a GPA-destroying grade on the horizon, students can choose **classes based on interest**, which is really the purpose of a liberal arts education after all.

(re)Model - Non-Recording Option

Prototyping and Feedback:

After the first and second rounds of interviews, we played with several ideas for how we might adjust classroom experiences to reduce motivations for cheating. Our storyboards tried to explore the mindsets that we had observed and lay out the ways in which different interventions could change those.

In an early prototype to simulate testing environments on cheating behaviors we handed out four arbitrary tests to our classmates with an easy opportunity to cheat. The answers were at the bottom, turned upside down. We tested three environments with one control. We told them that if they got six questions out of twelve right, we would give them a piece of candy.

- 1. Control Test we didn't change anything about the testing environment
- Partial Credit participants were told to circle their first answer and square their second. They would receive a half point if their second choice was correct.
- 3. Accountability before participants took this iteration of the exam, we told them to turn to their neighbor, say their name, and tell them that they wouldn't cheat.
- 4. *Pass/Fail* on this exam, participants were told that they only need to get four answers right in order to receive candy.

After these experiments, we surveyed the class, after giving them their candy of course. They said they were least likely to cheat on the partial credit test and the pass/fail test.

There were flaws with this prototype test. We meant to tell them before the testing began that we would be ranking them, in order to simulate the stakes that a competitive educational learning environment brings.

After this prototype, we settled on our solution and conducted user feedback. We got the following responses:

"I would **love NRO distribs**. They are like something you need but also don't need for your major." - TG '20

"Test corrections would reduce cheating because they'd help me realize that exams aren't as big of a deal and I could make up for the mistakes I made the first time around." - AA '19

"People would definitely be less stressed. People might disengage, but engagement in distribs is already pretty low." - MW '20

"I'd like [access to old materials], it'd help me study. But it would **take away the advantage that I have being on a team**, puts me at a disadvantage." - MZ '19

Next Steps:

The obvious next steps are to meet with faculty and judicial affairs to discuss the implementation of some of our solutions. Identifying champions among professors will help push these models forward. In order to judge the effectiveness of some of these measures, interviews with the students and professors should be done throughout the term.

Our solution only attacks a specific part of this **cheating ecosystem** - the motivation to cheat. Further concrete steps can address two other parts of that ecosystem - **the opportunities to cheat and the punitive system**.

A lot of the cheating behaviour we observed was a crime of opportunity that often involved large class sizes and memorization-type multiple choice questions. To reduce opportunity we would propose the elimination of multiple choice evaluation methods and taking steps to reduce class size. There are a number of problems with multiple-choice-style examination. Replacing tests formatted in this way with short answer, or "show what you know" style questions can make the information feel less arbitrary and make it harder to cheat. Multiple choice is an outdated version of testing, as it originated in a time where online search engines weren't commonplace in work environments. Adults no longer have to rely only on their memorization to perform their work, so why should students? By implementing short answer questions, or what we call "show what you know" in place of the multiple choice format, students aren't confined by the strict limitations of an "all or nothing" questions. Instead, of a question that asks "Which of these was Freud most famous for?", the question would read, "In 2-3 sentences, explain the significance of Freud." The student would have the opportunity to show the professor their knowledge and receive partial credit.

We recognize that short answer tests are more time consuming to grade, which is why they are difficult to implement in large lecture classes. That is why we propose smaller class sizes across the board, even in intro courses. There could be multiple sections to ensure a smaller size, or, if that was not feasible, the professors could hire **more TA's to help with grading**.

In our interviews with students who had been suspended or called in front of judicial affairs, one thing became clear - **the punitive system is flawed**. Right now, if you a student gets caught violating the honor code, they brought before a council and are most often suspended. The two students we interviewed were caught sharing homework answers, were suspended, and experienced serious **anxiety and depression** felt as a result. Moreover, they felt their education had been unjustly interrupted for a one-time mistake or misunderstanding. The

one-strike policy, as its name suggests, offers **no leniency**. Given the prevalence of cheating on campus and the stratified causes and motivations, Since most students, especially the relativists, cheat when their back is against the wall, we believe that the action is impulsive. In our next steps, we propose that others explore and revise the punitive system. Based on our preliminary research, it might make sense to have the **punitive system operate on a scale and a 3-strike policy**. The scale would ensure that the punishment matches the crime. Cheating on one question on a small pop quiz shouldn't merit the same punishment as a pre-meditated cheat sheet for a midterm or a plagiarized final paper.

So what might the punishment be for a first time offender? First, they would receive a **zero on that assignment**. Second, we propose a form of **restorative punishment**. This could include community service or an adapted version of the BASICs program for students who cheat.

The second time the student was caught, they would also complete restorative punishment and **wouldn't be able to complete the course** in which they cheated, resulting in an Incomplete. The third time might result in **suspension**.

Finally, we strongly believe that, over time, **Dartmouth must change prevailing** attitudes about cheating. Right now, students, especially those who cheat, worry that grades 1) are not always a reflection of their learning or effort and 2) have a heavy impact on their futures. Education should be about learning; ideally, a successful education should be one in which you have learned a lot. However, students consistently demonstrate that they are willing to compromise academic integrity and their learning in order to get good grades. Evaluation is seen as disconnected from learning. Moreover, grades have become tied to incentives that extend past the boundaries of our time at Dartmouth. Completely eradicating cheating behavior will depend on our ability to instill **love of learning**, generate interest and investment in education itself, and rethinking evaluation to reflect these values while recognizing and reconciling the influence of job markets and other competitive post-undergraduate institutions.

Appendix:

1. Preliminary interview questions:

- What are your thoughts on the honor code?
- What was the last time you read it or it was read to you?
- Have you ever cheated on a test?
- In what class, or which classes?
- Why did you cheat?
- Do you think it is easy to cheat?
- What makes it easy or hard to cheat?
- Have you ever been caught?
- If you knew you'd never be caught, would you do it more?

2. Initial Whiteboard



3. Personas

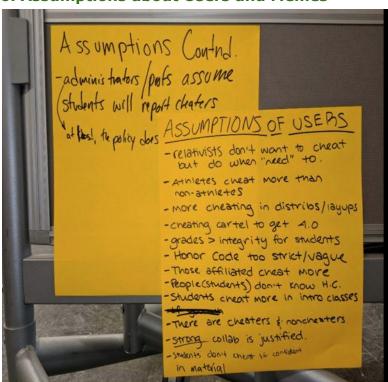




5. Environmental Factors Contributing to Cheating

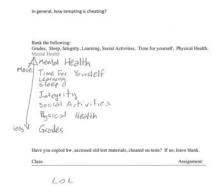


6. Assumptions about Users and Memes

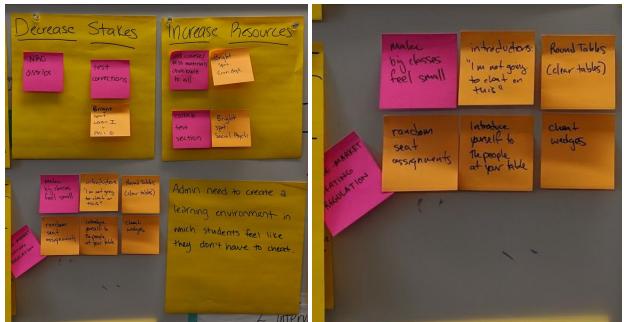


6. Schematic Survey

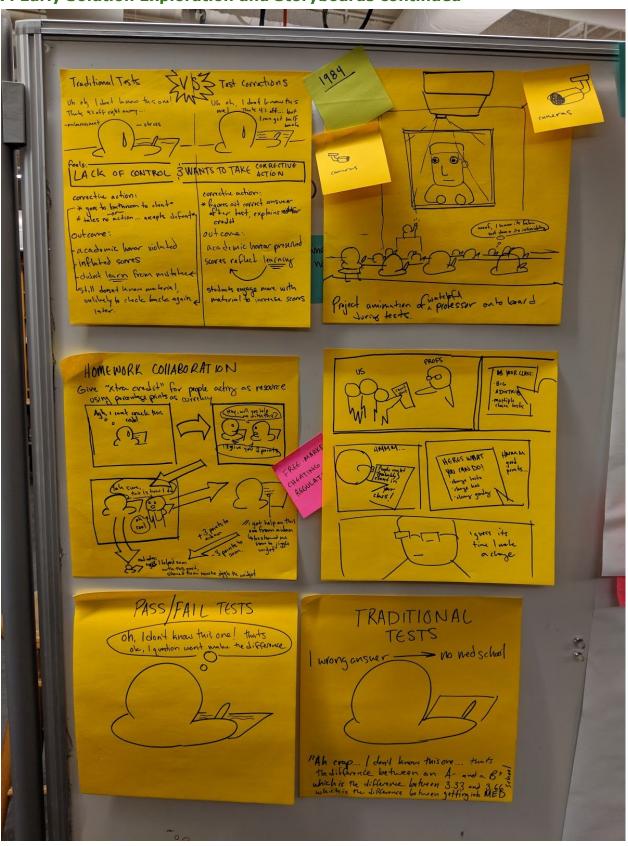




7. Early Solution Exploration and Storyboards



7. Early Solution Exploration and Storyboards continued



8. Important Quotes and Testimonies, de-identified to protect sources.

"Cause, I think it's really dumb, and I'd rather cheat and run the risk than actually put effort into something that doesn't improve myself whatsoever."

"It's not that I have a rule or something, it just comes about that I break the honor code more when I don't find any honor in the code... like I don't give a shit about studying for linguistics... but I would never fudge my thesis."

"I've optimized my process so that it's impossible to be caught"

"Another method I have employed in the past was bringing a cheatsheet into memorization-type exams"

"Most of the tests I take now allow you to bring in a crib sheet, or are open notes, which means that the test will be more difficult, and will be operating at a higher level of problem solving, which I actually enjoy much more than tests that are memorization based. So on these Tests I can't really cheat because you can bring materials in already, and so its more on your ability as a problem solver which I think is a better way to test people."

"Most of the information you learn in class is arbitrary, in terms of what I plan to utilize in the future, so by giving myself an edge, I still am forced to learn the 'material' without really hurting myself"

"Like let's say if I'm taking these homeworks from the turn in box, and using those to reference my own homework, I'm not just copying those homework because it be too obvious that I'm cheating- I'm still working through it myself, I'm just able to take a peek at it if I'm lost, or once I do get the right answer I can cross reference it to make sure that its correct. I'm still learning but in a streamlined fashion. I haven't found any subjective difference in my knowledge of the material vs. if I just try to struggle through it on my own I just take longer and get marked down for kind-of arbitrary mistakes."

"When you're at Dartmouth, you study so that you become a better version of yourself and you learn materials, so I only sign up for classes that I'm interested in, but there are some classes that you have to take that you're not interested in, and that was astro... I'm not sure if it was astro 1, 2 or 3, it was just astro something in my sophomore summer"

"Yea I wasn't really interested in those topics and the quizzes were kindof silly in that they didn't really teach me anything... it was simply multiple choice questions and the grades were based on multiple choice... and so I would just look up the

answers to the multiple choice, and it was so silly that you could get such a good grade in a Dartmouth class just by knowing the answers to multiple choice just by looking them up. That class was the one class where I found none of it interesting I didn't really find the material interesting and I had to take it cause I needed that distrib"

"I think it's where there's a disconnect between that where spending extra time to make a project or write an essay that you really find intellectually engaging"

"I obviously struggle with [cheating], because grades are the indicator people look at when they see your college career"

"There's been a few times when I've been told one thing will be on the exam, but then a totally different thing is on the exam and I know about it, but I didn't put it on my crib sheet... like I know the concept about how to do something but I don't know the exact formulas, so it's been tempting to go look up this thing"

"A sense of desperation- like the feeling that they have to do well on something but they're not equipped to do well.. or they feel like they really need to pass this class"

Course selection:

"How easy of a class can I get into, and how easy would it be to cheat"

"I can get a senior on the swim team send me all the course materials"
That's basically the college telling me they don't care how smart I am or how much
I know

"Of course people are going to cheat- because it doesn't matter if we're doing well, you just have to do better than everyone else, and at that point that's a valid tactic, and if everyone's doing it then it's in your best interest to do it as well."

"I know a lot of people get previous exams and materials from upperclassmensome profs have tried to get ahead of it by releasing their own past exams, but a lot of them are too lazy to rewrite their exams"

"Or sometimes it's just like busywork that's not going to help us learn, and our time is better spent doing literally anything else."

"You have an advantage if you have an old midterm that isn't necessarily the one you're going to see, but you know what it's like."

"So before the test I saw these dudes with a test.. and thought wait that's not the

practice test I was given... and then lo and behold, the next day, that's the fucking test"

"I notice cheating a lot more with kids whose main goal in school is pre professional ambitions."

"There's unnamed students who take two layups per term, make sure they have a 4.0, go into banking- what matters to them is not what they learn.. they go through the motions in class."

"I wish professors all had the same interpretation of the honor code. It's just hard to keep up."

"Pass/Fail takes the stress off. It makes me feel like I can take risks or try things without it negatively impacting an internship I'm trying to get or a career I want to have."

"I want my professors to tell me it's okay to not know."

"Cheating is when you turn in a final version of something and it's not like 95% your work."

"Cheating is using someone else's information that you didn't study for or learn only for the purpose of a better grade, not learning."

"only dumb people get caught for cheating....like....I don't know....cheat smarter"

"Pressure to succeed is Dartmouth's driving force."

"How hard I work isn't reflected in my grades. It's frustrating. Grades are all people see."

"Odds are stacked against you in classes like Psych 1 where it's essentially like 'how well can you memorize an entire textbook'. In classes like that it's so tempting."

"I hate distributions. I wish they didn't exist. I have to pick them carefully because I don't want them to mess with my GPA but I wish I could just take the ones I'm interested in."

"I think suspension is stupid. You don't learn anything. Just like take away social privileges and stuff."

"I have a huge advantage being in a sorority. We have so many documents about

which classes are easy and storages of old test materials."

"I hate the term layup. It's rude to people who might have a harder time in that class. I'm more likely to cheat in those because I feel dumb if I'm the only one who doesn't do well."

"I wouldn't cheat if it wasn't graded."

"College is about the numbers you get on assignments. That's why people cheat. I wish we were graded based on effort. Or on how much we improved."

"Anyone that I know that has taken the class before me, I'll ask them for their notes and previous tests and use them to help me study. A lot of the time people keep folders for previous classes on their computers which typically include notes, responses, papers and study guides and they will just pass those down."

"Everyone at Dartmouth cheats. If you say that you don't then you need to broaden your definition of cheating."

"If you don't help your teammates cheat you are looked at as an outcast. Cheating is honestly part of the culture at Dartmouth or at least on a lot of sports teams. Teammates just expect each other to be okay with helping others cheat."

"I cheated in my Econ 21 class because I got way below the median on the first two midterms and I needed to get an A on the last one to pass the course."

"Cheating is super common at Dartmouth. The biggest way I see it is in my sorority. People pass down cheat sheets and study guides from years and years past. I look at it as a necessity so it is probably unfair to the people that don't have that resource."